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**16<sup>th</sup> Congress of the  
European Society for  
Dermatology and Psychiatry**

**25<sup>th</sup>–27<sup>th</sup> June 2015**

Programme  
and  
Abstracts

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# 16<sup>th</sup> Congress of the European Society for Dermatology and Psychiatry



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## 16<sup>th</sup> Congress of the European Society for Dermatology and Psychiatry 25–27 June 2015, Saint-Petersburg, Russia

**Thursday June 25, 2015**

**Open registration (08:00)**

### Auditorium No. 1

**OPENING OF THE CONGRESS AND KEYNOTE LECTURES (10:00–12:00) (KLI–KL3)**

**Greetings from Government of Saint-Petersburg, from the Health Committee of Saint-Petersburg, from the Presidium (Vice-Governor of Saint-Petersburg O.A. Kazanskaya, Chairman of the Health Committee of Saint-Petersburg V.A. Kolabutin)**

*President of the Congress Prof. N. Potekaev, Chair of Presidium of the Organizing Committee Acad. Prof. A. Smulevich, Vice-Presidents: Prof. N. Neznanov, Prof. K. Raznatovskiy, MSPCDC hospital chief executive Assoc. Prof. O. Zhukova, President of ESDaP Dr. D. Linder (Italy), President-Elect of ESDaP Prof. U. Gieler (Germany), Secretary General of ESDaP Assoc. Prof. L. Tomas Aragonos (Spain), Prof. K. Takamori (Japan), Chair of the International Scientific Committee Prof. A. Lvov*

- Systematics of mental disorders in dermatology. A. Smulevich (Russia)
- Biopsychosocial model in dermatology. D. Linder (Italy)
- Multidisciplinary approach in understanding and treatment of mental disorders: myth or reality? N. Neznanov, A. Vasileva (Russia)

### PLENARY SESSION (PL1–PL13)

**Bridging the Gap between Body and Mind... (12:10–13:00)**

*Chairs: Dennis Linder (Italy), Lucia Tomas Aragonos (Spain), Uwe Gieler (Germany)*

- Expert opinion. Skin picking: the ESDaP Project. U. Gieler (Germany)
- Acta Dermato-Venereologica and ESDaP: the key to a successful collaboration. Agneta Andersson (Sweden)
- Herman Musaph Awards Ceremony.

**New Development of Psychodermatology (13:30–15:00)**

*Chairs: N. Potekaev (Russia), A. Ingber (Israel), M. Musalek (Austria)*

- A history of the progress of psychodermatology in Russia. A. Lvov (Russia)
- From evidence based medicine to human based medicine in psychosomatics. M. Musalek (Austria)
- Dermatology and psychiatry in Israel: past and present. A. Ingber (Israel)
- Announcement of bad news in psychodermatology. L. Misery (France)
- Discussion.

**From pathogenesis to clinical heterogeneity. (15:10–17:50)**

*Chairs: K. Raznatovskiy (Russia), L. Misery (France), I. Smirnova (Russia), J. Ulnik (Argentina)*

- Psychoimmunology in chronic inflammatory skin diseases: new aspects in a stimulating field. E. Peters (Germany)
- Update of the treatment of skin picking. N. Vulink (The Netherlands)
- Psychiatric morbidity in psoriasis patients. N. Potekaev, E. Khama-ganova (Russia)

- Dermatologist–patient relationship in psoriasis. J. Ulnik (Argentina)
- The body–mind–unity theory in dermatology – current approaches to research. B. Pramsöhler (Austria)
- Personality traits in patients with psoriasis. C. Remroed, K. Sjöström (Sweden)
- Posttraumatic growth in melanoma survivors. R. Campos-Rodenas (Spain)
- Quality of life in non-melanoma skin cancer. G. Vinding (Denmark)

**WELCOME RECEPTION at the lobby Hotel “Park Inn by Radisson Pribaltiyskaya”. (18:00–20:00)**

### Auditorium No. 2

**PLENARY SESSION (13:30–15:00) (PL14–PL17)**

**Delusional, self-inflicted and skin-picking disorders**

*Chairs: P. Lepping (UK), D. Romanov (Russia), A. Bewley (UK)*

- Delusional parasitosis: evidence of heterogeneity of the disorder. D. Romanov (Russia)
- Delusional infestation and update for dermatologists. P. Lepping (UK)
- Dermatitis artefacta in childhood. A. Bewley (UK)
- An update on pharmacological interventions in skin picking disorders. M. Jafferany (USA)
- Discussion.

### POSTER SESSION (16:00–17:00)

**Skin and Psyche: basic research and clinical cases (1)**

*Chairs: L. Tomas Aragonos (Spain), A. Bewley (UK), S.E. Marron Moya (Spain), S. Bobko (Russia)*

**Friday June 26, 2015**

### Auditorium No. 1

**RESEARCH SYMPOSIUM (09:30–12:00) (RS1–RS6)**

**Psychodermatology: Spreading Horizons**

*Organized and supported by Russian Society of Psychiatrists. All reports during the symposium will be presented in English. Open access.*

*Chairs: Acad. Prof. SMULEVICH A. (Moscow, Russia) - Member of the Russian Academy of Sciences; Head of Department of Psychiatry and Psychosomatics, Sechenov First Moscow State Medical University; Head of department of “borderline” mental pathology and psychosomatic disorders, Mental Health Research Center of Russian Academy of Science. Prof. NEZNANOV N. (Saint-Petersburg, Russia) - Chairman of the Russian Society of Psychiatrists Board; Director of the St. Petersburg V.M. Bekhterev Psychoneurological Research Institute.*

- Greetings from the Presidium. Opening of the Symposium. A. Smulevich, N. Neznanov (Russia)
- “Delusional parasitosis and related disorders” by A.B. Smulevich, D.V. Romanov, A.N. Lvov (Book presentation and overview).
- Potentialities of the psychodynamic approach in a multidimensional model of the dermatological diseases ethio-pathogenesis. N. Neznanov, A. Vasileva (Russia)
- Structure and severity of mental disorders in patients with facial

- dermatoses. *G. Rukavishnikov, N. Petrova, I. Smirnova* (Russia)
- Psychotropic medications in dermatology. *I. Dorozhenok* (Russia)
- Skin-picking disorder: clinical variability and treatment approach. *D. Romanov* (Russia)
- Addiction to body modification. *A. Egorov* (Russia)
- The impact of mental health disorders in HIV-infected patients with early syphilis in their social adaptation. *E. Chumakov* (Russia)
- Discussion.

## PLENARY SESSION (PL18–PL23)

### Itch and related disorders. (13:30–15:20)

Chair: *K. Takamori* (Japan), *S. Staender* (Germany), *A. Lvov* (Russia)

- Antipruritic mechanisms of Cyclosporin A in atopic dermatitis. *K. Takamori* (Japan)
- Prurigo nodularis: what do we really know about this disease? *S. Staender* (Germany)
- Brain processing of contagious itch in patients with atopic dermatitis and its alteration through progressive muscle relaxation. *C. Schut* (Germany)
- Problems of diagnostics and treatment of psychogenic itch. *S. Bobko* (Russia)
- The prevalence and intensity of itch in dermatological patients in Europe. *J.A. Halvorsen* (Norway)
- The burden of chronic urticaria. *A. Reich, J. Szepietowski* (Poland)

### Psychosomatic dermatology: state of the art (15:30–18:00) (PL24–PL33)

Chairs: *J. de Korte* (The Netherlands), *A. Sergeev* (Russia), *K. Taube* (Germany), *I. Dorozhenok* (Russia)

- The burden of atopic dermatitis and acne – a comparison with a stratified control group. *J. Kupfer* (Germany)
- Prevalence of iatrogenic drugs causing secondary delusional infestation. *C. Marshall* (UK)
- Tension before picking and relief during or after picking in Israeli adults screening positive for excoriation (skin picking) disorder. *V. Leibovici* (Israel)
- An analysis of the range of mental disorders, provoked by chronic dermatoses, which present to University Hospital Dermatology Department in Russia. *I. Dorozhenok* (Russia)
- Alexithymia and Psoriasis. *M. Garcia-Bustinduy* (Spain)
- The quality of life of patients with psoriasis vulgaris in Bulgaria. *V. Gincheva* (Bulgaria)
- A web-based educational quality of life program for patients with a chronic skin disease: version 2.0. *O.D. van Cranenburgh* (The Netherlands)
- e-Health cognitive behavioral treatment for patients with psoriasis: a randomized controlled trial. *S. van Beugen* (The Netherlands)
- The educational intervention “NO.TE.S. (Non Technical Skills), The art of the doctor–patient relationship”: A pilot study in communication skill training in Greek dermatologists. *Z. Tsimtsiou* (Greece)
- A multidisciplinary training program for outpatient children and adolescents with psoriasis and their parents: A pilot study. *S. Spillekom-Koullil* (The Netherlands)

## Auditorium No. 2

### POSTER SESSION (12:10–13:00)

#### Skin and Psyche: basic research and clinical cases (2)

Chairs: *L. Tomas Aragones* (Spain), *A. Bewley* (UK), *S.E. Marron Moya* (Spain), *S. Bobko* (Russia)

### CONGRESS DINNER (19:30–23:00)

*Saturday June 27, 2015*

## Auditorium No. 1

### PLENARY SESSION (10:00–11:50) (PL34–PL38)

#### Patient-centered care in aesthetic medicine.

Chair: *W. Harth* (Germany), *O. Zhukova* (Russia), *H. Wolff* (Germany), *I. Lesnaya* (Russia)

- Botulinum toxin: the misguided path. *W. Harth* (Germany)
- Hair and scalp problems with psychological origin. *H. Wolff* (Germany)
- Psychological and therapeutic effects of needle therapy in vitiligo. *H. Zelenkova* (Slovakia)
- Trichotillomania in young adults: prevalence and comorbidities. *P. Pacan* (Poland)
- Body dysmorphic disorders in dermatological clinic: typology and differential diagnosis. *E. Matyushenko* (Russia)

### ESDAP GENERAL ASSEMBLY (12:00–13:00)

### PLENARY SESSION (13:30–15:00) (PL39–PL43)

#### Psychosocial consequences of chronic skin diseases and STI

Chairs: *D. Linder* (Italy), *A. Vasileva* (Russia), *F. Dalgard* (Norway), *M. Gomberg* (Russia)

- Attachment style in patients with chronic skin disease across Europe. *F. Dalgard* (Norway)
- Psychovenereology: personality and lifestyle factors in STI. *M. Gomberg* (Russia)
- A Balint-type training for enhancing the empathic abilities of future physicians and facilitating psychosomatic approach. *S. Consoli* (France)
- Impairment of sexual life in 3485 dermatological outpatients from a multicenter study conducted in 13 European countries. *F. Sampogna* (Italy)
- Posttraumatic stress disorder and psychiatric comorbidities in patients with childhood psoriasis: Preliminary results of a case control study. *B. Ates, T. Mutluer* (Turkey)

### ROUND TABLE DISCUSSION (15:10–15:30)

#### Actual trends in psychodermatology

Moderators: *U. Gieler* (Germany), *D. Linder* (Italy), *A. Lvov* (Russia), *D. Romanov* (Russia)

### CLOSING CEREMONY (15:30–15:45)

## LIST OF POSTERS

- PP1:** Relatives of patients with delusional infestation may present with a shared delusion in place of (or before) the actual patient. S. Shinhmar, R. Taylor, A. Bewley
- PP2:** Psychological aspects in burning mouth syndrome. C. Brufau-Redondo, R. Martín-Brufau, T. Salas-García, A. López-Gomez, M. Dorado-Fernandez, A. Ramírez-Andreo, J. Ruiz-Martínez, J. Corbalán-Berná
- PP3:** Postherpetic neuralgia: assessment of quality of life. T.W. Cordoba-Irusta, S.E. Marron, M. Lamarre, L. Tomas-Aragones
- PP4:** Nosological structure of skin diseases in patients in a psychoneurological asylum. I.E. Danilin, Z. Niewozinska, I.M. Korsunskaya, M.S. Artemieva
- PP5:** Role of the enzymes of dopamine biodegradation in the pathogenesis of panic disorder and psoriasis. E.A. Klimov, E.S. Gapanovich, J.E. Azimova, O.I. Rudko, Z.G. Kokaeva, L.R. Sakaniya, I.M. Korsunskaya, I.E. Danilin, V.V. Sobolev
- PP6:** Pruritic and painful dermatoses carry the highest psychological burden among dermatovenerological patients. I. Dediol, M. Vurnek Zivkovic, M. Buljan, V. Bulat, T. Sugnetic, M. Situm
- PP7:** Pathological skin picking in a patient with obsessive-compulsive disorder. M. Tampa, M. Sarbu, M. Mitran, C. Mitran, M. Dosaru, C. Matei, M. Costescu, V. Benea, S-R. Georgescu
- PP8:** Skin picking producing prurigo nodularis lesions in a patient with obsessive compulsive disorder. C. Mitran, M. Mitran, M. Tampa, C. Matei, M. Dosaru, M. Sarbu, V. Benea, S-R. Georgescu
- PP9:** Sexual dysfunction and traumatic childhood experiences in patients with functional pruritus. O. Durmaz, B. Ates, T. Mutluer, I. Kivanc Altunay, S. Mercan, S. Özdemir, O. Mutluer
- PP10:** Impact of comorbidity on compliance in geriatric psychodermatology. E.V. Gerasimchuk, V.V. Gladko, M.U. Gerasimchuk
- PP11:** Comprehensive and integrated assessment of patients with depression. M.U. Gerasimchuk
- PP12:** Feature affective disorders on women with acne and hormonal abnormalities. I.Y. Golousenko, K.B. Olkhovskaya
- PP13:** Motivation issues in cosmetic surgery patients. O.M. Gribova
- PP14:** Prurigo nodularis among dermatological patients in Europe. J.A. Halvorsen, L. Misery, E. Brenaut, J. Kupfer, F. Dalgard and the ESDAP-study group
- PP15:** Intralesional methotrexate: A plausible treatment option for non metastatic squamous cell carcinoma. M.A. El-Darouti, M.S. El-Hawary, R.A. Hegazy, A.S. Hassan
- PP16:** Alexithymia in hemodialysis patients with uraemic pruritus. M. Heisig, A. Reich, P. Koniński, J. Jaworska-Wieczorek, W. Czyż, J.C. Szepietowski
- PP17:** Anxiety in patients with alopecia areata. K. Kaaz, A. Puchalska, K. Marcinów, J. Garbowska, A. Reich, J.C. Szepietowski
- PP18:** Quality of life and psychological aspects of patients with psoriasis and psoriatic arthritis. E.A. Khlystova, A.N. Lvov, T.V. Korotaeva, D.N. Serov, N.N. Potekaev, O.V. Zhukova
- PP19:** Patients with vitiligo benefit from short psychological intervention during climatotherapy with pseudocatalase PC-KUS at the Dead Sea. C. Krüger, J.W. Smythe, K.U. Schallreuter
- PP20:** Anxiety assessment in patients with alopecia. M. Lamarre, L. Tomas-Aragones, S.E. Marron, T.W. Cordoba-Irusta
- PP21:** Predictors of quality of life in adults with acne: the contribution of perceived stigma. J. Liasides, F-S. Apergi
- PP22:** Delusion of Parasitosis: Therapeutic strategies. Experience in three patients. E.M. Malatesta
- PP23:** A study of stress in patients with acne excoriée, lichen and macular amyloidosis, and lichen planus. R. Malakani, S. Rangwala, A. Desai, M. Singh Setia
- PP24:** Psychosocial history and intervention of female patient with Epidermolysis Bullosa. S.E. Marron, L. Tomas-Aragones, M. Lamarre, T.W. Cordoba-Irusta
- PP25:** Women's self-image – how we perceive ourselves, how much we sacrifice for perfect looks. E. Pierzchała, K. Mazurek, A. Macierzyńska
- PP26:** Determinants of psoriatic patients' psychosocial well-being – results of the multinational study. K. Mędrek, Adam Reich, J.C. Szepietowski, F.J. Dalgard, U. Gieler, L. Tomas-Aragones, L. Lien, F. Poot, G.B. Jemec, L. Misery, C. Szabo, I. Coati, F. Sampogna, H. van Middendorp, J. Halvorsen, F. Balieva, D. Romanov, S.E. Marron, I.K. Altunay, A.Y. Finlay, S.S. Salek, J. Kupfer
- PP27:** Trichotemnomania: three adolescent cases with a very rare disorder and review of the current literature. T. Mutluer, B. Ates, S. Nasiroglu, F.O. Mutluer
- PP28:** Gender bias in preferences for dermatology as a specialty among department of health post-graduate interns of a tertiary hospital in the Philippines. M.F. Quinio, M.A. Lavadia
- PP29:** The Barbie effect on kindergarten girls and on women seeking aesthetic procedures. A. Raducan, L.A. Raducan
- PP30:** Neurotic excoriations in a blind woman. A. Raducan, L.A. Raducan
- PP31:** Comorbid psychiatric disorders in patients with hair loss. Y.Y. Romanova, A.N. Lvov, D.V. Romanov
- PP32:** Psychological impairment in patients with chronic spontaneous urticaria. S. Ros, L. Puig, E. Serra, I. Gich, A. Alomar
- PP33:** The importance of illness representations and coping for physical impairment in patients with atopic dermatitis: A 1-year-follow-up study. C. Schut, A. Felsch, C. Zick, K-D. Hinsch, U. Gieler, J. Kupfer
- PP34:** A comparative study of the psychosocial effects of Hansen's disease on male versus female patients in a tertiary government hospital. J.M. Servas, K. Prieto, M.A. Lavadia, M. Villanueva, D. Arcega
- PP35:** Lichen planus and comorbid mental disorders. V. Shenberg, I. Dorozhenok, E. Snarskaya
- PP36:** Quality of life in Iranian high school students with acne vulgaris. S.Z. Ghodsi, N. Jabri
- PP37:** Psychodermatology Outpatient Clinic in Rotterdam, the Netherlands: Overview of a five-year experience. R. Waalboer-Spuij, M.B.M. Tan, I.S. Ferket, T.E.C. Nijsten
- PP38:** Erythromelalgia: is a psychodermatological disease? O.B. Tamrazova, A.V. Molochkov, A.V. Tamrazova, K.G. Bagdasarova, A.N. Lvov
- PP39:** Self-inflicted skin lesions: a case report. L. Tomas-Aragones, S.E. Marron, T.W. Cordoba-Irusta, M. Lamarre
- PP40:** Burning mouth syndrome. Evaluation of its management in hospital Del Mar (Barcelona) patients. M.J. Tribó Boixareu, R. Rovira López, F. Gallardo Hernández, R. Pujol Vallverdu, S. Segura Tigell
- PP41:** Psychodermatology in the Netherlands: a network of psychosocial care providers. O.D. van Cranenburgh, S. Spillekom-van Koullil, H.E. Boonstra, M.B. Crijns, Andrea W.M. Evers, P.M.J.H. Kemperman, J. de Korte, A.I.M. van Laarhoven, J.R. Spoo, J.P.W. van der Veen, N.C.C. Vulink
- PP42:** Psychogenic pruritus: a dermatologist's dilemma. V. Jain, A.J. Kanwar
- PP43:** Trichotillomania: a case series from North India. A.J. Kanwar, V. Jain
- PP44:** The effect of the internal disease pattern on the course of chronic urticaria. M.U. Voronova, O.S. Bodnya
- PP45:** The combination of disorders of the skin and urinary retention in women infected with Herpes simplex virus II, I or Varicella zoster virus. S. Vykhodtcev, A. Batko
- PP46:** Affective disorders in patients with atopic dermatitis and psoriasis. G. Batpenova, T. Vinnik, T. Kotlyarova, T. Tarkina, G. Sadykova
- PP47:** Multimodal psychotherapy of onychophagy in children. T.V. Koroleva, O.A. Radchenko

## KEYNOTE LECTURES

**KL1  
SYSTEMATICS OF MENTAL DISORDERS IN  
DERMATOLOGY***Anatoliy Smulevich**I.M. Sechenov First Moscow State Medical University, Moscow, Russia*

Relevance of psychodermatological studies in order to elaborate systematics, exoteric as for dermatologists, as for psychiatrists, is based on a high prevalence of mental disorders in dermatology. The range for dermatological service is about 21–34% in outpatients and 31–60% in inpatients. There are several major systematics of mental disorders in dermatology [Koblenzer C.S., 1987, 1992; Van Moffaert M., 1992; Koo J.Y., Lee C.S., 2003; Harth W. et al., 2007, 2009]. However a problem of classification of these disorders is still actual, as there is still a lot of controversy. The proposed classification summarizes results of studies based on about 15 year's research and consultation-liaison activities of psychiatrists of Department of Psychiatry and Psychosomatics in Dermatovenerological Clinic of the I.M. Sechenov First Moscow State Medical University. The classification is "dual" and ranges overlapping mental and dermatological presentations on the basis of a main principle – the principle of psychosomatic balancing and interrelation. Thus, the designated categories differ in contribution of corresponding constituents and are listed as follows: *I. Mental disorders with pseudodermatological presentations in a "space of skin".* 1. Personality disorders (PD) with skin-oriented dimensions (cutaneous somatoperceptive traits): a) PD with an over-valued idea of skin beauty; b) PD self-defeating (the oppressed masochists); c) PD with skin neuropathia. 2. Neurotic psychodermatological mental disorders and distress: a) excoriation (skin-picking) disorder; b) trichotillomania/onychotillomania; c) somatoform itch (skin organ neurosis); d) formication (skin hysteralgia); e) transient psychogenic skin reactions/dysfunction in mental distress (psychogenic itch, erythrophobia/erytrophobia/ereuthophobia, psychogenic acute urticaria). 3. Neurotic psychodermatological mental disorders mixed with dermatoses: a) amplifying itch (somatoform itch with a dermatosis); b) acne excoriée (skin-picking in acne). 4. Psychotic psychodermatological mental disorders: a) somatopsychosis (skin type); b) hypochondriasis circumscripta; c) tactile hallucinations; d) coenaesthesiopathic paranoia (dermatozoic delusions); e) coenaesthesiopathic paraphrenia (enterozoic delusions) and spectrum of disorders with delusional parasites infestation; f) dysmorphic delusions. 5. Artificial (factitious) disorders: a) Munchausen syndrome; b) dermatitis artefacta; c) pathomimia. *II. Nosogenic/somatogenic provoked mental disorders and psychosomatic dermatoses.* 1. Nosogenic mental disorders provoked by dermatoses: a) psychogenic reactions (histrionic, depressive, anxious etc.); b) prolonged hypochondriac states triggered/sustained by dermatoses; c) endoform reactions in schizotypal disorder (endoform depressions, delusional/paranoiac reactions, reactions with sensitive ideas of reference etc). 2. Psychosomatic dermatoses – psychogenic (non-nosogenic) manifestations/exacerbations of dermatoses (recurrent herpes simplex, chronic urticaria, atopic eczema etc.). *III. Dermatoses provoked by mental disorders and psychotropic medications:* 1. Skin disorders provoked by neurotic mental disorders (e.g. contact dermatitis in mysophobia); 2. Skin disorders provoked by psychotic mental disorders (self-mutilation); 3. Skin adverse effects of psychotropic medications (photosensitization, skin pigmentation, allergic/contact dermatitis, toxic epidermal

necrosis etc). *Conclusion:* The proposed classification is of theoretical value, as based on psychopathological models of somatization, hypochondriasis, delusional formation. Practical value of the classification results from its relevance for differential diagnosis, prognosis and respective treatment approaches.

**KL2  
THE BIOPSYCHOSOCIAL MODEL IN  
DERMATOLOGY***Michael Dennis Linder**Medical University of Graz, Graz, Austria*

Physicians, independently on whether they practice research or clinical work (or both), require a sound theoretical model of health and illness in order to be able to make sense of their daily experiences, cope with difficulties arising out of the manifold – sometimes unforeseeable - manifestations of human nature and speculate about new concepts and mechanisms of disease. The classical biomedical model along with an essentially linear understanding of causality has served its purpose for more than two centuries and is still proving essential in research and in clinical applications. Nonetheless, we are now confronted with the growing importance of diseases which are often chronic and which cannot be managed any more by simple "one-time" medical interventions. Disease, nowadays, requires mostly a more complex approach, and one may even state, as Tinetti and Fried put it, that "time has come to abandon disease as the focus of medical care" (1). Dermatological conditions, which are not only often of chronic nature, but also deeply and inextricably rooted in a psychological and a social dimension, provide perhaps the best example of how the Biopsychosocial Model and both the scientific and the clinical approach related to it may in the future substantially improve the quality of medical care. The complex interaction of biological, psychological and social factors and the importance of non-linear causal relationships need to be taken in due consideration at all levels, from bench to bedside: from medical history taking and from the choice of the therapy to the planning of laboratory research but also to the planning of clinical studies, public health interventions and resource allotment. The field of Dermatology serves as an excellent example for the need of this change of paradigm.

*Reference:*

1. Tinetti ME, Fried T. The end of the disease era. *Am J Med* 2004;116: 179–185.

**KL3  
MULTIDISCIPLINARY APPROACH IN UNDER-  
STANDING AND TREATMENT OF MENTAL DIS-  
ORDERS: MYTH OR REALITY?***Nikolay Neznanov, Anna Vasileva**V.M. Bekhterev Psychoneurological Research Institute, Saint-Petersburg, Russia*

Multidisciplinary approach became recently one of the most discussable topics among the mental health scientists. This is quite understandable because of the financial difficulties that to different extent are experiencing all over world and have their impact on the health care system, including mental health care services. The discrepancy between the costs of the every next generation of the medicines and their efficacy is constantly growing. We observe the

regular appearance of the new very diverse approaches in the list of health care services. It is really difficult to define how valuable they are not comparing them with the already existing ones, especially when they belong to the different fields and specialties of the mental health care. At the same time national ministries of health care, insurance companies, patients themselves and their relatives make increasing demands and expectations to the quality of the provided mental health care services. All these mentioned above, brings about the challenge for the elaboration of the integrated therapeutic programs, encompassing the most effective approaches from the different fields of mental health care system. Their efficacy should be proved by the means of the evidence based medicine. It is quite obvious that development of such programs can be successful only

as a result of constructive discussion of the representatives of all disciplines of mental health system – psychiatrists-professionals of the in and out-patient and ambulance care units, psychotherapists, clinical psychologists, social workers and nurses. In the literature one can already easily find the calls for joining this movement. The reports about its successful appliance appear. Nevertheless they are far away from becoming the standard of practical mental health service, where the managed care reigns. The complexity of the establishment of mutual understanding and common language among the participants of multi-professional teams is evident. This causes the doubts in realness of the determined goals and question multidisciplinary approach is a coming true reality or however is a myth?



## PLENARY LECTURES

## PL1

## SKIN PICKING - THE ESDAP PROJECT

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Skin picking syndromes are not easy to manage. The new classification of the European Society of Dermatology and Psychiatry (ESDaP) suggests the skin picking syndromes as part of the self-inflicted skin lesions. They are skin classified as a lack of impulse control with a high variance in symptoms and psychological diseases behind. There are often visible as manipulation of an existing specific dermatosis or coming up without any skin disease before. The treatment is in the meantime outlined by guidelines and one of the important features are the empathic communication to the mostly psychologically severely disturbed patients without confrontation (Eisendraht 1989). The knowledge of the underlying personality problems are the first step in the treatment. There are some habit reversal techniques which are indicated in some skin picking patients (Stein et al 2006, Teng et al 2006). This includes recognizing affect regulation, behavioral addiction and cognitive control. The differential diagnosis of the so called "skin picking" patients will be demonstrated. The ESDaP Self-Inflicted Skin Lesions Task Force developed some proposals for the multidisciplinary treatment in skin picking syndromes. With regard to the severity and chronicity of the disorder there are some psychotherapeutic aspects which should be accepted in the treatment options of the skin picking syndromes.

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## PL2

## A HISTORY OF THE PROGRESS OF PSYCHODERMATOLOGY IN RUSSIA

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Psychodermatology is one of the most important areas of modern psychosomatic medicine, moreover it has a long history. The problem of correlation between mental disorders and skin diseases were developed in several directions in Russia. At the beginning of the last century, almost all non-communicable skin diseases were inevitably considered to be referred to the theory of Nervism (by I. M. Sechenov) and Psychophysiological doctrine (by I. P. Pavlov). So, P. W. Nikolski was the first in the Russian science who has formulated the concept of «cutaneous neurosis» in 1901. Subsequently, with the discovery of new pathogenetic mechanisms of cutaneous pathology (genetic, immunological, metabolic, etc.), this approach in explaining the nature of a number of dermatoses receded into the background. Nevertheless, various psychocorrective activities were actively used by Russian dermatologists. So, Professor A. I. Kartamyshv published the first monograph «Hypnosis in dermatology» in 1936. Professor N. N. Zheltakov successfully worked for a long time on the problem of hypnosuggestive therapy. Among the studies of the '60s – 80s the work of Yu K. Skripkin in the pathogenesis of allergic dermatosis (in particular, the role of the CNS in these conditions) is worth to be noted. At the Department of Skin and Venereal Diseases of the Medical faculty (I.M. Sechenov Moscow Medical Academy) targeted research in the field of Psychodermatology occupied a priority position for a long time (1972-2013) (N. S. Potekaev, O. L. Ivanov, V. V. Ostrishko, A. N. Lvov). After the unification of efforts of experts from the Scientific school of Academician A.B. Smulevich in 2003, the cooperation of dermatologists and psychiatrists reached a qualitatively new level. There were formulated the conceptual foundations of systematics of mental disorders in dermatology (Smulevich A., 2004-2015), was developed the theory of hypochondria circumscripta in dermatology as a basis for the emergence of dermatitis artefacta (Lvov A., 2006), were studied the psychosomatic aspects of acne, recurrent herpes simplex, psoriasis and atopic dermatitis (Michenko A., 2008), psychogenic itch (S. Bobko, 2013), were thoroughly studied the problems of neurotic excoriations, delusional parasitosis and related disorders (Romanov D., 2014). The large-scale epidemiological

studies were carried out, the algorithm was developed to provide integrative medical care to patients with psychosomatic dermatoses and the schemes of rational pharmacotherapy in dermatological practice were developed as well. The most important Neuroimmunological and Neurophysiological studies that have received worldwide recognition has been continued. The pioneering works in the field of Trichology has been started. Currently, research in the field of Psychodermatology in Russia are most actively conducted in the Commonwealth of The Mental health Research center of RAMS and the Moscow Scientific and Practical Center of Dermatovenereology and Cosmetology of the Moscow Healthcare Department. There is a Psychodermatological group which is functioning as the part of both institutions. It has fully justified itself as the most effective form of joint scientific, diagnostic and treatment activities on an integrative front.

### PL3

#### FROM EVIDENCE-BASED MEDICINE TO HUMAN-BASED MEDICINE IN PSYCHOSOMATICS

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Human-based Medicine (HbM), a form of psychiatry that focuses not only on fragments and constructs but on the whole person, no longer finds its theoretical basis in the positivism of the modern era, but rather owes its central maxims to the post-modernist ideal that ultimate truths or objectivity in identifying the final cause of illness remain hidden from us for theoretical reasons alone. Evidence-based Medicine (EbM) and HbM are thus not mutually exclusive opposites; rather, despite superficial differences in methods of diagnosis and treatment, EbM must be integrated into HbM as an indispensable component of the latter. Probably the most important difference between EbM and HbM lies in the aims and methods of treatment. In HbM the goal is no longer simply to make illnesses disappear but rather to allow the patient to return to a life that is as autonomous and happy as possible. The human being with all his or her potential and limitations once again becomes the measure of all things. This also implies, however, that the multidimensional diagnostics of HbM are oriented not only towards symptoms, pathogenesis, process and understanding but also to a greater degree towards the patient's resources. Treatment options and forms of therapy do not put the disease construct at the centre of the diagnostic and therapeutic interest, but have as their primary aim the reopening of the possibility of a largely autonomous and joyful life for the patient.

### PL4

#### DERMATOLOGY AND PSYCHIATRY IN ISRAEL: PAST AND PRESENT

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The history of modern medicine in Israel began with the vision of Henrietta Szold (1860–1945). She was born in Baltimore, Maryland, USA as the eldest of 8 daughters of Rabbi Benjamin Szold the spiritual leader of Baltimore's temple "Ohev Shalom". In 1896, one month before Theodor Herzl published his magnum opus: "Der Judenstaat" (The Jewish state) she described her vision of establishing a Jewish state Israel. In 1912 Henrietta Szold founded the Hadassah Organization- A women American Medical Zionist Organization dedicated to support health, education and welfare of the Jewish community in Israel (Palestine at that time).

In 1920 at age 60, Henrietta Szold immigrated to Israel. In 1921 The Meir Rothschild Hospital (Established in 1854 in Jerusalem by the Rothschild family of France) changed its name to Hadassah Hospital as the hospital of the Hadassah Medical Organization.

1913 – A clinic of dermatology was housed in a rented structure adjacent to Meir Rothschild Hospital.

1919 – The first department of dermatology in Israel was established and moved into the hospital.

1920 – Prof. Arye Dostrovsky was elected to be the first head of the department of dermatology. He was born in 1887 in Kiro (Crimea) in Russia. He studied medicine in Vienna graduating in 1914. In 1917 he completed residency in dermatology in Petrograd Immigrated to Palestine (Israel) in 1919. He was the first Chairman of the first Department of Dermatology in Israel opened in Hadassah Hospital on 1919. He was the first dean of the first Medical School opened in the Hebrew University in Jerusalem on 1949.

The first dermatologist and psychiatrist in Israel was Prof. Yakov Shanun. He was born in Mir Russia in 1911. He was a talent musician, pianist and graduated music at the academy of music in Bologna, Italy. Later he studied medicine and finished residency in dermatology in Italy in 1936. He immigrated to Israel in 1939 and settled in Jerusalem. For the first 10 years of his stay in Jerusalem, he worked as a musician and in 1949 he joined the Department of Dermatology at Hadassah Hospital. In 1956 he went to the US to study psychosomatic medicine and when he returned to Israel two years later, he founded the Clinic of Dermatology and Psychiatry at Hadassah first of its kind in the Middle East. A significant element in his activities at this clinic was his work with holocaust survivors. He noticed that many of them have dermatological problems and psychiatry disorders as well which he believed that they are connected. His works were published in international journal and the USA government funded his studies on this subject. He helped the survivors not only treating their illness but also the submission of claims to the German government in respect of their suffering. He conducted many studies on dermatology and psychiatry and in 1987 he got the medal of «Yakir Jerusalem» the highest medal of appreciation of the city of Jerusalem. He died in 1994.

At present there are two clinics in Israel dedicated to dermatology and psychiatry: in the department of dermatology at Hadassah Hospital in Jerusalem and at the department of dermatology at the Ichilov-Municipal Hospital of Tel Aviv. Both are very active treating hundred of patients with dermatological and psychiatric disorders and performing many studies in this field.

### PL5

#### ANNOUNCEMENT OF BAD NEWS IN PSYCHO-DERMATOLOGY

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Although they are usually not lethal, psychodermatological diseases are frequently bad news. Indeed, they are often repressed or are considered as shameful. The idea of being considered a fool is resented. The diagnosis overmuch concerns privacy. The therapeutic options (psychotherapy or drugs) are resented or frighten.

Hence, the announcement of diagnosis and/or treatment of psychosomatic disease or psychiatric disease can be problematic. Paradoxical reactions of denial, excessive control, revolt, negotiation, displacement, regression or sublimation can occur.

After considering ethical, legal and psychological aspects, what to do is highly variable according to the patient and may change over time. In any case, it is useful to announce as soon as possible that a disorder can be modulated or even be created by psychological context because the brain is the main organ of our body. Later, the speed of the announcement as well as the quantity and the quality of the data that are given to the patient vary according to each patient. The doctor must adapt. The success is not always the end of the road, especially with hysterical, psychotic or perverse patients.

## PL6

### PSYCHOIMMUNOLOGY IN CHRONIC INFLAMMATORY SKIN DISEASES: NEW ASPECTS IN A STIMULATING FIELD

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A growing body of evidence accumulates which shows, stress is not always stress. In particular, at the interfaces of the organism with its environment, a single acute inflammatory stimulus or an acute psychosocial stress experience can exert completely different neuroendocrine-immune reactions when compared to repeated, simultaneous or chronic challenge. In other words, is an acute psychosocial stress stimulus immediately followed by an inflammatory stimulus or vice versa, the stress-effects are additive. Under acute conditions, we observe a neurotrophin- and neuropeptide-dependent activation of innate immunity in mice both with noise-stress and with allergen provocation. If both challenges come together, a dramatically intensified inflammatory response can be observed. This exacerbation depends on neurotrophins, substance P and neurogenic inflammation. Stress-induced worsening thereby associates with a shift in the immune balance toward pro-allergic cytokine-production and also affects behavior of mice. We recently found that this process is likely to be further exacerbated by a lack of substance P-depleting mast cell proteases and a reduction of anti-inflammatory acetylcholine receptor activation. This reaction, however, is transient. By contrast, repeated stress exposure, modulates regulatory immunity and shifts the cytokine-balance towards cytokines that support a cellular dominated immune response. Under these conditions, acute inflammation resolves. At the same time, there is an increased neuro-immune interaction in the skin, which can react faster and stronger to further irritation. Chronic and pathogenetically sustainable and effective stress effects therefore seem to occur in particular when various stress stimuli interact. This process however can be trained.

## PL7

### UPDATE OF THE TREATMENT OF SKIN PICKING

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*Objectives:* Skin picking is a chronic and disabling obsessive-compulsive spectrum disorder which is also called dermatillomania. It's prevalence is, although not thoroughly studied, estimated on 2-5%. It is characterized by continuously scratching, squeezing

or pinching out irregularities, such as wounds or pimples, little hairs that are about to emerge under the surface of the skin, but even healthy skin. Most patients focus on the skin of the face, but it can occur on every part of the body. Patients experience an uncontrollable urge to start the picking, and experience feelings of satisfaction during and feelings of guilt or regret after the skin picking. Consequences are tissue damage (90%) and possible infections (around 60%). Just like in trichotillomania psychological consequences are feelings of shame and avoidance, either by masking the skin by make-up or avoidance of social events. The etiology is unknown, but a relationship with psychosocial stress is established. The undesired behaviour on the one hand helps to reduce stress, on the other hand it is a stimulating activity when the subject is bored. Every time one engages in the anxiety reducing behaviour, this behaviour is reinforced. Up till now, only a few papers addressed the efficacy of psychotherapy for patients with skin picking. *Methods:* At the Department of Psychiatry of the Academic Medical Centre, we have the first specialized habit reversal group treatment program for patients with skin picking, consisting of psychoeducation, chain analysis, stimulus response and control, restriction in time and place. The program consists of 8 group sessions with 6–8 patients of 4 hours a week during 4 months. During the last two years, we have treated 27 patients with skin picking and evaluated their symptoms using the Skin Picking Scale (SPS) and the Dutch Dimensional Obsessive Compulsive Scale (DDOCS) in a naturalistic design. *Results:* Skin picking symptoms decreased significantly during treatment. SPS scores decreased from 16.0 (SD 5.2) to 7.3 (SD 2.7) after 4 months and the DDOCS decreased from 18.1 (SD 3.7) to 10.1 (SD 2.1). Three patients dropped out during our treatment. *Conclusion:* Patients with skin picking can be effectively treated with group habit reversal therapy. However, randomized clinical trials including a waiting list condition are needed.

## PL8

### PSYCHIATRIC MORBIDITY IN PSORIASIS PATIENTS

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Psychiatric morbidity is frequent in patients with psoriasis. Many patients may face various limitations in their psychosocial lives because of symptoms indicating the presence of psychopathological phenomena. The strong influence of the disease on patients' health-related quality of life with profound impact on the psychological aspect is well known. The objective of the examination was to detect the most frequent psychological changes in psoriasis patients. *Material & methods:* The 186 patients suffering from moderate to severe psoriasis were examined by dermatologists. The family histories & case histories were scrutinized. 31 patients (17%) with suspected psychological changes were consulted by psychiatrist. *Results:* Neurotic disorders associated with stress & somatoform disorders were diagnosed in 23 patients, including neurasthenia in 9 cases, somatoform disorders in 7 cases, panic disorder in 2 cases; mixed generalized anxiety & depressive disorder in 2 cases; obsessive-compulsive disorder in 2 cases; phobia in 1 case. Mood disorders presented by episodes of moderate severity level were diagnosed in 8 patients. *Conclusion:* 17% of patients suffering

from moderate to severe psoriasis have mental diseases. Neurotic disorders associated with stress & somatoform disorders prevail. The findings prove the necessity of interdisciplinary programs of diagnostics and treatment of psoriasis.

### **PL9 DERMATOLOGIST–PATIENT RELATIONSHIP IN PSORIASIS**

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Success in the treatment of psoriasis' patients lies not exclusively on drug efficacy but also on the change in patients' perception, helping them back to normal life. Thus, the cure implies regaining contact and intimacy with those they care about. The dermatologist-patient relationship is sometimes the field where this process is developed. *Objective:* To assess in terms of proxemics (the use of space on interpersonal communication) the association between the psoriasis and the feelings of trust and intimacy in the dermatologist-patient relationship. *Methods:* 116 psoriatic patients and 88 controls were studied in a psoriasis centre. The affective distances test was administered to both groups to compare the intimacy area and the touching behaviour of different bonds (sexual, family, work, public, with the physician, with the enemy, etc.) in each group. As patients and controls were asked to explain in writing why they chose a particular distance for each relationship, measured distances and verbal explanations were evaluated qualitatively. *Results:* Compared to controls, patients with psoriasis showed significant differences in "affective distances" with the dermatologist ( $p=0.000$ ). Verbal associations revealed two kinds of responses: a) the attaching one, when patients feel that physical proximity means a promise of being healed or when they tend to equate medical setting with family environment and b) the avoiding one, when they fear being invaded. *Conclusion:* Psoriasis' patients establish a closer distance with their doctor than the controls. The patient's need to feel loved or attached to others influences the type of bond they have with their doctor. Thus, they confuse physical proximity and medical care: being clingy or getting the doctor to always be present means being in the doctor's mind, and therefore better treated. They also could behave at the doctor's office as if it were their home and expect the doctor to be as a family member. This promotes the tendency to deposit the burden of the disease in the dermatologist's office or to have a time-consuming behavior. On the other hand, they can develop a defense against the fusion with an attitude of detachment and avoidance that results from an unconscious fear of invasion. Sometimes, an alternation between both attitudes is observed, producing confusion in the medical team and preventing the intimacy and trust necessary for the healing process.

### **PL10 THE BODY-MIND-UNITY THEORY IN DERMATOLOGY – CURRENT APPROACHES TO RESEARCH**

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After a groundbreaking article issued in 1977 in Science, "The Need for a New Medical Model: a Challenge for Biomedicine" which pointed to the need of integrating social and psychological factors in a new model of health and disease, George Engel published in 1980 in the American Journal of Psychiatry a second, possibly nowadays more neglected work, "The Clinical Application of the Biopsychosocial Model". Here the importance and the advantage of applying concepts from Bertalanffy's Systems Theory in Medicine are properly presented. When recognizing the hierarchy of natural systems (levels of organization) both the scientist and the clinician can go beyond the reductionist approach, thus for the first time taking into due account the interdependence "of the rules and forces responsible for the collective order of a system, whether an organelle, a cell, a person, or a community" [1]. In the course of the last decades, the biopsychosocial model has increasingly gained recognition and is now often described as a theory based on the unity of body and mind [2]. Recently, also more attention has been devoted to biopsychosocial research: data showing the complex interconnections between social, psychological and biological factors are being increasingly collected. Especially in the field of psychodermatology we find significant results that emphasize the importance of a multidimensional approach, which adequately recognizes the unity of body and mind both in research and daily medical practice.

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### **PL11 PERSONALITY TRAITS IN PATIENTS WITH PSORIASIS**

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*Objectives:* In psychodermatological literature, personality has been treated both as a psychological consequence of skin disease and as stable traits that might modulate the onset and course of skin diseases. The literature regarding personality traits and psoriasis is sparse. The aim of measuring personality traits in our studies was to identify potential traits of psychological vulnerability in different clinical subgroups of patients with psoriasis. To the best of our knowledge, no previous study has yet used the Swedish Universities Scales of Personality (SSP) in psoriasis research. *Methods:* A descriptive cross-sectional study was conducted among 101 consecutively recruited outpatients with psoriasis. A psychosocial interview was performed followed by self-assessment of validated questionnaires: SSP, Spielberger State-Trait Anxiety Inventory Form-Y, and Beck Depression Inventory. Psoriasis severity was assessed by the Psoriasis Area and Severity Index. Pruritus was measured by a Visual Analogue Scale. *Results:* Three clinically relevant subgroups of patients with an increased psychological vulnerability could be identified: Early age at onset of psoriasis, but not disease duration, was significantly associated with four pessimistic personality traits, i.e., embitterment, trait irritability, mistrust, and verbal trait aggression. Early age at onset of psoriasis was also associated with higher scores of depression and anxiety, compared with late onset psoriasis. Patients with higher levels of pruritus showed higher scores in four negative pessimistic personality traits, i.e., somatic trait anxiety, embitterment, mistrust, and physical trait aggression. Those with severe pruritus

also reported significantly higher scores for both depression and anxiety. Sixty-four patients (63%) reported a subjective association between disease exacerbation and stress, and were defined as “stress reactors”. Stress reactors showed a significantly more vulnerable and stress susceptible personality profile and higher scores of both depression and anxiety, compared with non-stress reactors. *Conclusion:* From a clinical perspective, our results stress the importance of increased attentiveness to psychological vulnerability when caring for patients with psoriasis, especially those with young age at onset, and/or severe pruritus, and/or patients who experience disease exacerbation during stress.

### PL12

#### POST-TRAUMATIC GROWTH IN MELANOMA SURVIVORS

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Cancer patients experience positive as well as adverse consequences from cancer diagnosis and treatment. We shall review psychological adjustment issues in melanoma patients and their differences with other cancer areas such as breast cancer. We also will present preliminary data on an ongoing study aimed to characterize the experiences of posttraumatic growth (PTG) in a cohort of female melanoma survivors and their significant others. *Methods:* This cross-sectional study is part of a multimethod, two-stage design (quantitative in the first phase and qualitative in the second) and a longitudinal project. For this phase we collected medical variables and physical variables as well as the following questionnaires: Posttraumatic Growth Inventory (PTGI), Impact Event Scale, Mental Adjustment to Cancer Scale, Life Orientation Test, Distress Thermometer, Hospital Anxiety and Depression Scale, Functional Assessment of Chronic Illness Therapy General (FACIT-G) and Spirituality (FACIT-Sp). Partner or significant others were approached and completed PTGI and personal account of patient’s observable and behavior change (health behavior inventory). In the qualitative part of this study we use an interpretative phenomenological analysis (IPA) of groups of women melanoma patients who are willing and able to describe a detailed assessment of cancer-related disclosure and the pre-existing factors promoting psychological growth and maintenance of a sense of well being. *Results:* 30 women survivors (18 months average time from stages IA-IB-IIA, IIB melanoma diagnosis with no clinical evidence of disease at last medical follow-up) were approached and 75% reported finding benefit from their experience. Enhanced interpersonal relationship and greater spirituality were the most commonly cited scales. PTG was also prevalent among significant others. The PTG scores and significant others accounts were highly correlated. We found a robust relationship between perceived threat (IES) and PTG. Posttraumatic growth was not associated significantly with factors pertaining to cancer treatments variables. MAC fighting spirit was associated positively with PTG scales and MAC helplessness/hopelessness was negatively associated. We found no evidence of PTG being associated with reduced distress (HADS scores and NCCN thermometer). A modest positive correlation was found between PTG and optimism. IPA of 30 women melanoma survivors with high rates in the Spanish version of PTGI (21 item self-report inventory) reported some issues relating to the underlying interpersonal factors as predictors of benefit finding.

### PL13

#### QUALITY OF LIFE IN NON-MELANOMA SKIN CANCER

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Non-Melanoma Skin Cancer (NMSC) is common, has low mortality, and often occurs in the context of field cancerization. As a result of this, patients often have a protracted disease course. Approximately 80% of NMSC appear in the cervicofacial region, and the disease therefore predominantly involves areas readily visible to both the patient and relatives. The assessment of patient-reported outcomes may therefore be particularly important in NMSC. Studies using generic and dermatology-specific Quality of Life (QoL) measures have shown only a minimal impact of NMSC on patients. On the contrary, studies using open-ended questions for NMSC and actinic keratosis have identified a number of significant QoL issues, especially emotional concerns. The need for QoL instruments to capture patients’ concerns and explore the field of rising NMSC incidence and new non-invasive treatments have led to the development of different skin cancer-specific QoL questionnaires. The Skin Cancer Index (SCI) questionnaire concerning QoL of patients with NMSC on the face and neck was designed and validated for patients undergoing Mohs surgery. The Skin Cancer Quality of Life Impact Tool has been developed for patients following surgical removal of non-metastatic skin cancer (Malignant Melanoma or NMSC). The Skin Cancer Quality of Life (SCQoL) questionnaire was developed, tested and found useful for assessing QoL in patients with NMSC affecting any area and undergoing any therapy. A clinical interpretation of the SCQoL scale score has also been made.

### PL14

#### DELUSIONAL PARASITOSIS: EVIDENCE OF HETEROGENEITY OF THE DISORDER

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Delusional parasitosis (DP) defined also as Ekbom syndrom, delusional infestation or zoopathic delusion (Dermatozohenwahn) is designated by a false idea of infestation with parasites. Although there is a plenty of case and case-series publications of clinically variable forms of the disorder, existing data lack information about possible rationale for such heterogeneity of DP obtained in large clinical samples. Objective is to establish clinical heterogeneity of DP in a large sample of outpatients referred to dermatological department. *Methods.* The study sample comprise 64 subjects (50 female; mean age – 59.5±16.5 years) diagnosed with DP in 2009–2014. The methodological approach included precise dermatological and psychiatric evaluation performed in an interdisciplinary paradigm. Psychiatric assessment was based on a phenomenological psychopathology and pointed on precise description of signs, symptoms, and syndromes, i.e. mental states. *Results.* Psychopathological structure of DP is complex. It corresponds to conceptual binary model and comprise basic/primary and secondary/derived phenomena. The former include different sensory phenomena (tactile/coenaesthesiopathic and visual hallucinations), the later include corresponding ideatoric symptoms (delusions of infestation per se). As a result of analysis of primary and secondary symptoms interactions, three major types of DP were delineated: coenaesthesiopathic

paranoia, coenaesthesiopathic paraphrenia and zoopathic delusion of imagination. In coenaesthesiopathic paranoia tactile sensory phenomena predominate over visual hallucinations and correspond delusions of parasites infestation of the skin. In coenaesthesiopathic paraphrenia coenaesthesiopathic phenomena extend to include also visceral hallucinations (“parasites crawling inside”). Correspondingly delusions of parasites infestation are not limited by skin involvement, but include visceral invasion (Enterozoenwahn). By contrast, in zoopathic delusion of imagination coenaesthesiopathic phenomena are minimal (e.g. just skin surface), and visual hallucinations predominate. Correspondingly delusions of parasites infestation are florid, inconsistent, vivid and imaginative (multiple diverse images of parasites projections on a “skin screen”). *Conclusion.* The proposed major types of DP could differ in prognosis and suggest different diagnostic and treatment approach.

### PL15

#### DELUSIONAL INFESTATION AND UPDATE FOR DERMATOLOGISTS

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Delusional infestation (delusional infestation), formerly also known as delusional parasitosis or Ekblom syndrome, is a rare disorder, but often raises disproportionate practical problems for health care systems. Delusional infestation is characterized by a patient fixed belief that your skin, your body, or your immediate environment is infested by small, living (or less frequently inanimate) pathogens, despite a lack of medical evidence for this. 40% of patients have a mono-delusional form of delusional infestation. Approximately 60% of patient have secondary forms of delusional infestation that occur in the context of substance abuse (for example, cocaine, amphetamines, cannabis), dopaminergic drugs, antibiotics, or can be associated with physical or mental illness (such as delirium, dementia, depression, schizophrenia, stroke, and other medical conditions that affect the brain or cause itching). The neurobiology of delusional infestation is not fully understood. Studies point to structural brain dysfunction or damage to the frontal cortex, the dorsal striatum, parietal and temporal cortex, and thalamus, i.e., the brain areas involved in sensory interpretation and learning. This supports the hypothesis that delusional beliefs are the result of problems with basic processes of learning and probabilistic reasoning. Consider delusional infestation in patients presenting with a fixed belief that they are infested with living or non-living organisms. Always exclude actual infestation first, review by a dermatologist or specialist in infectious diseases is usually appropriate. Recognize patients’ distress, but do not reinforced false beliefs. Most patients require antipsychotics (amisulpride, olanzapine or risperidone), which can be offered as a means to alleviate symptoms and distress. Response rates are very good and doses are usually lower than in the treatment of schizophrenia. Management ideally requires a multidisciplinary approach, but as patients rarely agree to full psychiatric assessment the clinician who has developed trust with the patient should initiate treatment.

### PL16

#### DERMATITIS ARTEFACTA IN CHILDHOOD

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Dermatitis artefacta (DA) is a factitious disorder caused by the deliberate production of skin lesions by patients usually with a history of underlying psychological problems. The patient may not be fully aware of this, and the true extent of this disorder is unknown. The skin lesions in this condition may be produced consciously by the patient, followed by an attempt to conceal and deny any involvement in their production. The subject may be aware that they are driven to create the lesions, or in some instances the activity may occur in a dissociative state outside the patients’ awareness. DA is not well understood and is probably under diagnosed. Also, the aetiology of DA is multifactorial with a strong psychological component. Management of these patients can be especially challenging as many fail to engage effectively with their dermatologist. In children bullying, exam stress, parental divorce or separation is the common precipitating factors. DA in this group is usually transient and milder probably resulting from a maladaptive response to a psychosocial stress. Psychosocial stressors can be identified as a trigger in most cases and it is essential for the clinician to explore why the patient is presenting with DA rather than how they are creating their skin lesions. Rarely it may be possible to elicit a history of physical or sexual abuse especially if the DA lesions involve the genital skin or breasts. Although the link between the skin and psyche is not new the lack of awareness, expertise training and resources make caring for this group of patients not only challenging but also results in inefficient use of resources. And so these patients are best managed in a dedicated psycho dermatology setting which, evidence indicates, improve outcomes.

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### PL17

#### AN UPDATE ON PHARMACOLOGICAL INTERVENTIONS IN SKIN PICKING DISORDERS

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Skin picking disorder is fairly common and undertreated. No specific pharmacological agent has been approved for the treatment of skin picking disorder. Recent studies suggest that drugs acting upon serotonin, dopaminergic, and glutamatergic receptors have shown promising results in various case reports and open trials. Double blind randomized studies and multicenter controlled clinical trials are needed to determine the efficacy of such agents.

### PL18

#### ANTI-PRURITIC MECHANISMS OF CYCLOSPORIN A IN ATOPIC DERMATITIS

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*Background:* Atopic dermatitis (AD) is a chronic relapsing inflammatory skin disease associated with skin barrier impairment characterized by eczematous skin lesions and intense pruritus.

Cyclosporin A (CsA) is an immunosuppressive agent that suppresses pruritus and is currently used in the treatment of patients with severe AD, although its antipruritic mechanism is poorly understood. *Objective:* This study was performed to reveal antipruritic mechanisms of CsA in AD using NC/Nga mice, a mouse model of AD. *Methods:* Dermatitis was induced by repeated application of *Dermatophagoides farinae* body ointment to the dorsal skin of NC/Nga mice. Different concentrations of CsA (1 mg/kg and 5 mg/kg) were administered intraperitoneally to each group of mice. Skin and dorsal root ganglion (DRG) were taken to investigate histological examination and gene expression, respectively. *Results:* Intraperitoneal administration of 5 mg/kg CsA reduced number of scratching, dermatitis scores, and transepidermal water loss, as well as reducing epidermal nerve fibers, CD4-immunoreactive T cells, mast cells, eosinophils, and epidermal thickness. In addition, it reduced itch-related gene expression such as IL-31ra and NK1R (Tacr1) in the DRG of 5 mg/kg CsA treated-mice compared with those in control mice. *Conclusion:* These findings suggest that the therapeutic efficacy of CsA in pruritus of AD may involve reduced epidermal nerve fiber density and expression levels of itch-related receptor genes in the DRG as well as improvement of acanthosis and reduction of cutaneous inflammatory cell numbers.

### PL19

#### PRURIGO NODULARIS: WHAT DO WE REALLY KNOW ABOUT THIS DISEASE?

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Prurigo nodularis (PN) is a highly pruritic condition resulting from a vicious circle of repeated itching and scratching. It is characterized by the presence of multiple hyperkeratotic, erosive, and bleeding nodules and papules. PN occurs very rarely among dermatological patients; however, in our itch clinics, PN patients comprise one-third of the patients with chronic pruritus. Multiple pruritic diseases are known to underlie PN. Interestingly, women exhibit PN significantly more often than men. The pathophysiology of PN is still unknown, but peripheral sensitization and dermal neuronal hyperplasia seem to be involved. Clinically, a broad range of lesional types is seen in prurigo. We identified up to 500 single lesions in patients, with an average of over 150 papules and nodules per patient. Analysis of the different types of prurigo enabled identification of five prurigo forms: papular, nodular, plaque, ulcerative, and umbilicated ulcerated types. The papular, nodular, and plaque types may merge into one another. Based upon this terminology, we suggest a novel classification and a prurigo activity score (PAS) that enables the assessment of PN in medical care and clinical trials. All patients with prurigo, irrespective of the type, have a high burden and severely reduced quality of life due to visible, repeatedly bleeding skin lesions and availability of few treatment options. Treatment of PN continues to be challenging. There are only a few randomized controlled trials investigating the efficacy of topical pimecrolimus, topical steroids, and certain phototherapies in PN. All other therapies have been evaluated in case series or case reports. Based upon our experience, we have developed a treatment ladder for PN comprising the most effective treatment options including pregabalin, gabapentin, aprepitant, and naltrexone, and immunosuppressants such as cyclosporine or methotrexate.

### PL20

#### BRAIN PROCESSING OF CONTAGIOUS ITCH IN PATIENTS WITH ATOPIC DERMATITIS AND ITS ALTERATION THROUGH PROGRESSIVE MUSCLE RELAXATION

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*Background:* Itch can be induced by observing other people scratching, a phenomenon referred to as contagious itch (CI). The brain processing of CI has been previously investigated in healthy subjects, but not in chronic itch patients. Interventions that target the brain such as stress management trainings decrease itch in patients with atopic dermatitis (AD). The aim of this study was twofold: to examine brain activity during CI in AD-patients and to examine whether progressive muscle relaxation (PMR) can alter CI and the brain activity associated with it in AD-patients. *Methods:* Nineteen AD-patients were shown two videos: an experimental video (EV) showing other people scratching and a control video (CV) showing the same people sitting idly. If patients reacted to the EV with an increase in itch intensity of at least 3 (VAS 0–10) and fulfilled the inclusion criteria, they were included in the study ( $n=11$ ). Eight of them took part in a 2-week PMR intervention. Before and after the PMR, they underwent fMRI scans and were shown the videos in- and outside the scanner. Perfusion based brain activity during the videos was measured using arterial spin labeling. Itch intensity was assessed in- and outside of the scanner. Scratching (duration and number of scratch movements) was assessed outside the scanner and was evaluated by two independent people (inter-rater-reliability  $r>0.94$ ;  $p<0.001$ ). *Results:* At baseline, the presentation of the EV compared to the CV led to a significant increase in brain activity in the supplementary motor area (SMA; threshold:  $p<0.001$ ; cluster size  $>20$ ). Moreover, the presentation of the EV led to a significant increase in itch and scratching ( $p<0.05$ ). Region of interest analyses indicated that induced activity in the SMA was reduced after participation in PMR. In addition, induced itch and the number of scratch movements measured outside the scanner were significantly reduced after PMR ( $p<0.05$ ). *Conclusions:* This study showed that CI leads to an activation of the SMA, which was significantly reduced after PMR in AD-patients. The SMA is a region that is associated with the motor intention derived from the desire to scratch. Thus, decreased activity in this region may reflect the reduced urge to scratch. Future studies should investigate the effects of PMR in randomized control trials that include patients with other skin diseases for which also a relationship between stress and itch has been shown.

### PL21

#### PROBLEMS OF DIAGNOSTICS AND TREATMENT OF PSYCHOGENIC ITCH

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Itch is determined by its high prevalence, problems of diagnostics, social-economical loss, not clarified mechanisms of pathogenesis

and limited therapeutic and prophylaxis methods. According to classification, itch can be chronic (during 6 weeks and more) and acute; in addition, itch is a dermatological sign of skin diseases, systemic diseases and psychiatric disorders. The aim of our work was to determine systematics, to study clinical picture, to improve complex therapy and prophylaxis of psychogenic itch based on complex clinical (dermatologic, psychiatric, psychological) and experimental examination. In the period of 2009–2013, 60 patients (54.28±15.79 years) with itch duration about 5 years were examined by psychodermatological group including Visual analogue scale (VAS) and Eppendorf index, Life Style Index, Mini-Mult index, Hospital Anxiety and Depression Score. As a result of the study there were 3 groups of patients: the 1<sup>st</sup> group of patients with psychogenic itch ( $n=28$ ), the 2<sup>nd</sup> group of patients ( $n=18$ ) with amplified itch that did not correlate with severity of skin lesions in skin diseases and the 3<sup>rd</sup> group with itch by neurotic excoriations ( $n=14$ ). According to VAS in 46.7% ( $n=28$ ) itch intensity was high – more than 7 points – and in 43.4% ( $n=26$ ) medium – 4–6 points. The relationship of psychotraumatic factor in these 3 groups was statistically significant ( $p=0.038$ ). Patients with psychogenic itch had somatoform disorders in 41.3%. Personal predisposition was observed in patients with demonstrative (56.6%) and avoidant (21.8%) features. Complex treatment with dermatological and psychotropic drugs (antidepressants and neuroleptics) and prophylaxis in concordance with psychiatric disorders and clinical picture allow to achieve clinical efficiency in 58.4% in treatment of psychogenic itch.

#### PL22

##### THE PREVALENCE AND INTENSITY OF ITCH IN DERMATOLOGICAL PATIENTS IN EUROPE

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**Introduction:** Itch is the most common symptom in patients with dermatological disease. **Objectives:** To describe the prevalence and intensity of the symptom itch among dermatological patients in 13 European countries. **Material and Methods:** In dermatological clinics in 13 countries in Europe, a questionnaire was filled in by 250 consecutive patients. In addition 125 healthy controls filled in a questionnaire in each country. The questionnaire had an item on the presence of itch or not, and if yes the duration and intensity of itch assessed with a visual analogue scale. The study was approved by the Ethical Committee of Oslo and from each participating country. The diagnoses were categorized in 26 groups of common skin conditions. **Results:** The total number of responders was 4994 (3,635 patients and 1,359 controls). The prevalence of itch was 54.4% in patients and 8% in controls. The intensity (range 0–10) was highest in patients with prurigo (7.4±2.3), lowest in patients with non-melanoma skin cancer (4.0±2.4) and benign skin tumors (4.0±2.0). **Conclusions:** The presence and intensity of itch varies among the 26 different categories of skin diseases and is a common symptom among the controls. The findings show that itch is a significant symptom in a wide range of skin diseases. To our knowledge, this is the largest study to report the prevalence of itch in different skin diseases using the same questionnaire.

#### PL23

##### THE BURDEN OF CHRONIC URTICARIA

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Urticaria is one of the most common skin diseases. If symptoms last longer than six weeks, urticaria is considered as a chronic one. Despite the high prevalence of chronic urticaria, its influence on patients' well-being has been poorly studied so far. Recently we have performed a large multicenter study to provide more insights regarding the relevance of chronic urticaria on patients' functioning and psychosocial status. A total of 1,091 adults (709 women and 382 men) with chronic urticaria (383 with inducible urticaria and 708 with chronic spontaneous urticaria) have been included into the study. Beside collecting a detailed anamnesis all patients were asked to complete the Dermatology Life Quality Index (DLQI), Work questionnaire (Q-Work) of Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q), Athens Insomnia Scale as well as to assess pruritus with visual analogue scale (VAS) and 4-item itch questionnaire (4-IQ). Chronic urticaria was responsible for at least moderately impaired quality of life (QoL) in 65.1% of patients. No significant differences were observed between patients with inducible and chronic spontaneous urticaria regarding QoL (8.9±6.2 vs. 8.3±6.1 points,  $p=0.14$ ), work activity (74.3±16.4% vs. 74.3±18.4%,  $p=0.99$ ) and pruritus intensity assessed with VAS (6.8±2.3 vs. 6.7±2.4 points,  $p=0.26$ ). Patients with chronic spontaneous urticaria compared to those with inducible urticaria had slightly more problems with sleeping: 7.3±5.3 points vs. 6.2±4.9 points ( $p<0.001$ ) and slightly higher pruritus scoring according to 4-IQ (8.8±4.0 vs. 7.7±3.9 points,  $p<0.001$ ). Severity of urticaria significantly correlated with patients QoL ( $r=0.55$ ), problems with sleeping ( $r=0.4$ ), pruritus intensity ( $r=0.34$ ), and to lesser degree with decreased work activity ( $r=-0.22$ ) and itch severity according to 4-IQ ( $r=0.26$ ) ( $p<0.001$  for all comparisons). Significant correlation was also observed between DLQI scoring and mean pruritus intensity ( $r=0.39$ ,  $p<0.001$ ). Our large epidemiological study clearly indicated, that patients with chronic urticaria often demonstrate impaired QoL, and the QoL alteration is independent on the urticaria type, but is rather related to pruritus severity.

#### PL24

##### THE BURDEN OF ATOPIC DERMATITIS AND ACNE – A COMPARISON WITH A STRATIFIED CONTROL GROUP

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**Objectives:** Atopic dermatitis (AD) is a common skin disease characterized by chronicity, itch and typical infected skin areas. Acne vulgaris is another chronic skin disease which like AD also mainly affects adolescents and young adults. Psychological factors seem to be responsible for the course of the diseases in a subset of both patient groups. The first aim of this study is to describe



psychological abnormalities in patients with AD and acne (compared with healthy controls (HC)). Besides, predictors of these abnormalities will be identified in both patient groups. *Methods:* All patients and skin HC were selected from the data pool of the ESDaP study. Then for each group of patients a control group was chosen stratified by country of origin, age, sex and socioeconomic status. A total of 152 AD-patients (age  $36.92 \pm 14.6$  years) and 152 HC (age  $=37.11 \pm 13.3$  years) (each group included 66 males and 86 females) as well as 140 acne patients (age  $=25.65 \pm 7.16$  years) and 140 HC (age  $=26.22 \pm 5.95$  years; each group included 49 males and 91 females) were selected. All subjects completed questionnaires assessing socio-demographic and disease-related variables, the DLQI, HADS and EQ-5D. In addition, all patients were seen by a doctor to verify the diagnoses and to determine the severity of skin disease. *Results:* Compared to HC, AD-patients scored higher concerning problems with self-care (EQ-5D: OR=5.27; CI 95%=1.48, 18.73), pain/ discomfort (EQ-5D: OR=3.09; CI 95%=1.93, 4.96), problems with usual activities (e.g. work, study, housework, family or leisure activities; EQ-5D: OR=2.47; CI 95%=1.39, 4.39), depression (HADS: OR=2.34; CI 95%=1.29, 4.25), suicidal ideations (OR=2.32; CI 95%=1.06, 5.07) and perceived stress (OR=1.62; CI 95%=1.02, 2.57). Acne-patients differed from HC in only a few scales. They scored higher in the following items: anxiety/depression (EQ5D: OR=2.26; CI 95%=1.39, 3.67), depression (HADS: OR=2.04; CI 95%=1.05, 3.96) and stress (OR=1.77; CI 95%=1.07, 2.93). Predictors for these increased values will be presented at the conference. *Conclusions:* Both groups of dermatological patients reported a reduced quality of life, increased depression values and more stressful life events than HC. Compared to acne patients, AD-patients experience limitations in more areas of life. The predictors for these increased values will be presented at the conference. Moreover, possible psychotherapeutic approaches will be discussed.

### PL25

#### PREVALENCE OF IATROGENIC DRUGS CAUSING SECONDARY DELUSIONAL INFESTATION

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*Objectives:* Our objective was to find out the prevalence of iatrogenic drugs causing secondary delusional infestation in a dedicated psychodermatology clinic in the UK. *Methods:* We conducted a retrospective study to find out the prevalence of iatrogenic induced secondary delusional infestation in patients diagnosed with delusional infestation between 1<sup>st</sup> March 2012 and 1<sup>st</sup> March 2015. *Results:* 86 patients seen in psychodermatology clinic between 1<sup>st</sup> March 2012 and 1<sup>st</sup> March 2015 were diagnosed with delusional infestation. 6 (9.3%) of patients were on medications that are known to be causative of secondary delusional infestation. A further 2 (2.3%) patients were HIV positive and on antiretrovirals. Of the 6 patients, 1 patient had Parkinson's and was on ropinirole a dopamine-receptor agonist. 4 patients were on opiates (1 patient was taking oxycodone, oxycontin and ketamine for chronic back pain, under the pain clinic for three unsuccessful spinal operations; 1 patient was taking oral morphine for Tarlov perineural sacral cysts; 1 patient was taking opiates for chronic pain due to chronic fatigue under the pain clinic; and 1 patient was taking methadone, morphine and temazepam for a cause not documented in the hospital medical records). 1 patient was taking a prescribed benzodiazepine for a cause not documented in the hospital medical

records. *Conclusion:* Health care professional need to be mindful before commencing drugs such as opiates and benzodiazepines in patients as delusional infestations is a possible consequence. We believe that health care professionals need to monitor patients for the development of delusional infestation early if they start such medications. Anaesthetists and other health care professionals involved in pain clinics must also be alert to the possibility and be aware of how to manage such patients.

### PL26

#### TENSION BEFORE PICKING AND RELIEF DURING OR AFTER PICKING IN ISRAELI ADULTS SCREENING POSITIVE FOR EXCORIATION (SKIN PICKING) DISORDER

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*Objective:* We examined endorsement of tension before picking or while attempting to resist, and relief or pleasure during or after skin picking, in participants who met strict vs. loose criteria for excoriation (skin picking) disorder (SPD). The two SPD groups (loose and strict) and SPD vs. non-SPD groups were also compared on additional clinical variables. *Methods:* Two thousand seven hundred forty-one (2,741) questionnaires from prior surveys of SPD in the Israeli population were used. Participants with picking not due to medical or other psychiatric conditions were assigned to strict (associated distress and functional impairment) or loose (associated distress or functional impairment) SPD groups. Univariate *t*-tests and chi-square tests were used to compare groups on severity of depression, perceived stress, generalized anxiety, body dysmorphic disorder (BDD), obsessive-compulsive disorder (OCD), attractiveness to self and others, smoking, and alcohol and illicit drug use. *Results:* 205 (7.48%) participants screened positive for SPD. Of these, 147 (71.7%) endorsed the loose and 58 (28.3%) endorsed the strict SPD criteria. Mean age of the SPD participants was 33.1 (SD=15.6; range=18-81) years. 945 (44.4%) participants were above the age of 30. 42.8% of participants were male and 1,096 (40.2%) were married. 69.48% of those who satisfied the loose or strict SPD criteria endorsed tension before or while resisting picking. 63.41% of this group endorsed relief after picking. Only 31% of the total SPD (loose and strict) group present with both tension and relief. Participants satisfying either loose or strict SPD criteria endorsed tension or nervousness before picking, or while attempting to resist ( $p < 0.001$  and  $p < 0.001$ , respectively) and pleasure or relief during or after picking the skin ( $p < 0.001$  and  $p < 0.001$ , respectively) more often than non-SPD participants. Severity of depression ( $p < 0.001$ ), OCD ( $p < 0.001$ ) and perceived stress ( $p < 0.001$ ) were greater in the SPD (strict and loose criteria) vs. non-SPD groups. Similarly, the SPD and non-SPD groups differed on rated attractiveness to self ( $p = 0.01$ ), BDD ( $p < 0.001$ ), generalized anxiety ( $p < 0.001$ ), smoking ( $p = 0.02$ ) and alcohol use ( $p = 0.02$ ). OCD ( $p = 0.04$ ), BDD ( $p = 0.002$ ) and generalized anxiety ( $p = 0.001$ ) were significantly higher in the SPD strict vs. loose participants. In contrast, depression ( $p = 0.35$ ), perceived stress ( $p = 0.6$ ) and attractiveness to self ( $p = 0.78$ ) and others ( $p = 0.76$ ) were not different between SPD strict and loose groups. *Conclusions:* Two-thirds of Israeli survey participants screening positive for SPD endorse either tension or nervousness before picking the skin, or while attempting to resist picking or

pleasure or relief during or after picking. Only one-third of this group endorse both tension and relief associated with skin picking behavior. SPD vs. non-SPD individuals, as well as pickers endorsing loose vs strict criteria, differ on several variables that should be clinically assessed for optimal treatment outcomes.

### PL27

#### AN ANALYSIS OF THE RANGE OF MENTAL DISORDERS, PROVOKED BY CHRONIC DERMATOSES, WHICH PRESENT TO UNIVERSITY HOSPITAL DERMATOLOGY DEPARTMENT IN RUSSIA

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**Objectives:** There was a clinical study to assess the range and typology of nosogenic mental health disorders, provoked by chronic dermatoses, which present to a University Hospital Dermatology Department in Russia. **Methods:** 767 patients (av. age 38.3±6.3) with nosogenic disorders (ND) (F43; F45) were examined in Dermatology Hospital FMSMU I.M. Sechenov (atopic dermatitis - 132; psoriasis - 127, acne - 118, rosacea - 115, eczema - 109, seborrheic dermatitis - 88, lichen planus - 64, pemphigus - 14 patients). Each patient was examined by psychiatrist, psychologist and dermatologist by clinical method and with use of standard diagnostic scales and questionnaires. **Results:** Depressive and dissociative nosogenic disorders (ND) were found in severe dermatoses with a predomination of somatogenic and vital factors (extensive affection of skin, frequent relapses, pain, itch, life threat and risk of disability). Depressive ND included depressed mood, crying, irritability, sleep disorders, hypochondriac fears, and somato-psychic hyperaesthesia. Dissociative ND were characterized by rational relation to manifestation of severe dermatosis with formation of overcoming behavior in patients with expansive-schizoid and paranoid premorbid personality (PP) with deficit in body self-consciousness (masqued hypochondria) or neglect of disease in patients with hysteric-hyperthymic or borderline PP with somatopsychic depersonalization (aberrant hypochondria). External-based (1) and internal-based (2) ND revealed in moderate dermatoses with predomination of psychogenic factors (affection of open skin areas, associated with cosmetic defect). 1. Patients consider cosmetic defect due to its perception by others in social situations, that leads to formation of anxiety-phobic (social phobia, situational avoidant behavior, avoidant and hysterical PP) and obsessive (sensitive ideas of reference, total avoidant behavior, sensitive-schizoid PP) symptoms. 2. Possession with ideas of elimination of cosmetic defect in order to reach «ideal» appearance - overvalued hypochondria (pathological fixation on affection of skin, absence of social phobia, massive autoaggressive behavior, narcissistic and schizotypal PP). **Conclusion:** Clinical typology was developed and psychopathological structure of nosogenic disorders was identified according to clinical severity of dermatosis, predomination of somatogenic, vital or psychogenic factors, structure of patient's personality.

### PL28

#### ALEXITHYMIA AND PSORIASIS

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**Objectives:** Our aim was to compare the prevalence of alexithymia traits among psoriasis patients in the Canary Islands, Spain, and a control group (healthy subjects) and also with patients in Slovenia. We also wanted to find out epidemiological factors that could influence the results on both psoriasis groups of patients. **Materials and Methods:** We designed a transversal case-control observational study, including 30 patients with moderate to severe psoriasis born in the Canary Islands, 30 Slovenian patients and 30 control healthy subjects. Their alexithymia traits were assessed according to the 20-item version of the Toronto Alexithymia Scale (TAS-20). Psoriasis severity was evaluated using the Psoriasis Area and Severity Index (PASI). In addition, study subjects provided some personal data by completing a questionnaire about their own life and illness. Statistical analysis was performed using SPSS 20 (Chicago, Illinois). **Results:** For those patients in Spain, higher prevalence of alexithymia traits were found in the psoriasis group, but it was not statistically significant ( $p=0.166$ ). Our analysis showed no statistically significant differences between both groups, except for a connection of certain alexithymia traits and the patient's psychiatric history ( $p<0.05$ ). When comparing Spanish with Slovenian patients, a statistically significant higher prevalence of alexithymia traits were found among the last, moreover, the psychiatric history showed a negative relationship with these higher alexithymia traits found in the Slovenian population ( $p=0.05$ ). **Conclusion:** Alexithymia traits were found to be slightly higher among psoriasis patients than in healthy control subjects in the Canary Islands. Higher scores were found among Slovenian patients. Previous psychiatric illness was found more on those Spanish patients showing alexithymia higher traits than in Slovenian patients.

### PL29

#### THE QUALITY OF LIFE OF THE PATIENTS WITH PSORIASIS VULGARIS IN BULGARIA

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**Objectives:** To evaluate the relationship between the effectiveness of treatment and the psychological status of patients suffering from Psoriasis vulgaris in the in-patient and out-patient setting in the University Teaching Hospital Pleven. **Methods:** 100 patients with Psoriasis vulgaris were asked about the impact of their disease and its treatment on their lives; The patients were asked to fill in the DLQI questionnaire on day 0 of their hospitalization and once again, on day 10, the day of their discharge from the hospital. The results unwarrantedly show that the DLQI score of these patients did not decrease (their DLQI score was evaluated to be the same on day 0 and on day 10 in most of them, or the variation was insignificant). It was noted the Psoriasis Assessment and Severity Index (PASI) score of these patients showed that the disease was well treated and the severity of the skin disorder decreased significantly. **Results:** The DLQI questionnaire was also completed by twenty patients with Psoriasis vulgaris, with treatment in the out-patient setting. The results showed that after 10 days of treatment at home, the main score of those patients was very low compared with the main score of the patients, treated at the hospital. **Conclusion:** This study confirmed that even if the disease is well treated, the admission to the hospital causes a lot of stress to the patients. It may be noted that the general condition in most government hospitals is of lower standard in Bulgaria as compared to the Western European

countries. Hence, the psychological status of our patients does not to their somatic one.

### PL30

#### A WEB-BASED, EDUCATIONAL, QUALITY-OF-LIFE PROGRAMME FOR PATIENTS WITH A CHRONIC SKIN DISEASE: VERSION 2.0

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**Background:** Chronic skin diseases can have a major impact on patients' health-related quality of life (HRQoL). Patient education aiming at an improvement of HRQoL is a promising and efficient way to provide additional care. We developed a web-based, educational ("e-learning") programme on HRQoL, offering patients knowledge and skills to cope with their chronic skin disease more effectively and to improve their HRQoL. A previous feasibility study with the first version of this programme led to several recommendations for improvement. **Objectives:** We aimed to improve the e-learning programme on HRQoL, resulting in a version 2.0, and to evaluate the content, relevance, effectiveness, convenience, design, and feasibility of this new version in the opinion of health care providers and patients. **Methods:** A panel of experts ( $n=6$ ) and patients with various chronic skin diseases ( $n=14$ ) was founded, who were closely involved in the development of version 2.0 of the programme. Patients indicated their needs and preferences. Both experts and patients reviewed the content. To evaluate the programme, we conducted a pilot study in three dermatological clinics and one patient association. Health care providers and patients completed study-specific questionnaires to evaluate their experiences. **Results:** The e-learning programme version 2.0 consists of an introduction- and final-module and 8 optional modules: 1) Coping with itch, 2) Rumination, 3) Anger, 4) Depression, 5) Body image, 6) Sexuality, 7) Social contacts, and 8) Leisure time and sports. First, patients complete a screening questionnaire and then choose four optional modules that fit their individual situation best. Each module consists of tips and advice from both patients and experts. Patients complete tests to increase their awareness and assignments to improve their quality of life. Also, blended learning is integrated in the programme. Data collection for the pilot study is currently ongoing. **Conclusions:** A version 2.0 of the e-learning programme was developed in close collaboration with experts and patients. Health care providers and patients evaluated the content, relevance, effectiveness, convenience, design, and feasibility of this new version. Results and conclusions will be presented at the conference.

### PL31

#### E-HEALTH COGNITIVE BEHAVIORAL TREATMENT FOR PATIENTS WITH PSORIASIS: A RANDOMIZED CONTROLLED TRIAL

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**Objective:** Patients with psoriasis regularly experience physical and psychological impairments, which are often not fully addressed in routine dermatological care. A potential (cost-)effective solution to this problem may be to offer an adjuvant internet-based cognitive behavioral treatment to risk groups of patients with psoriasis. The aim of the current study is to examine the efficacy of therapist-guided and individually-tailored eHealth cognitive behavioral treatment for risk groups of patients with psoriasis in a randomized controlled trial. **Methods:** Patients from four outpatient dermatology departments and one patient association were screened for elevated levels of distress. Risk groups were included in a randomized controlled trial comparing assessing guided, tailored, internet-based cognitive behavioral treatment ( $n=65$ ) compared to care as usual for controls ( $n=66$ ). Outcome measures included the impact of psoriasis on daily life, including its impact on physical and psychological functioning and daily activities at post-treatment, and follow-up measurement at six months after post-treatment. Secondary outcomes included patient-reported improvements at post-treatment. **Results:** At post-treatment, patients indicated improvements in both coping and complaints, and were satisfied with the eHealth cognitive behavioral treatment. Positively rated intervention aspects include face-to-face intake sessions, setting of treatment goals, and online therapist contact. **Conclusion:** Preliminary results indicate that eHealth cognitive behavioral treatment for patients with psoriasis is feasible and effective from the patients' perspective, suggesting its potential value as an adjuvant treatment for this patient group. Post-treatment and follow-up results of the randomized controlled trial on the primary outcomes are forthcoming and will be discussed in the presentation.

### PL32

#### THE EDUCATIONAL INTERVENTION "NO.TE.S. (NON TECHNICAL SKILLS), THE ART OF THE DOCTOR-PATIENT RELATIONSHIP": A PILOT STUDY IN COMMUNICATION SKILL TRAINING IN GREEK DERMATOLOGISTS

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**Objectives:** The aim of this pilot study was to test the feasibility of a one-to-one training program on communication skills in dermatologists in their own practices and also to explore the participants' evaluation. **Methods:** Fifteen dermatologists were offered a one-to-one communication skills training program in their private practices, organized by LEO Pharma Hellas. A trained specialist provided 7–9 sessions to each participant from 9/2014 to 1/2015. After the program's completion, participants were asked to complete anonymously and voluntarily an evaluation questionnaire. Data have been qualitatively analysed by using thematic content analysis. **Results:** Fourteen dermatologists completed the program (93.3%). They had a mean professional experience of 10.9 years

(±6.6) and ten were female (71.4%). Thirteen declared no previous education on communication skills (92.9%). All of them (100%) would suggest NO.TE.S to a colleague, while 13 (92.9%) expressed an interest in getting involved in future educational programs on communication skills. All 14 physicians stated that their participation was a highly positive experience: for some physicians it led to re-consideration of the physician-patient relationship, while for others it motivated them to be more patient-centered, to improve their communication skills, to be aware of guides to medical interviews, to increased self-confidence, and finally to better self-care. After their training, 11 (78.6%) of the dermatologists declared that they have noticed improvements in patients' satisfaction, 14 (100%) in their own satisfaction, 7 (50%) in adherence to therapeutic plans, and 7 (50%) in treatment outcomes. *Conclusion:* This pilot study provides evidence that the one-to-one communication skills training tested in NO.TE.S, could be an effective, convenient, personalized means of enhancing communication skills in continuing medical education programs, leading to a more patient centric doctor-patient interactions.

### PL33

#### A MULTIDISCIPLINARY TRAINING PROGRAM FOR OUTPATIENT CHILDREN AND ADOLESCENTS WITH PSORIASIS AND THEIR PARENTS: A PILOT STUDY

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*Objectives:* Pediatric psoriasis can have a profound effect on the patient's life, including complaints of itch, pain, shame, and stigmatization. In conjunction with dermatological care, psychosocial training programs have the possibility to improve physical and psychosocial wellbeing. The aim of this pilot study was to assess the feasibility and acceptance, and describe the possible effects of, a multidisciplinary training program for outpatient children and adolescents with psoriasis and their parents. *Methods:* The outpatient group training consisted of four sessions of 2.5 hours and was designed for two age groups (6–12 and 12–18 years). The training was delivered by a multidisciplinary team consisting of a dermatologist, psychologist, and dermatology nurse specialist. The program included treatment modules of medical information and skin care, itch and scratch problems, psychological issues in coping with psoriasis, sleep hygiene, and relapse prevention. To assess the feasibility and acceptance of the program, participants were asked to fill in an evaluation questionnaire at the end of treatment. In addition, assessments were made before and after treatment and at three months follow-up on the outcome measures quality of life, itch and scratch responses, illness cognitions, impact on family life, and disease severity. Twenty-three patients and their parents participated in the training. In addition, age and gender-matched controls were recruited to create a control group of pediatric psoriasis patients. *Results:* Patients and their parents were highly satisfied with the program. Both patients and parents highly valued the group format and meeting other patients and parents. The great majority of participants indicated subjective improvements with regard to skin care, itch, scratching behaviors, psychological wellbeing, and dealing with stigmatization. In addition, positive changes were found for the treatment group on

the outcome measures quality of life, itch and scratch responses, illness cognitions of helplessness and acceptance, and impact on family life. However, these improvements were relatively small and were also found in the control group. *Conclusion:* These results suggest that a multidisciplinary training program for children and adolescents with psoriasis and their parents is well-accepted and positively evaluated by the patients and their parents. Further improvements of the treatment program and suggestions for future research will be discussed.

### PL34

#### BOTULINUM TOXIN: THE MISGUIDED PATH

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Botulinum toxin is widely used and has become a popular mass phenomenon in aesthetic medicine. Considerable scientific data concerning the biopsychosocial impact of botulinum toxin use have become available. The bidirectional interaction of mimic and emotion, described as the facial feedback hypothesis, is particularly influenced, as is mimicry. Furthermore, botulinum toxin can cause dysfunction of face harmony including false laughing or the "frozen face". As a result, complex psychosocial disturbances can occur and may affect social interaction and cause flattening of affect. Thus one must ask whether in the future botulinum toxin will continue to be employed in aesthetic dermatology or perhaps be regarded as a misguided path.

### PL35

#### HAIR AND SCALP PROBLEMS WITH PSYCHOLOGICAL ORIGIN

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There are various reasons for hair loss and alopecias. Most of the frequent alopecias are not caused or aggravated by psychologic factors. These include androgenetic alopecia (50% of all men, 10–20% of all women), scarring alopecias such as folliculitis decalvans or lichen planopilaris. Whether alopecia areata has psychologic cofactors is a matter of intense debate. Clearly of psychologic origin are autoaggressive disorders like trichotillomania (plucking of hair, scratching of the scalp) and its variants such as trichoteiromania (rubbing of the scalp, breaking of hair) or trichotemnomania (cutting of hair). The diagnosis of these disorders is often missed. In the presentation, clues for correct diagnosis of these disorders will be presented. Treatment options include behavioral modifications as well as antipsychotic drugs.

### PL36

#### PSYCHOLOGICAL AND THERAPEUTIC EFFECTS OF NEEDLE THERAPY IN VITILIGO

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In medicine many specialists use needles in different conditions. Needle therapy in combination with selective UVB 311 exposure is a new method that is used in the therapy of vitiligo. The method is based on the hypothesis that multiple injections can transfer melanocytes from normal skin into vitiligo area followed by UVB exposure stimulating melanogenesis. According to Iftikhar

Sheikh, who presented his first experience in 2009, this combination can give promising results. In our clinic use of this method demonstrated great therapeutic and psychological effects in 205 patients. Application of tacrolimus also positively influences on the repigmentation.

### PL37

#### TRICHOTILLOMANIA IN YOUNG ADULTS: PREVALENCE AND COMORBIDITIES

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Trichotillomania is an impulse control disorder characterized by the repeated non-cosmetic pulling out of hair resulting in noticeable hair loss. The exact prevalence of trichotillomania is unknown. However, estimates from university surveys suggest that even 6% of individuals pull out hair endorsing diagnostic criteria of trichotillomania. The aim of our study was to assess the prevalence of trichotillomania in young adults, and the comorbidity of these conditions with anxiety disorders and obsessive compulsive disorders (OCD). A total of 339 individuals, 208 (61.4%) females and 131 (38.6%) males (medicine students of Wrocław Medical University) were interviewed with a structured questionnaire. Twelve (3.54%) of participants reported hair pulling during their lifetime, 9 females (75%) and 3 males (25%). Eight participants (2.36%) fulfilled diagnostic criteria of trichotillomania (5 females and 3 males). Anxiety disorders were diagnosed in 6 participants with trichotillomania (75%), while in the group without trichotillomania 67 persons (20.2%) met ICD-10 criteria for anxiety disorders during lifetime. The differences in anxiety disorders prevalence between analyzed groups were statistically significant ( $p=0.0012$ ). OCD during lifetime was not diagnosed in the group with trichotillomania while among participants without trichotillomania OCD was diagnosed in 14 persons (4.26%).

### PL38

#### BODY DYSMORPHIC DISORDERS IN DERMATOLOGICAL CLINIC: TYPOLOGY AND DIFFERENTIAL DIAGNOSIS

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*Objectives:* Complex clinical and psychopathological study of Body Dysmorphic Disorder (BDD) in dermatology with additional epidemiological, psychological and therapeutic methods. *Methods:* 90 patients (68 female (75.6%), av. age  $27.9 \pm 9.6$ ) with BDD diagnosis according DSM-IV criteria (300.7) adapted for use in dermatological practice were explored. Epidemiological setting included 534 patients (48 female (67.6%), av. age  $28.2 \pm 12.3$ ). Life Quality Questionnaire SF-36, Dermatologic Life Quality Index (DLQI), Hospital Anxiety and Depression Scale (HADS), Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Clinical Global Impression Scale (CGI) were used. *Results:* BDD prevalence in dermatology was 13.3%. Two polar BDD types were identified – with external-based psychopathological disorders (65.6%) and

with internal perfectionism (34.4%). 1<sup>st</sup> type BDD is characterized by social phobia with fear of extensive attention of others to their nonexistent or slight defect in appearance and includes 2 subtypes: with sensitive ideas of reference ( $n=24$ ) and with social phobia ( $n=35$ ). 1: Obsessive syndrome within dynamics of schizoid personality disorder (PD) (F45.2, 54.2%) or schizotypal disorder (F21, 45.8%) with sensitive ideas of reference, total avoidance behavior, hypothyria, absence of skin autodestructions, rare seeking for dermatological treatment. 2: Obsessive-phobic syndrome within dynamics of histrionic PD (F45.2, 62.9%) with fear of negative evaluation by others, safety and situational avoidance behaviors, checking behavior, high utilization of traditional dermatological treatment. BDD with internal perfectionism ( $n=31$ ) – overvalued hypochondria predominantly within narcissistic PD dynamics (F45.2, 83.9%) with pathological fixation on appearance imperfection without fear of evaluation by others, egodystonic skin perception, severe skin autoaggressive behavior, seeking for invasive radical dermatological treatment and operations. Overall CGI responders rate on psychotherapy was 72.9%. In 1<sup>st</sup> type (80.0% responders) atypical antipsychotic monotherapy was effective in 1 subtype and SSRIs - in 2 subtypes. In 2<sup>nd</sup> type (58.8% responders) in order to overcome treatment resistance combination therapy was effective. *Conclusion:* BDD's prevalence in dermatology is high. BDD is heterogeneous disorder with two polar types. Pharmacotherapy is effective in BDD treatment and it is differentiated due to BDD type.

### PL39

#### ATTACHMENT STYLE AND COMMON SKIN DISEASES IN EUROPE: THEORETICAL ASPECTS

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*Objectives:* To study attachment is an exploration of the content and nature of close relationships. A multi-center observational cross-sectional study was conducted in thirteen European countries organized by the European Society of Dermatology and Psychiatry. The purpose of the international study was to investigate the psychological burden of common skin conditions. One of the goals of the study was to explore the attachment style among patients with skin diseases and controls. *Methods:* The design was cross-sectional. In dermatological clinics in 13 countries in Europe, a questionnaire was filled in by 250 consecutive patients and 125 healthy controls. The questionnaire included socio-demographic background information, and attachment style was assessed with the Adult Attachment Scale. A clinical examination was performed. *Results:* The total number of responders was 4994. Patients' average age was  $47.06 \pm 17.97$  years, percentage of females was 56%. In this presentation we will focus on the theoretical aspects of attachment styles. We will also discuss pathways on how attachment might impact general health, and dermatological conditions specifically. Examples will include how attachment theory could explain the impact on close relationships among persons who had skin disease during childhood and how persons whose relationship with a main carer was altered by severe atopic dermatitis. Some results and limitations from the ESDaP multicenter European study will be presented and discussed. *Conclusion:* Attachment theory represents an innovative approach to psychosomatic aspects of chronic skin diseases.

**PL40****PSYCHOVENEREOLOGY: PERSONALITY AND LIFESTYLE FACTORS IN STI**Mikhail Gomberg<sup>1</sup>, Vladimir Kovalyuk<sup>2</sup><sup>1</sup>Moscow scientific and practical center of dermatovenerology and cosmetology, <sup>2</sup>Department of urology, Federal medical biological agency, Moscow, Russia

It is evident that STIs correlate with a lifetime number of sexual partners. Other factors like sexual practice (e.g. orogenital and anal) and unprotected sex may play a major role in diversity of microbiological findings in STI. *N. gonorrhoeae* and *C. trachomatis* are among the most common bacterial agents that may cause STI. Both infections are very well treatable. But over the last 2 decades the rate of these pathogens decreased significantly. Up to 30-40% cases of urethritis in males are of non-chlamydial non-gonococcal origin. The role of viruses as STI agents are often underestimated. Despite the discussions in media regarding the role of HPV in oral cancer, and widely spread HSV-infection with lesions on oral mucosa, the unprotected oral sex is still a very common practice. In our study of sexual behavior in 505 heterosexual males with gonococcal, chlamydial and non-chlamydial non-gonococcal urethritis (nCnGU) we observed that unprotected orogenital sex with a casual partner was reported twice as frequently than unprotected vaginal sex. Among other observations we found that patients with nCnGU were significantly older, more frequently used unprotected orogenital sex, more frequently had a history of STIs, and had more lifetime sexual partners than patients with gonorrhea and Chlamydia infection. Another interesting observation from this study was that HSV infection was relatively common among patients with nCnGU followed unprotected oral sex. Sexual behavior is depended on the achievements in the management of the most dangerous STI. The more successful is situation with therapy of life-threatening infections (i.e. HIV) the less careful are patients in their sexual practice.

**PL41****A BALINT-TYPE TRAINING FOR ENHANCING THE EMPATHIC ABILITIES OF FUTURE PHYSICIANS AND FACILITATING PSYCHOSOMATIC APPROACH**

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**Background:** Empathy refers to the ability to share emotions with others, without confusion between self and others. Physician's empathic abilities are essential to build a strong doctor-patient relationship, which is known to improve treatment adherence and clinical outcomes. **Objective:** Although empathy is critical in a doctor-patient relationship, empathic abilities seem to decline throughout medical school. Our study aimed at examining changes in empathic abilities of fourth-year medical students who participated in an optional certificate based on Balint groups. **Methods:** Thirty-four students were included in the "Balint group" certificate and compared with 129 participating in other certificates. Before the training sessions and 4 months later, they filled in the interpersonal reactivity index (IRI) and were asked to rate their emotional reactions in response to two case-reports: the first described a woman with diabetes, borderline- personality traits and a history of childhood trauma; the second, a woman with histrionic traits suffering from multiple sclerosis and hospitalized for functional

symptoms. A principal component analysis extracted four factors from the 8 questions asked: empathic-approach (e.g. finding the patient touching), rejecting-attitude, intellectual-interest and fear of emotion contagion. **Results:** At baseline, there were no socio-demographic or psychological differences between groups. At follow-up, an increase of IRI fantasy-scale ( $p=0.02$ ) and a decrease of IRI empathic-concern ( $p=0.006$ ) were observed, regardless of the group. Empathic-approach only increased in the "Balint group" and for the first case-report ( $p=0.023$ ), with a difference between the groups at follow-up ( $p=0.003$ ). **Conclusion:** Results suggest that Balint groups may enable medical students to better handle difficult clinical situations such as those presented by borderline personalities. Our findings encourage assessing training initiatives designed at helping young medical students to take into account the emotional component of a doctor-patient relationship. Balint groups are also an interesting training method for helping experienced dermatologist be more aware of transference and counter-transference feelings within patient doctor relationship and thus keep the right distance and achieve a comprehensive psychosomatic approach.

**PL42****IMPAIRMENT OF SEXUAL LIFE IN 3485 DERMATOLOGICAL OUTPATIENTS FROM A MULTICENTRE STUDY CONDUCTED IN 13 EUROPEAN COUNTRIES**Francesca Sampogna<sup>1</sup>, Uwe Gielert<sup>2</sup>, Lucia Tomas-Aragones<sup>3</sup>, Lars Lien<sup>4</sup>, Françoise Poot<sup>5</sup>, Gregor B.E. Jemec<sup>6</sup>, Laurent Misery<sup>7</sup>, Csanad Szabo<sup>8</sup>, M. Dennis Linder<sup>9</sup>, Andrea W.M. Evers<sup>10</sup>, Jon Anders Halvorsen<sup>11</sup>, Flora Balieva<sup>12</sup>, Jacek Szepietowski<sup>13</sup>, Dmitry Romanov<sup>14</sup>, Servando E. Marron<sup>15</sup>, Ilknur K. Altunay<sup>16</sup>, Andrew Y. Finlay<sup>17</sup>, Sam S. Salek<sup>18</sup>, Jörg Kupfer<sup>19</sup>, Damiano Abeni<sup>1</sup>, Florence J. Dalgard<sup>20</sup>

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**Objectives:** Skin conditions may have a strong impact on patient's quality of life (QoL). Sexual life is an important

component of QoL. However the degree to which it is affected by a disease is often not assessed by the physicians in their clinical practice, mainly because it is difficult to discuss such a sensitive issue. The aim of this study was to investigate the impact of several dermatological conditions on patients' sexual lives. *Methods*: In the framework of a cross-sectional study on the psychological burden of skin diseases conducted in thirteen European countries, we analyzed the sexual impact using item 9 of the Dermatology Life Quality Index (DLQI). The question asked "Over the last week, how much has your skin caused any sexual difficulties?", with the possible answers "very much" (3), "a lot" (2), "a little" (1), and "not at all/not relevant" (0). The Hospital Anxiety and Depression Scale (HADS) was used to evaluate the presence of depression and/or anxiety in patients. We calculated the frequency of each answer in the different dermatological conditions, and we studied the association of sexual impairment with different variables. *Results*: Data were complete for question 9 of the DLQI in 3485 patients. Sexual difficulties were reported "very much" or "a lot" in 11.4% of patients overall. The impairment was particularly high in patients with hidradenitis suppurativa (42.9%), prurigo (25%), psoriasis (17.9%), pruritus (17.3%), infections of the skin (16.6%), blister disorders (15.8%), atopic dermatitis (15.1%), urticaria (14.5%), and eczema (14%). The lowest frequencies were reported by patients with nevi (0.6%), non melanoma skin cancer (2.7%), benign skin tumours (4.1%), and rosacea (4.3%). There was no significant difference between men and women, while sexual impairment was reported to be more frequently by younger patients. Sexual difficulties were strongly associated with both depression and anxiety. For example, among patients who reported sexual difficulties "very much", 29.4% had clinical depression, while among patients who reported no problems, the prevalence of depression was only 7.2%. For anxiety, the percentages were 45.3% and 14.1%, respectively. *Conclusions*: These observations reinforce the idea that it is important to take into account specific psychosocial problems, such as sexual life, when assessing severity and treatment efficacy in dermatological conditions.

### PL43

#### POSTTRAUMATIC STRESS DISORDER AND PSYCHIATRIC COMORBIDITIES IN PATIENTS WITH CHILDHOOD PSORIASIS: PRELIMINARY RESULTS OF A CASE CONTROL STUDY

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*Objectives*: Various studies in adults showed that posttraumatic stress disorder (PTSD) may accompany psychocutaneous diseases and affect complex interaction between nervous, endocrine and immune systems. Our aim is to investigate the presence of PTSD and other psychiatric disorders in patients with childhood psoriasis vulgaris (CPV). This is the first study to present data on PTSD in patients with CPV. *Methods*: We planned this study in 30 patients and 60 controls. We would like to present herein preliminary results of our study with currently enrolled 15 patients with CPV (9 female, 6 male, mean age  $11\pm 3.5$ ), and 25 healthy children as controls (19 female, 6 male, mean age  $9\pm 1.2$ ). All participants completed a comprehensive test battery, which consisted of a questionnaire for socio-demographic data and clinical history. The Clinician-Administered PTSD Scale (CAPS) was applied to all participants for diagnosis of PTSD. Psychiatric comorbidities were assessed with Schedule for Affective Disorders and Schizophrenia for School Age Children-Present and Lifetime Version-Turkish Version (K-SADS-PL-T). *Results*: Lifetime PTSD was detected in 73.3% ( $p<0.01$ ) and current PTSD in 53.3% ( $p<0.01$ ) of the patients. None of the participants were diagnosed as PTSD in control group. Anxiety disorder (86% vs 4%  $p<0.01$ ), major depressive disorder (47% vs 0%  $p<0.01$ ) and obsessive-compulsive disorder (47% vs 0%  $p<0.01$ ) were significantly more frequent in CPV than the control group. The lifetime and current scores in CAPS were significantly higher in CPV patients (median: 92.7 vs 34 and 72.9 vs 34  $p<0.01$  in patients versus controls, respectively). *Conclusions*: PTSD is a severe, prolonged (at least 1 month) and sometimes a delayed reaction in response to an event that creates intense stress. It has been proposed that PTSD results in an increase in circulating T cell counts (especially NK cells), blood catecholamine levels and decrease in blood cortisol levels (by disrupting hypothalamic-pituitary axis), and these changes may predispose patients to autoimmune cutaneous diseases. Moreover, skin lesions can persist even for years following PTSD, if the traumatic event remains unresolved. This study demonstrates that CPV might be associated with PTSD, and we suggest that these patients should be assessed carefully for psychiatric comorbidities.

## RESEARCH SYMPOSIUM ABSTRACTS

**RS1**  
**POTENTIALITIES OF THE PSYCHODYNAMIC APPROACH IN A MULTIDIMENSIONAL MODEL OF THE DERMATOLOGICAL DISEASES ETIOPATHOGENESIS**

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The biopsychosocial paradigm is acknowledged nowadays in nearly all fields of modern medicine. We understand it as a complex multidimensional model considering the reciprocal interrelationship of biological, psychological, and environmental factors in the onset and course of the disease, as well as in elaboration for individualized treatment plans for the patient. We would like to stress that the impact of each dimension can fluctuate at the different stages of the disease. From the very beginning dermatological illnesses were an important part of psychosomatic medicine, because of the specific role of the skin for ones identity. Besides its set of important physiological functions it has its irreplaceable psychological dimension. It serves as a visible border between the inner and outer world, and it also provides its own communicative function which begins before the development of language skills. Dynamic psychiatry defines the formation of dermatologic symptoms as pathological efforts to repair deficits in ego-structure; they play the role of the so-called “false-identity”, enabling the patient to escape the stigmatization of mental illness. Somatic symptoms play an important role in anxiety binding by providing relatively successful social functioning for patients. The peculiarities of early development, resolution of symbiosis complex, and pathological forms of attachment bring about distortions in the development of central ego-functions that causes specific vulnerabilities related to the onset and relapse of dermatological diseases under subjective stress conditions. Therefore, the use of specific psychotherapeutic interventions in the treatment of dermatological diseases can substantially improve the efficacy of the therapy and reduce relapse probability.

**RS2**  
**STRUCTURE AND SEVERITY OF MENTAL DISORDERS IN PATIENTS WITH FACIAL DERMATOSES**

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*Introduction & Objectives:* The comorbidity of common skin disorders and mental pathology is well reviewed in the literature. However, there are only a few studies describing the specifics of mental distress in patients with facial dermatoses. In our study we evaluated the structure and severity of psychopathology in patients with the most common in outpatient practice facial dermatoses. *Materials & Methods:* 67 outpatients who presented with facial dermatoses (adult acne=24, adolescent acne=22, excoriated acne=7, rosacea=10, perioral dermatitis=4) were enrolled in our study. The psychiatric diagnoses were assessed on the basis of a semi-structured interview, and classified according to ICD-10. Symptom Checklist-90-Revised (SCL-90-R), Hospital Anxiety and Depression scale (HADS), and Hamilton Anxiety and Depression

scales were used for the evaluation of the severity of the symptoms.  $p < 0.05$  was considered significant. *Results:* 43% of the patients presented with a comorbid psychiatric pathology. 31% of patients with mental distress were diagnosed with Generalized Anxiety Disorder (F41.1), 9% with Somatization Disorder (F45.0), 12% with Adjustment Disorder (F41.2), 12% with the Combined Anxiety and Depressive Reaction (F43.22), 6% with Dysthymia (F34.1), 9% with Hypochondria (F45.2), 6% with Social phobia (F40.1), and 3% – with Alcohol Dependence (F10.2). 9% reported a Severe Depressive Episode (F32.2) and 3% a Panic Disorder (F41.0) in anamnesis. The SCL-90-R mean scores of the patients with facial dermatoses were higher compared to the results of the general population were higher in items such as somatization ( $0.61 \pm 0.05$ ), interpersonal relations ( $0.71 \pm 0.05$ ), anxiety ( $0.57 \pm 0.05$ ), phobia ( $0.31 \pm 0.04$ ), and psychoticism ( $0.34 \pm 0.03$ ). According to HADS scores 7% of all patients presented with moderate anxiety, 28% with mild anxiety, 1% with moderate, and 9% with mild depression. According to Hamilton scales mild depressive symptoms were present in 12% of all cases, mild anxiety in 37%, and moderate anxiety in 3% of all cases. *Conclusions:* According to the results of our study, patients with facial dermatoses showed moderate frequency of psychiatric distress represented mostly by anxiety and affective disorders. The evaluation of symptoms severity showed mild to moderate distress mostly in items of somatization, anxiety, and interpersonal engagements. Further investigation is likely to determine the best complex approaches in treatment of these patients.

**RS3**  
**PSYCHOTROPIC MEDICATIONS IN DERMATOLOGY**

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*Objectives:* Development of algorithms for the range of therapies used for mental health disorders, provoked by chronic dermatoses. *Methods:* 542 patients with nosogenic mental health disorders (F43;F45) provoked by chronic dermatoses (acne – 112, atopic dermatitis - 98; psoriasis – 95, rosacea – 86, eczema – 73, seborrheic dermatitis – 37, lichen planus- 36, pemphigus – 5 patients) were treated in Dermatology Hospital Sechenov's First Moscow State Medical University. Clinical Global Impression Scale (CGI), Hospital Anxiety and Depression Scale (HADS), Hamilton rating scale for depression (HAMD-21) and anxiety (HAMA), Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Dermatologic Life Quality Index (DLQI), Side-Effect Rating Scale were used. Evaluation of dermatological status was also performed on each visit. *Results:* Modern antidepressants such as agomelatine, SSRIs and venlafaxine in average daily doses were effective and safe in nosogenic depression. Combination of antidepressant with alimemazine was effective and safe for amplified itch. Atypical antipsychotics in average daily doses: risperidone 4 mg, paliperidone 6 mg, olanzapine 10 mg, quetiapine 300 mg and aripiprazole 10 mg were effective and safe in dissociative and severe sensitive nosogenic disorders. Treatment of choice for external-based anxiety-phobic and obsessive nosogenic disorders were SSRIs (fluvoxamine, paroxetine and escitalopram), when massive somato-vegetative symptoms occur SSRIs in



combination with sulphiride were effective. Internal-based overvalued hypochondria with massive skin autodestruction was therapy resistant. Moderate therapeutic effect was shown only with use of combined therapy of atypical antipsychotics with SSRIs. *Conclusion:* Treatment of mental disorders provoked by chronic dermatoses could be successful in dermatological hospital when it is in consultation with psychiatrist. Treatment includes differentiated use of psychotropic agents (according to its clinical typology and psychopathological structure) along with psychotherapy.

#### RS4

### SKIN PICKING DISORDER: CLINICAL VARIABILITY AND TREATMENT APPROACH

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Recently skin picking disorder (SPD) has been placed into the section Obsessive-Compulsive and Related Disorders in DSM-5 (2013). However, there is an evidence that it is not limited exclusively by compulsive features, but includes clear impulsive subtypes (Snorrason et al., 2012). Also there are limited data of a complex clinical structure of the disorder, that comprise not only motor acts and urges to scratch (compulsive/impulsive), but also variable skin sensations, e.g. "itchiness", "benign irregularity", "sensations such as something underneath the surface of the skin" etc. (Gupta et al., 1986, 1987; Neziroglu et al., 2008). The mentioned skin sensory (coenaesthesiopathic) phenomena are not considered among diagnostic criteria of SPD and generally neglected. Objective is to distinguish compulsive and impulsive subtypes of SPD based on a clinical variability of sensor (coenaesthesiopathic), ideatory/emotional and motor dimensions of the disorder. *Methods:* The study sample comprise 51 subjects (37 female) diagnosed with SPD among outpatients referred to dermatological department. Psychiatric assessment was based on a phenomenological psychopathology and pointed on precise description of signs, symptoms, and syndromes, i.e. mental states. *Results:* Clinical structure of SPD is multidimensional, corresponds to conceptual binary model and comprise basic/primary and secondary/derived phenomena. Basic phenomena in SPD are sensor (coenaesthesiopathic) symptoms that differ in compulsive and impulsive subtype corresponding to distinct secondary/derived ideatoric/emotional symptoms and skin picking motor acts per se. As a result two major types of SPD were distinguished. In compulsive SPD ( $n=19$ , 16 female) skin sensory phenomena could be designated as "epidermal dysaesthesia" and "tactile illusions" with an extrusive perceptions pattern: a sense of itchy and disturbing additional "plus tissue" on a skin surface, "protuberating" above the skin tactilely perceived as covered by "lesions" ("tubercles", "knobbles" etc.). Sensations are accompanied with compulsive skin picking acts as a result of obsessive urge of skin "lining". Attempts to resist and overcome the urge are associated with anxiety increase. As sensations, as anxiety dramatically decrease immediately after the scratching. In impulsive SPD ( $n=32$ , 21 female) coenaesthesiopathic phenomena refer to "intra-dermal dysaesthesia" with a distinct penetrating pattern described metaphorically ("like needles dig in", "like uderskin nodules rupturing from beneath the skin"). Sensations are combined with impulsive skin picking

acts: irresistible impulse is associated with irritability/dysphoric affect. Relief occurs immediately after the scratching act and is accompanied with a feeling of satisfaction, pleasure ("delight of scratching"). *Conclusion:* The proposed subtypes of SPD differ in diagnostic and treatment approach resulting from compulsive or impulsive nature of SPD.

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#### RS5

### ADDICTION TO BODY MODIFICATION

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Today it is obvious that the spectrum of addictive disorders consists of at least two groups: chemical (substance use) and behavior (or nonchemical) addictions. We have introduced the classification with five sections: 1) pathological gambling; 2) erotic addictions; 3) socially acceptable addictions; 4) technological addictions; 5) food addictions (Egorov, 2007; 2013; Egorov, Szabo, 2013). Body modification is the permanent or semi-permanent deliberate altering of the human body for non-medical reasons. In a 2010 study, 23% of Americans reported having at least one tattoo, and 8 percent reported sporting a piercing other than in the earlobe (Pew Research Center, 2010). Though the popularity of body modification is increasing, the psychosocial data about practitioners of body piercing and tattooing are few and controversial. In some cases the repeated body modification becomes uncontrollable and interferes negatively with life responsibilities, health and interpersonal relationships may be considered as a behavior addiction. Body modifications may be classified as Reversible: wearing unusual clothes and jewellery, colouring of the body (make-up, body art), manipulation with the hair, beard, moustaches and nails, weight change, and Irreversible: decorating skin with tattoos, scarification, implantation of foreign objects (mikrodermal and / or transdermal implantation), piercing, operational modifications of the teeth, tongue, genitals, fingers and toes until the desire for amputation, suspension, repeated cosmetic surgery. The leading motive of body modifications is to get pleasure from the individually produced changes, which are partly connected with the sexual desire and relationship with partner. This gives satisfaction in their own eyes. This desire is moving closer to manifestations of sexual fetishism and primarily with fetishistic transvestism. Repeated body modification may be classified as a behavioural addiction (among socially acceptable addiction section up to our classification) because of obsessive-compulsive craving with inability to correct which is based not only on social circumstances but on personality characteristics. As in other addictions human behavior is not consistent with the concept of society about what is acceptable or unacceptable. Further investigations are needed to elucidate the definition of the body modification addiction.

**RS6****THE IMPACT OF MENTAL HEALTH DISORDERS IN HIV-INFECTED PATIENTS WITH EARLY SYPHILIS IN THEIR SOCIAL ADAPTATION***Egor M. Chumakov, N.N. Petrova, I.O. Smirnova**Saint Petersburg State University, Saint-Petersburg, Russia*

**Objective:** The objective of the study was to determine the impact of mental health disorders in HIV-infected patients with early syphilis in their social adaptation. **Method:** 62 HIV-positive patients with early syphilis were examined by clinical method. **Results.** The sample was 20 women (mean age  $31.77 \pm 5.69$  years) and 42 men (mean age  $34.13 \pm 8.09$  years). Mental health disorders were found in 100% of women (dependence on opioids (F11; 80%), alcoholism (F10; 35%); depression (F32 - 20%; F43 - 15%), unstable personality disorder (F60.3; 20%)) and in 73.8% of men (depression (F43, 30.9%), alcoholism (F10, 21.4%), dependence on opioids (F11; 2.4%), unstable personality disorder (F60.3, 7.2%). The findings showed that the majority of patients had episodes or periods of maladjustment (from 1 month to 10 years) in their lifetime (100% of women and 64.3% men), which were accompanied by mental and/or behavioral disorders. The most common problems were drug abuse (85% of women and 30.9% men), alcohol abuse (45% of women

and 33.3% men), depressions (40% of women and 21.4% men) suicide attempts in 15% of women and 4.8% men. Other problems which we identified were delinquent and antisocial behavior, involvement in commercial sex services) in 50% of women and 28.6% men with personality disorders and addictive disorders. All patients displayed behavior which may be considered higher risk: the use of drugs and alcohol (85% of women and 33.3% men), unprotected promiscuous sexual partners (95% of women and 100% men) (homosexual – 69% of men) in an alcohol or drugs intoxication (45% of women and 21.4% men) involved in commercial sex in order to pay the drugs (25% of women and 2.4% men) and hedonistic purpose (28.6% men), crime (40% of women and 11.9% men). Adaptation level 70% of women and 21.4% men at the moment of examination was rated as low (do not have a job and profession, family or social support, the prospects for the future). The high level of adaptation in men was more frequent among homosexual patients (54.8%, 23.8%,  $p < 0.05$ ). **Conclusions.** We found the high frequency of mental health disorders in HIV-infected patients with syphilis. Women had significantly more frequent dependence on opioids (70% of women, 2.4% of men,  $p < 0.01$ ). We elucidated a low level of social adaptation in patients (especially female), accompanied by a large range of mental disorders (addictive disorders, depression, behavioral disorders).

## POSTER ABSTRACTS

### PP1

#### RELATIVES OF PATIENTS WITH DELUSIONAL INFESTATION MAY PRESENT WITH A SHARED DELUSION IN PLACE OF (OR BEFORE) THE ACTUAL PATIENT

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Delusional infestation (DI) is a reportedly uncommon psychocutaneous disorder in which an individual holds a fixed, false belief of pathogenic infestation of the skin contrary to medical evidence. We describe the occurrence of a shared delusion within a family of two sisters. These two retired caucasian females had never married and had lived together since childhood. The shared delusion was the belief that blue thread like fibres were coming out of their body. These beliefs led to the patients obsessively bathing and even hiring pest control professionals to clear their home. However, all methods to clear away these fibres were unsuccessful. Examination of both patients was unremarkable. In this case the index patient, the person who first developed the delusion was the eldest sister. However, the youngest sister who had the shared DI presented to doctors as she had the motivation to seek medical attention. In clinic, it was clear that the youngest sister had a shared delusion (she believed that her sister had morgellons disease and she was worried that she may be affected by her sister). We asked for the younger sister to encourage her elder sister to attend our clinic as we believed that the elder sister had DI and the younger sister (who presented to our clinic) had a folie a deux. When the elder sister attended clinic, aripiprazole was prescribed to the eldest sister and topical emollients to the younger sister to relieve complaints of dry skin. Folie a deux, the phenomenon in which a delusional belief is transmitted between two individuals, affects approximately 12% of cases of DI. Clinicians who manage patients with DI should be aware that the presenting patient may not have DI but may have a shared delusion (folie a deux/folie en famille). Recognising that the presenting patient has a shared delusion is important as the management of that patient is entirely different from the management of a patient with DI, and because clinicians can then encourage the presenting patient to facilitate the relative (who has DI) to attend for treatment of their disease. When patients with DI are successfully treated, relatives with a folie a deux usually get better spontaneously.

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### PP2

#### PSYCHOLOGICAL ASPECTS IN BURNING MOUTH SYNDROME

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**Objectives:** Burning Mouth Syndrome (BMS) is a chronic disease characterized by a burning sensation in the oral mucosa associated with a sensation of dry mouth and /or taste alterations in the ab-

sence of a detectable organic cause, with a bilateral and symmetric distribution, that occurs usually in postmenopausal women, and has an important impact on patient's quality of life. The exact pathophysiology of BMS is unknown. Recent studies have found evidence for mechanisms such as central and peripheral nervous system alterations using quantitative sensory testing and functional imaging methods. It has been reported that psychological disorders such as anxiety, depression, and somatization can be implicated in SBU and at least one-third of BMS patients may have an associated psychological diagnosis. The aim of this study is to explore the presence of a possible underlying psychological factor related with personality in patients with BMS. **Methods:** After excluding other known causes of oral burning through clinical and laboratory explorations, a diagnostic of BMS was performed in 37 patients attending a dermatological hospital service. Millon's personality test was used to assess personality profile in this group of BMS patients. The results were compared to the personality profiles of BMS subjects of an equivalent number of an age and gender matched group with organically based intraoral pain disorder seen at the maxillofacial surgery service. **Results:** Statistical differences in the personality profile between BMS and control group were found. Patients with BMS were more pessimistic, avoidant, introverted, fearful, neurotic and emotional and indecisive. We found a low psychological adaptation profile with a possible tendency to depression. Given the similar pathology in both samples, the differences should be more likely attributed to stable behavioural tendencies in BMS. **Conclusion:** The psychological styles found in BMS may be facilitating the pain sensation, lowering the pain threshold, which is in line with other previous findings.

### PP3

#### POSTHERPETIC NEURALGIA: ASSESSMENT OF QUALITY OF LIFE

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**Introduction:** Neuralgia is the most significant secondary effect of herpes zoster. The use of opioids in the treatment of pain caused by post herpetic neuralgia has been controversial. Post herpetic neuralgia causes fatigue, insomnia, depression and anxiety. These symptoms can affect interpersonal relationships, interfere with daily activities and lead to poor quality of life. In some studies, patients with post herpetic neuralgia have not presented psychiatric diagnostic criteria but they have shown a series of comorbid somatic symptoms. The objective of this work is to assess the evolution in the quality of life of patients suffering from postherpetic neuralgia after six months of treatment with transdermal fentanyl. **Methods:** The study group comprised 154 patients diagnosed with post herpetic neuralgia (42.2% men; 57.8% women). They were given transdermal fentanyl every 72 hours during a period of six months. Regular follow-up visits assessed possible secondary effects and the pain experienced by the patients was evaluated by means of the Analogue Visual Scale. The SF-36 questionnaire was used to measure quality of life and the SCL-90R was used to screen psychopathological symptoms. **Results:** Pain was controlled for the majority of the patients with 25–50 µg/h patches. Quality of life improved and somatic symptoms decreased with treatment. **Conclusion:** Transdermal Fentanyl offers efficient pain relief in

patients for post herpetic neuralgia and quality of life is improved. The side effects are minimum and patient satisfaction is achieved

#### PP4

### NOSOLOGICAL STRUCTURE OF SKIN DISEASES IN PATIENTS IN A PSYCHONEUROLOGICAL ASYLUM

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**Objective:** to investigate the nosological structure of skin diseases in patients in a psychoneurological asylum of Moscow. **Materials and methods.** 1,060 patients in a psychoneurological asylum were examined simultaneously by dermatologists. Skin diseases were revealed in 108 patients suffering from oligophrenia (58.3%), schizophrenia (22.2%) and dementia (19.5%). Seborrheic dermatitis was registered as the leading positions. It was found in 36 patients (3.3% among all), that keeps within statistics in total. 18 (50% of these patients did not receive any psychopharmacological therapy, 6 patients were treated with haloperidol and aminazine, leponex, thioridazine and truxal were prescribed to 3 patients each. Skin pathologies such as eczema, skin cancer, dyshydrosis, rosacea, atopic dermatitis, mycosis, acne vulgaris were revealed with similar frequency (in 6 cases each – 5.5%) as in patients taking haloperidol and in those, who did not receive psychotropic agent. We discovered psoriasis in 9 patients (8.3%). All of them were taking neuroleptics (periciazine – 3 cases, trifluoperazine – 3 cases and risperidon – 3 cases). The prevalence of skin pathology corresponded to occurrence of each type of mental disorder. In patients with oligophrenia we diagnosed seborrheic dermatitis (33.3%), atopic dermatitis and eczema (in 14.2% each), mycosis and acne vulgaris (in 9.5% each) and rosacea, pyoderma, psoriasis, skin itch (in 4.7% each). Seborrheic dermatitis was also the highest in patients with dementia (42.8%). Skin cancer came in second place in dementia patients. Rosacea and eczema amounted up to 14,2% each. In patients with schizophrenia eczema occupied 37.5%. Seborrheic dermatitis (25%) and psoriasis (25%). 12.5% of schizophrenia patients suffered of dyshydrosis. **Conclusion:** We plan to use this data for further investigation, which aims to reveal possible interdependence between skin pathology and factors such as type of mental disorder, use of psychopharmacological agents and presence of concomitant diseases.

#### PP5

### ROLE OF THE ENZYMES OF DOPAMINE BIODEGRADATION IN THE PATHOGENESIS OF PANIC DISORDER AND PSORIASIS

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**Introduction:** The comorbidity between psoriasis and depression, anxiety and other psychosocial disorders has been documented

(Rieder, Tausk, 2012; Zeljko-Penavic et al., 2013). Previously, we have informed of the effect of polymorphisms of genes encoding catechol-O-methyltransferase (COMT) and dopamine beta-hydroxylase (DBH) on the pathogenesis of panic disorder. The aim of this work is to reveal the association of polymorphic variants of COMT gene (c.472G>A) and DBH gene (Ins/Del) with psoriasis. **Materials and methods.** We used DNA samples of patients diagnosed with psoriasis (n=88) and unscreened residents of Moscow as a control (n=363). Molecular genetic analysis conducted by allele-specific PCR (DBH) and real-time PCR (COMT). Statistical processing was performed using chi-square test. The search for associated complex haplotypes was performed using APSampler 3.6.1 software. **Results and discussion:** Association with the disease detected only for COMT gene: genotype AG (chi-square=10.57, p=0, OR=3.54, CI (95%)=2.00–6.29). During the analysis of complex haplotypes a combination of alleles of the studied genes was revealed that contribute to the pathogenesis of the disease: COMT:G,A + DBH:Del (Fisher p=2.13e-06, OR=3.85, CI (95%)=[2.18-6.80], Correction Bonferroni p=0.00012) and COMT:A + DBH:Del (Fisher p=0.00036, OR=2.71, CI (95%)=[1.54-4.79], Correction Bonferroni p=0.02). Both enzymes involved in biosynthesis of dopamine, using it as a substrate. DBH is synthesized norepinephrine from dopamine. A deletion in the 5'-region of the DBH gene linked to low level of its plasma activity. This leads to the accumulation of dopamine. Substitution in COMT gene (c.472G>A) causes an amino acid substitution p.Val158Met. The enzyme containing Met at position 158, showed 3–4 fold lower activity than wild-type Val. COMT methylate dopamine to form 3'-methoxytyramine. The decrease of COMT activity also leads to the accumulation of dopamine. The second complex haplotype COMT:A + DBH:Del, has less power, but indicates a role of decrease in enzymes activity in the pathogenesis of psoriasis. This suggests a role for dopamine excess in the pathogenesis of psoriasis. **Conclusion:** Thus, we show the effect on the pathogenesis of psoriasis polymorphisms of genes involved in the metabolism of dopamine and previously associated with panic disorder. This suggests the role of abnormalities in the functioning of neurotransmitter systems in the pathogenesis of psoriasis.

#### PP6

### PRURITIC AND PAINFUL DERMATOSES CARRY THE HIGHEST PSYCHOLOGICAL BURDEN AMONG DERMATOVENEROLOGICAL PATIENTS

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**Objectives:** Skin diseases are mostly chronic and lifelong with recurrences. The special thing about skin diseases is their visibility. Most of them are public because face and hands is the most common site of many dermatoses. Pain is not common but it has its parallel pruritus. All of these facts influence patient's life, social network and psychological status. In this study different dimensions of quality of life were being assessed and psychiatric comorbidities: depression and anxiety were evaluated. **Methods:** This study was approved by the Ethics Committee of the University Center Hospital, Sestre milosrdnice, in Zagreb, where the study was conducted. Two hundred and ninety male and female patients suffering from different dermatoses and venereological diseases participated in the study. All participants were treated as inpatient and outpatient at the Department of Dermatovenereology. Participants were divided into three groups. First group of patients were those with symptomatic

dermatoses like psoriasis, atopic dermatitis and venous ulcer. Second group were dermatoses without symptoms like vitiligo, alopecia and acne. Third group involved venereological patients with diagnose of HPV, Herpes simplex and Balanopostitis. Consenting participants completed the following standardized psychological questionnaires: Dermatology Specific Quality of Life Index, Beck's Index of Depression and State and Trait Anxiety Inventory. *Results:* The first group of patients had the highest influence of the disease on their quality of life. There were statistically significant differences between different dimensions of quality of life except psychological dimension. 4.1% of the participants had a high depression scores, mostly in first group of patients. Anxiety symptoms were mild in all three groups even though there was statistically significant difference between venereological diseases and the other two groups. Different dimensions of quality of life were in correlation with intensity of the disease with the exception of the psychological dimension. Patients with high intensity of the skin lesions were more depressed but patients with exposed (to UV radiation) localization (hands and face) were more anxious. *Conclusion:* Patients with pruritic and painful dermatoses are the skin diseases that influence quality of life most. The psychological aspect of quality of life is probably mostly affected by patient's personality traits and not by skin or venereological disease by itself. Localization and intensity of the dermatovenereological disease influence symptoms of depression and anxiety.

#### PP7

### **PATHOLOGICAL SKIN PICKING IN A PATIENT WITH OBSESSIVE-COMPULSIVE DISORDER**

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*Objectives:* Pathological skin picking is a condition in which patients produce skin lesions through repetitive excoriations of normal skin or skin with minor irregularities. Patients admit that they produce their lesions but are unable to stop their behavior. Obsessive-compulsive disorder (OCD) is a chronic, debilitating syndrome, consisting of intrusive thoughts, experienced as inappropriate by the patient and producing anxiety, and compulsions, manifesting as repetitive behaviors produced to reduce anxiety. OCD is a frequently encountered psychiatric comorbidity in patients with xerosis, eczema or lichen simplex chronicus. However, other afflictions, which are otherwise included in the group of factitious disorders, have also been associated with OCD. *Methods:* We report the case of a 17-year-old female, Caucasian patient from the urban area who addresses the dermatology department for an eruption consisting of erythematous, sharply demarcated, papules and plaques, with angular and oval shapes, disseminated on the thighs, arms and forearms. The patient asserts that the lesions had first occurred 5 days before presentation, after depilation. She claims that they are extremely pruritic and she feels relieved after excoriating them. However, she acknowledged that they had enlarged after intensive scratching. The local examination also revealed erythematous lesions covered by hematic crusts in both knees and multiple linear scars on the left forearm. *Results:* Laboratory findings were within normal range. The patient was sent for a psychiatric examination and was diagnosed with OCD. *Conclusion:* Based on the clinical findings and psychiatric examination the patient was diagnosed with pathological skin picking in a patient with OCD. She was treated with antihistamines, topical

corticosteroids and doxepin and she received psychiatric treatment with selective serotonin reuptake inhibitors. The evolution was favorable, with complete remission of the skin lesions at the one-month follow-up. She remains under our supervision and under the supervision of the psychiatric department. Studies show that about one third of the patients addressing dermatology departments have psychiatric comorbidities. Therefore, a close collaboration between dermatologists and psychiatrists is of paramount importance.

#### PP8

### **SKIN PICKING PRODUCING PRURIGO NODULARIS LESIONS IN A PATIENT WITH OBSESSIVE COMPULSIVE DISORDER**

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*Objectives:* Prurigo nodularis (PN) is a rare disorder of undetermined cause. It is characterized by the presence of intensely itchy nodules with a hyperpigmented halo, especially on the limbs and trunk. PN is often resistant to treatment. We present the case of a patient who was admitted to our clinic for the occurrence of pruritic nodular lesions. *Methods:* A 51-year-old woman presented to our clinic with very pruritic nodular cutaneous lesions. The lesions had developed 17 years before. The onset was on her left calf. She was diagnosed with PN. The disease evolved with remissions and exacerbations. The remissions lasted about 4 months. Pruritus was exacerbated by warm water and sun exposure. *Results:* A physical examination revealed grouped and scattered erythematous nodular lesions rounded by a hyperpigmented halo, on the limbs, lower back and superior thorax. Multiple excoriations were noticed. The patient was underweight (BMI 17). Otherwise, the physical examination was unremarkable. Laboratory findings were within the normal range. A skin biopsy was performed from the left thigh. The skin biopsy showed hyperkeratosis (ortokeratosis), epidermal hyperplasia and focal hypergranulosis. A dense dermal lymphohistiocytic infiltrate with numerous eosinophils, was also found. These histopathological findings suggested PN. The patient had been diagnosed with obsessive compulsive disorder one year before. It is important that patients with chronic pruritus also be evaluated according to their psychological status. *Conclusion:* The management of patients with PN is difficult; first we should rule out the associated disorders. Notably when the cause remains unknown, a possible psychogenic condition should be evaluated. Numerous studies have shown the connection between emotional status and cutaneous manifestations.

#### PP9

### **SEXUAL DYSFUNCTION AND TRAUMATIC CHILDHOOD EXPERIENCES IN PATIENTS WITH FUNCTIONAL PRURITUS**

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*Objectives:* Pruritus is not only the most common symptom in dermatology; but also it is frequently encountered in various systemic, psychiatric and neurologic conditions. Functional pruritus (FP) is a subtype of chronic pruritus that is a somatoform disease in nature. Skin is an organ from which sexual arousal begins and

spreads, through visual and tactile sensations. Certain skin regions become the main source of pleasure in certain childhood periods. Traumas during these periods result in fixation in these regions as the source of pleasure. Disturbed psychosexual development or childhood psychological traumas may lead to problematic sexual life in adulthood. We investigated sexual dysfunction, accompanying depression-anxiety and childhood traumatic experiences in patients with FP. *Methods*: 46 patients with FP (34 female, 12 male, mean age 40.65±8.3) and 48 healthy controls (40 female, 8 male, mean age 38.27±3.9) were enrolled in the study. Sociodemographic data including sex, age, educational status and illness-specific data were collected. FP diagnosis was made using diagnostic criteria of the French Psychodermatology Group (FPDG). Pruritus severity was evaluated subjectively with visual analog scale (VAS). Beck Depression Scale (BDS), Beck Anxiety Scale (BAS) and Arizona Sexual Experience Scale (ASEX) were performed in all subjects. Childhood Abuse and Neglect Questionnaire (CANQ) was also applied to assess traumatic experiences of children. *Results*: There was no difference between the groups in terms of sociodemographic variables. Sexual dysfunction was significantly more frequent in FP patients than in the control group, according to the ASEX total scores (median: 21 vs 15.5,  $z=-2.58$ ,  $p<0.05$ ). BDI and BAI scores were statistically higher in patients compared with the controls (median: 22 vs 9,  $z=-4.11$ ,  $p<0.01$  and median: 14.5 vs 6.5,  $z=-4.45$ ,  $p<0.01$ ). A history of physical, emotional and sexual abuse and neglect in childhood was significantly more frequent in FP cases than in the control group ( $p<0.001$ ) according to CANQ results. *Conclusions*: FP patients have higher rates of sexual dysfunction, depression, anxiety and childhood abuse or neglect when compared with healthy population. These psychological components of FP can lead to secondary sexual dysfunction. In conclusion, we suggest that patients with FP should be evaluated for sexual dysfunction and comorbid psychopathology.

### PP10

#### IMPACT OF COMORBIDITY ON COMPLIANCE IN GERIATRIC PSYCHODERMATOLOGY

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*Objective*: The purpose of this study was with the view of compliance improvement by psychotropic drug prescriptions (antidepressants, sedatives, anxiolytics) and prevention of iatrogenic complications, to examine the comorbidity between skin and internal organs diseases, taking into account the emotional state of patients with mycological infection. *Methods and Materials*: The sample included 51 patients: 42 men (82,4%) and 9 women (17,6%), aged 75 to 93 yrs (mean age 80 yrs). The ICD-10 codes, Hospital Anxiety (A) and Depression (D) Scale (HADS), Dermatology Life Quality Index (DLQI) and Scoring Clinical Index for Onychomycosis (SCIO) have been applied to identified patients. All subjects had cytological confirmation of the diagnosis of *Tinea unguium*. [B35.1] and *Tinea pedis*. [B35.3]. The number of affected nail plates ranged from 1–10. The SCIO was estimated to be 16–30 points. *Results*: in the sample, intercurrent dermatoses were distributed as follows: benign skin tumors (seborrheic keratosis, papilloma) in 100% of cases; Leser-Trélat syndrome ( $n=10$ ); rosacea ( $n=16$ ); herpes zoster ( $n=3$ ); eczema on the lower legs ( $n=8$ ); seborrheic dermatitis ( $n=12$ ); chromophytosis ( $n=4$ ); candidal intertrigo between the gluteal folds

and perianal region ( $n=5$ ); recurrent angioedema ( $n=1$ ), recurrent chronic urticaria ( $n=1$ ), allergic contact dermatitis ( $n=4$ ), dyshidrotic eczema on the hands ( $n=1$ ). Concomitant physical illnesses were associated with such systems as cardiovascular ( $n=35$ ) (high blood pressure, heart attacks, condition after insertion of a pacemaker), urogenital ( $n=34$ ) (kidney cysts, chronic pyelonephritis, glomerulonephritis, urolithiasis, prostate adenoma); endocrine ( $n=7$ ) – condition after strumectomy ( $n=1$ ), toxic nodular goiter nodular goiter ( $n=1$ ), diabetes mellitus ( $n=5$ ); digestive ( $n=27$ ) (gastric ulcer, duodenal ulcer, cholecystitis, pancreatitis, irritable bowel syndrome, Crohn's disease), nervous ( $n=36$ ) (encephalopathy, ischemic stroke, Alzheimer's disease), bronchopulmonary ( $n=5$ ) (COPD), rheumatoid arthritis ( $n=1$ ) and skin and internal cancer ( $n=25$ ). In this study, the anxiety level (A) was detected from 1 to 15 points (mean=5.94). Depression level (D) from 1 to 19 points (mean=6.45). Gender features were identified: in the female sample, the mean level of anxiety was 8.75, depression – 4.8, 5.4 and 8.8 in males, accordingly. It has been shown when identified concomitant cardiovascular diseases A were 10.5, D=10; digestive – A=8, D=5; bronchopulmonary – A=8, D=16; diabetes mellitus – A=10, D=6; Alzheimer's disease – A=8, D=11; skin and internal cancer – A=10, D=8.5. Combination of 10 affected nail plates (SCIO=30) and candidal intertrigo in perianal region resulted in A=7, D=8. When intercurrent dermatoses observed the mean levels of anxiety and depression were different, for example: rosacea A=8, D=9; seborrheic dermatitis A=9, D=6; allergic contact dermatitis A=6, D=7; eczema on the lower legs A=6, D=7; dyshidrotic eczema on the hands A=6, D=9; Leser-Trélat syndrome A=5, D=7; herpes zoster A=3, D=9. *Conclusions*: In this study, gender features were clearly demonstrated: subclinical levels of anxiety were more frequent in females and subclinical levels of depression in males. In the presence of concomitant pathology subclinical levels of anxiety (skin and internal cancer, diabetes mellitus, high blood pressure, condition after insertion of a pacemaker, Alzheimer's disease, gastric ulcer and duodenal ulcer, irritable bowel syndrome) and depression (skin and internal cancer, cardiovascular disease, Alzheimer's disease, COPD) were determined. Based on the findings, intercurrent dermatoses enhanced anxiety (rosacea, seborrheic dermatitis) and depression (total onychomycosis, candidal intertrigo in perianal region, dyshidrotic eczema on the hands, herpes zoster). It seems necessary to consider comorbid diseases in patients with mycological infection in order to improve the compliance and prevent iatrogenic complications by integrated management and corrective pharmacotherapy assignment.

### PP11

#### COMPREHENSIVE AND INTEGRATED ASSESSMENT OF PATIENTS WITH DEPRESSION

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*Background*: The inseparable connection between the pathological skin process and mental health is obvious [Lvov A.N., 2004]. According to the World Health Organization (WHO), from 4 to 6% of the global population suffers from depression, lifetime risk reaches to 15–20%. Dermatological symptoms, including itch, may considered both a phenomenon of anxiety mediated by the autonomic nervous system [Mendelevich V.D., Soloviev S.L., 2005], and a skin reaction that develops due to severe and chronic hypothyria. As for analysis of the dynamics, chronic dermatoses increase the risk of the recurrence of depression whereas mood disorders

reduce the duration of clinical remission to 40% in patients with skin diseases [Mashkilleysen A.L., 1990]. The percentage of psychogenic manifestation/exacerbation of psychosomatic disorders is following: psoriasis – 25-60% [Gupta M., 1996], rosacea – 25-70% [Lalaeva A.M., 2003]; vitiligo – 15-20% [Koshevenko J.N., 1999]. **Objective:** The aim was to analyze the frequency and structure of dermatological syndromes in patients with depression. **Materials and methods:** The sample included 22 inpatients (13 females (59%) and 9 males (41%)): 7 affected by F.31. – bipolar affective disorder, mild or moderate depression (first / recurrent episode) and 15 affected by F.32. /F.33. – unipolar depression of mild to moderate severity (first / recurrent episode), according to ICD-10 criteria. Patients ranging from 26 to 73 years (mean age=51.45 ± 3 yrs). Exclusion criteria were: schizophrenia, schizoaffective disorder, organic lesion of the central nervous system, dementia, epilepsy, Alzheimer's disease, traumatic brain injury, history of alcoholism and drug abuse, pregnancy and lactation. The Hospital Anxiety and Depression Scale (HADS), the Clinical Global Impression Scale (CGI) have been applied to identify patients. The dermatological data was collected by medical records and objectively on admission and during hospitalization. **Results:** In this sample 3 patients had previously established diagnoses: rosacea [L.71.] (n=1), psoriasis [L.40.] (n=1), vitiligo [L.80.] (n=1). These patients reported exacerbation of psychosomatic disorders on the background of mood disorder. On admission, during the skin inspection rash had been detected in 3 patients: red papules, localized to less than 5% of the skin surface (n=1); scattered all over the skin, but covers less than 1/3 of the skin surface (n=1); rash on neck, nasolabial triangle and upper chest (n=1). Increased tendency to sweating was identified in 8 patients (40.9%), hampering, requires frequent change of clothes (n=1). 2 patients suffered from allergic reactions: to birch flowering (n=1); to iodine-containing drugs, seafood, to Capoten and Corinfar (dry cough), angioedema to penicillin. Generally, dermatological syndromes were found in bipolar patients (3 patients; 42.9%) more often than in unipolar (5 and 33%). **Conclusions:** This study confirms the high prevalence of dermatological syndrome in patients with affective disorders, especially in bipolar. High comorbidity of dermatological and psychiatric diseases demonstrates the need of comprehensive assessment (thorough skin examination, catamnesis health records), and, most importantly, a joint management of psychiatrists and dermatologists.

## PP12

### FEATURE AFFECTIVE DISORDERS ON WOMEN WITH ACNE AND HORMONAL ABNORMALITIES

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**Object:** The study involved 326 patients with acne and 100 healthy women. Depending on the form of hyperandrogenism (HA) and other hormonal abnormalities, 6 groups were formed: in group I was 85 women with ovarian hyperandrogenism (OHA), group II - 65 OH and insulin resistance (IR), Group III - 31 with adrenal HA (AHA), group IV - 49 with mixed HA (MHA), group V - 27 with MHA and hyperprolactinemia (HPrI), group VI - 69 without laboratory signs of HA. The control group consisted of 100 women without acne. **Methods:** Psychological testing was conducted using the scale M. Hamilton, HDRS-21 and HARS. **Results.** In group I affective disorders were ascertained at 69.41%/59, in group II - 83.08% /54. During the test HDRS-21 in patients with AHA was found that was seen in dysthymia 9.68%/3 and depressive episodes

at moderate 6.45%/2 patients. Most commonly affective disorders in this group were characterized by mild anxiety at 25.81%/8 and medium impact at 35.48%/11 patients. The middle total score of depression was  $9,39 \pm 0,72$ , and anxiety -  $18,54 \pm 2,63$ . In women with MHA affective disorders were ascertained at 75.51%/37 from group IV and 88.89%/24 from V group. In this case, dysthymia is the most common in patients of group IV (28.57%/14), and episodes of depression and anxiety disorders in patients with moderate degree with HPrI (25.93%/37.04% and 7/10, respectively). The total gross score in these groups on a scale of HDRS-21 was  $15,83 \pm 1,24$ : women group IV -  $10,12 \pm 1,05$ ; patients of group V -  $21,54 \pm 1,43$  points, which corresponds to an average episode of depression severity. In assessing the severity of anxiety disorder average total score in these groups of patients was  $16,59 \pm 2,36$ . In group VI, in most cases (40.58%/28) were recorded episodes of depression of moderate severity, at which there were significant signs of dysmorphophobia and Dismorphomania. Dysthymia was observed in 24.64%/17 patients of group VI, at least - easy (10.14%/7) and medium (17.39%/12) degree of anxiety disorders. The lack of affective disorders in this group had 7.25% / 5 women. The average total score of depression on the scale of HDRS-21 women's group VI was  $21,48 \pm 2,35$ , anxiety scale HARS -  $9,32 \pm 1,06$ . When analysing the results of testing prevailed average degree in severity of episodes of depression in women groups V and VI. In the other group, the average total score on a scale of HDRS-21 match dysthymia. **Conclusion:** Women with acne and hormonal abnormalities were found to have comorbid affective disorders: prevalence of depressive episodes on women in groups V and VI, and anxiety disorders - patients groups III and V.

## PP13

### MOTIVATION ISSUES IN COSMETIC SURGERY PATIENTS

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**Objectives:** Motivation of patients for cosmetic procedure is an important factor to predict its outcomes. The aim of this study was to evaluate the clinical features of patients, depending on their motivations. **Methods:** This prospective study involved 25 cosmetic surgery patients operated in the City hospital of Saint Petersburg. Clinical method was used in the study. **Results:** The mean age was 33.8 years (range from 24 to 55 years). The patients were divided into two groups depending on the type of motivation. The first group included patients with external motivations: desire to increase sexual attractiveness was leading in 52.0% of cases (13/25). The second group included patients with internal motivations: subjective dissatisfaction with breast was leading in 48.0% of cases (12/25). Patients in both groups did not differ in age, severity of changes in the mammary glands, character of preoperative complaints. Patients of the first group characterized by a request for a larger size of the implant, inconsistency and uncertainty in conversation, the desire for informal communication with the surgeon, obvious strain during the conversation, conflict in relation to medical staff. These patients more often had unformed ideas of guilt ( $p=0.061$ ), decreased libido in the last 6 months ( $p=0.037$ ), the presence of distressed situations (break relations with a partner, divorce). In 38.46% of cases, patients with external motivations planned new aesthetic surgery before the current discharge from the hospital. Patients of the second group had more realistic and specific requests (usually associated with the return the parameters that were lost after childbirth and lactation). This group characterized by the wide prevalence of anxiety, formal

and distant behavior. There was a lack of awareness of psychological mechanisms of recourse to plastic surgery. *Conclusion:* Patients with internal motivations have personal distress, more specific requests for surgery. They have a better chance to achieve its objectives. Externally motivated patients require more careful preparation with a detailed explanation of the risks and benefits of the procedure. If the request does not correspond to the patient's expectations of the procedure, and if the patient is showing considerable conflict and stress, a consultation with a mental health specialist is recommended.

#### PP14

### PRURIGO NODULARIS AMONG DERMATOLOGICAL PATIENTS IN EUROPE

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*Introduction:* Prurigo nodularis is a highly pruritic, poorly understood severe skin disease with considerable morbidity. *Objectives:* To describe the clinico-epidemiological characteristics of patients with prurigo nodularis in a recent large study consisting of dermatological patients and controls from 13 European countries. *Material and Methods:* In dermatological clinics in 13 countries in Europe a total of 4635 patients and 1,359 controls were enrolled in the study. The patients were examined by a dermatologist, and all the participants filled in the same questionnaire. *Results:* A total of 24 patients from 10 European countries had either prurigo nodularis as first or second diagnoses, of which there were 9 females and 13 males. The prevalence of present itch was 91.3% (21/23) compared to 8.0% (88/1094) in controls. Dermatology Life Quality Index scoring was extreme in 6 patients, very large in 6 patients and moderately elevated in 4 patients. In patients with prurigo nodularis the prevalence of clinical depression was 30.4% (7/23), clinical anxiety 39.1% (9/23) and suicidal ideation 21.7% (5/23). The corresponding prevalence of clinical depression, clinical anxiety and suicidal ideation in patients with psoriasis was 13.8%, 22.7% and 17.3% and in controls 4.3%, 11.1% and 8.3%. *Conclusions:* Prurigo nodularis is an uncommon disease among dermatological patients in Europe. Patients with prurigo nodularis have a considerable morbidity reflected in a high prevalence of itch, high levels of mental health problems and reduced health-related quality of life compared to both healthy controls and patients with psoriasis.

#### PP15

### INTRALESIONAL METHOTREXATE: A PLAUSIBLE TREATMENT OPTION FOR NON METASTATIC SQUAMOUS CELL CARCINOMA

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*Objective:* Intralesional methotrexate have been used for the treatment of nonmelanoma skin cancer (NMSC) with no reports on its use in Squamous cell carcinoma (SCC). The aims were to evaluate intralesional methotrexate as a possible treatment modality for non

metastatic SCC. *Methods:* 15 patients with 15 SCCs were enrolled in the study. The size of the lesions ranged from 0.5 to 4 cm<sup>2</sup>. Sessions were performed every two weeks until complete cure. Dose injected ranged from 0.3 to 2.0 ml of 25 mg/ml concentration of methotrexate. *Results:* All 15 lesions were treated with a cure rate of 100%. Number of treatments ranged from 1 to 12. Lesions located on the lip and tongue, as well as lesions larger than 2 cm<sup>2</sup> required the maximum number of treatment sessions. No recurrences were detected over a mean two years follow-up period. *Conclusion:* Intralesional methotrexate is a cost effective treatment option for non metastatic cases of SCC, with an excellent cosmetic result.

#### PP16

### ALEXITHYMIA IN HEMODIALYSIS PATIENTS WITH URAEMIC PRURITUS

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*Objectives:* The aim of this study was to assess the relationship between alexithymia and pruritus in hemodialysis patients. *Materials and methods:* The study was conducted in 90 hemodialysis patients (48 with uraemic pruritus, 42 without pruritus). Alexithymia was evaluated in all patients using Bermond-Vorst Alexithymia Questionnaire (BVALQ). Pruritus intensity was assessed using the horizontal visual analogue scale (VAS). In addition, sleeping problems were analyzed with the Athens Insomnia Scale (AIS). All results were analyzed statistically. *Results:* Most of patients with pruritus rated their itch as mild or moderate. No significant differences were found between patient with and without pruritus regarding the total score of BVALQ (103.5±13.9 vs. 108.5±16.3 points,  $p=0.12$ ). However, there was a statistically significant difference considering the domain of daydreaming and fantasy. Patients with uraemic pruritus had significantly lower average score in this domain (25.9±11.1 vs. 21.7±8.9 points,  $p<0.05$ ) and the scoring also correlated with the intensity of pruritus ( $r=-0.33$ ,  $p=0.03$ ). In contrast, no relationship was found between alexithymia and sleep problems ( $r=-0.16$ ,  $p=0.14$ ). *Conclusions:* The ability to fantasize and daydream is higher in patients with uremic pruritus compared to patients without pruritus and correlates with the intensity of pruritus. Further studies should be conducted to confirm, if pruritus as an isolated symptom affects alexithymia in other groups of patients.

#### PP17

### ANXIETY IN PATIENTS WITH ALOPECIA AREATA

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*Introduction:* Alopecia areata is a common autoimmune skin disease with sudden loss of hair. The disease heavily affects well being of the patients. *Objective:* The aim of the study was to assess the intensity of anxiety in adult patients with alopecia areata in comparison with the normal subjects. *Material and methods:* A group of 50 subjects (35 women and 15 men, mean age 39.3 ± 15.1 years) with alopecia areata and 53 healthy volunteers (35 women and 18 men, mean age 43.2 ± 12.2 years) were enrolled. All patients underwent careful physical examination and completed questionnaires on anxiety and quality of life. The study was



based on Beck Anxiety Inventory (BAI), Social Physique Anxiety Scale (SPAS) and Dermatology Life Quality Index (DLQI). The results were statistically analyzed. *Results:* Patients with alopecia areata compared to control group had significantly increased level of anxiety (BAI: mean  $11.1 \pm 7.1$  vs.  $7.6 \pm 6.9$ ,  $p=0.01$ ; SPAS: mean  $42.7 \pm 8.4$  vs.  $46.1 \pm 8.4$ ,  $p=0.01$ ) respectively. Women statistically more commonly were affected with anxiety (BAI: mean women  $12.5 \pm 7.3$ , men  $7.7 \pm 5.2$ ,  $p=0.02$ ). In patients with alopecia universalis anxiety was more frequently observed than in patients with typical type of alopecia areata (BAI: mean  $15.0 \pm 6.8$  vs.  $9.9 \pm 6.9$ ,  $p=0.03$ ) respectively. However there was a significant correlation between anxiety level and DLQI (SPAS:  $r=-0.34$ ,  $p=0.02$ ). *Conclusion:* Alopecia areata is associated with significant increase in anxiety.

**PP18**  
**QUALITY OF LIFE AND PSYCHOLOGICAL ASPECTS OF PATIENTS WITH PSORIASIS AND PSORIATIC ARTHRITIS**

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Depending on the severity of psoriatic process, localization of lesions, the nature of its course and the presence of comorbid pathologies, psoriasis patients experience severe physical and psychological discomfort, difficulties in social and professional adaptation, and the quality of life is often lower than in serious diseases such as depression, myocardial infarction, diabetes mellitus. A number of studies have shown that in cases of mild, and in cases of severe course of psoriasis, the most disturbing symptom of patients, the most subjectivity deterioration in quality of life was itching, in second place was a pain in the joints of patients with psoriatic arthritis. Therefore, at present time psoriasis is considered as a systemic disease, since the presence of comorbid pathologies can not only aggravate the course of the primary process, but also lead to early disability of patients. The presence of rash on the skin of exposed areas of the body, scalp cause for patients special psychological problem, because according to studies, more than 70% of patients define psoriasis as a serious problem in their lives, about 60% of patients have a tendency to BDD experience social phobia and have lower self-esteem, which is connected with the fear of social rejection, difficulties in finding work and personal life device. Psychological distress in combination with pain, itching and immunological disorders can lead to severe depression, anxiety and significant social isolation and disadaptation of the patient. Importantly, comorbidity psoriasis and depression, social phobia occur with increased frequency in patients who have no subjective psychological discomfort. Therefore, the management of these patients is important, often a collegial approach to the disease, it is necessary to take into account related comorbidity. Much more attention should be paid to the issues of early diagnosis and prevention of psoriatic arthritis and other comorbid conditions and causal psychological disorders. For the purpose of social adaptation and rehabilitation of patients it is needed to inform patients about the ongoing schools psoriasis and other patient organizations where they can get information about the treatment and prevention of exacerbations of their disease, learn to accept their illness and maintain a way of life, and get psychological help and support.

**PP19**  
**PATIENTS WITH VITILIGO BENEFIT FROM SHORT PSYCHOLOGICAL INTERVENTION DURING CLIMATOTHERAPY WITH PSEUDOCATALASE PC-KUS AT THE DEAD SEA**

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*Objectives:* Vitiligo is an acquired skin disease leading to loss of pigmentation and often to an impaired well-being. Combined climato therapy with pseudocatalase PC-KUS at the Dead Sea is a medically effective treatment for this disease. Aim of this study was to explore the influence of an additional short term psychological intervention on quality of life (QoL) and coping in an international patient group at the Dead Sea. *Methods:* Dermatology Life Quality Index (DLQI) and the Adjustment to Chronic Skin Disorders Questionnaire (ACS), using the sub-scales Social Anxiety/Avoidance (ACS-SAA), Helplessness (ACS-H) and Anxious-Depressive Mood (ACS-ADM). High scores indicate impairment of well-being. Questionnaires were answered three times: on day 1 at the Dead Sea, 20 days later (last day) and 4 months later at follow-up appointment in Germany. At the Dead Sea, all patients were offered one hour session of interventional psychological stress assessment by a chartered psychologist from the UK using 1. a structured interview and 2. the opportunity to talk about any vitiligo-related issues. A second session was offered if required. 19 English-speaking patients and non-native speakers with sufficient language knowledge accepted and took part. The remaining 16 patients continued their medical treatment without the psychological intervention (control group). Signed consent was obtained. *Groups' characteristics:* Patients enrolled/controls: mean age 45.2/50.7 years, 10/9 males, 9/7 females, 16/15 with skin phototypes I-III and 3/1 with IV-VI (all differences  $p>0.05$ ). *Results:* 1. Patients with combined climato therapy only: Improvement of QoL from day 1 to day 20, but not measurable anymore 4 months later (day 1/day 20/follow-up: DLQI 8.8/2.9\*\*/6.4; ACS-SAA 44.9/40.5/42.3; ACS-H 28.7/27.2/28.7; ACS-ADM 24.4/23.1/22.9). 2. Patients with additional psychological intervention: Significant improvement of QoL, social anxiety/avoidance and helplessness, even 4 months later (DLQI 5.7/1.5\*\*/3.2\*; ACS-SAA 38.1/33.8\*/31.8\*\*; ACS-H 26.9/23.8\*\*/22.9\*\*; ACS-ADM 21.0/19.1/19.3, significance compared to day 1 by paired T-Test, \* $p<0.05$ , \*\* $p<0.005$ ). *Conclusions:* Combined climato therapy with pseudocatalase PC-KUS at the Dead Sea alone significantly improves QoL in the short term. Addition of a short psychological intervention significantly further improves QoL and coping even in the long term. Hence, psychological counselling should be considered for patient care in vitiligo.

**PP20**  
**ANXIETY ASSESSMENT IN PATIENTS WITH ALOPECIA**

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*Introduction:* Patients with various forms of alopecia often report high levels of personal distress and disability as a result of their

hair loss. Losing hair can be a very stressful situation. On the other hand, alopecia is often related to the presence of stressful situations. The aim of the present study is to measure and observe the existing relationship between alopecia and anxiety. *Methods:* We present a transversal study of 60 patients with alopecia: 7 with alopecia areata, 10 with diffuse alopecia and 43 with androgenetic alopecia. These patients were asked to complete the Inventory of Situations and Response to Anxiety (ISRA), as well as a socio-demographic form. *Results:* There were 32 females and 28 males aged between 15 and 51. The incidence of severe anxiety was 53% in women and 36% in men. The incidence of moderate anxiety was 31% in women and 50% in men. In both men and women, there were 15% with normal levels of anxiety. *Conclusion:* High levels of anxiety were found in both men and women with alopecia in our study. We will present details of the types of anxiety measured (cognitive, motor and physiological), as well as the situations which cause the stress (being evaluated, interpersonal relationships, phobias, everyday hassles).

### PP21

#### PREDICTORS OF QUALITY OF LIFE IN ADULTS WITH ACNE: THE CONTRIBUTION OF PERCEIVED STIGMA

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*Objectives:* As dermatology patients complain that their psychological distress is extensive and often overlooked, it is surprising that there is a paucity of research investigating factors associated with acne-related quality of life. This study, therefore, aimed to compile a preliminary list of risk factors for psychosocial distress as a result of having acne in adulthood, while specifically examining the role of an under investigated variable – perceived stigma – due to the high levels of stigmatization reported by these individuals. *Methods:* Adults with acne ( $n=119$ ; mean age:  $M=26.37$ ), recruited from private dermatology offices in Athens were administered the Feelings of Stigmatization Questionnaire (FSQ; Ginsburg & Link, 1989) and Acne-Specific Quality of Life Questionnaire (Acne-QoL; Allison, 1996). Multiple regression analysis was conducted in order to assess the capacity of various psychosocial and demographic variables to predict acne-related QoL. *Results:* Gender, age, history of acne, self-rated severity of acne and perceived stigma emerged as significant predictors of acne-related QoL. While perceived stigma and self-rated severity of acne represented significant predictors for all three domains of acne-related quality of life (self-perception, role-social and role-emotional), the former variable made the largest contribution to the regression model. *Conclusions:* This research study provides preliminary evidence that adults who feel stigmatized are at risk for experiencing a poor quality of life as a result of having acne. Potential risk factors of secondary importance, which can be clinically useful in providing red flags for dermatologists treating adults with acne, may also include one's self-rated severity of acne, age, gender and previous history of acne

### PP22

#### DELUSION OF PARASITOSIS: THERAPEUTIC STRATEGIES. EXPERIENCE IN THREE PATIENTS

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Delusional parasitosis (DP) is a condition in which a person has the unshakeable and mistaken belief of being infested with parasites. *Objectives:* • Share and compare my experience in the therapy of DP with colleagues from other countries. • Highlight the importance of the patient-physician relationship both with the patient himself and his family, with whom to generate an effective therapeutic strategy. • Assess comparatively the response, dosage and compliance to different antipsychotic drugs. *Methods:* Three clinical cases from private practice are shown, two male patients and a female one. Two of them were treated with 1 mg-day Risperidone and Aripiprazole respectively and in one case no antipsychotic treatment was prescribed. In two of the cases the treatment was accompanied by psychotherapy. *Results:* The therapeutic response may be considered favorable in all the cases, both when Risperidone and Aripiprazole were administered as when no antipsychotics were prescribed. The discontinuation of the treatment in the second case caused recurrence of the symptoms. *Conclusion:* As published in the literature, the pharmacological treatment improves the quality of life in these patients though the delusional syndrome remains silent. The choice of psychotropic drugs depends on the medical history of each case as well as the organic cause and interactions with other treatments. The compliance of these patients is irregular and requires a strong therapeutic alliance. Early treatment of this pathology with an interdisciplinary team or supervised by a dermatologist results in a marked improvement in the quality of life.

### PP23

#### A STUDY OF STRESS IN PATIENTS WITH ACNE EXCORIÉE, LICHEN AND MACULAR AMYLOIDOSIS, AND LICHEN PLANUS

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*Objectives:* The present study was conducted to compare stress scores and types of reported stress in three dermatological conditions (acne excoriée, lichen and macular amyloidosis, and lichen planus) and those without any dermatological condition. *Methods:* We assessed stress by Gurmeet Singh's Presumptive Stressful Life Events Scale (by a psychiatrist) in 20 cases of each condition each of acne excoriée, lichen and macular amyloidosis, and lichen planus, and 20 controls. We collected demographic data and stressors in all participants, and clinical data in 60 cases. We used multivariate linear regression models to study the factors associated with stress scores. *Results:* The mean age (standard deviation [SD]) in acne excoriée, lichen and macular amyloidosis, lichen planus, and controls were 25.2 (5.5), 39.4 (12.7), 35.7 (14.1), and 38.5 (11.6) years respectively ( $p<0.001$ ). The common stressful events were financial problems (51%), family problems (40%), marital conflicts (36%) and death (32%). Stressful life events were significantly more commonly reported by cases compared with controls (88% vs 8%,  $p<0.001$ ). The Median (Interquartile range [IQR]) stress scores were highest in patients with lichen and macular amyloidosis (230 [210, 284.5]), followed by acne excoriée (189 [130, 234.5]), lichen planus (154 [105, 200.5]), and controls (0 [0, 65]); the differences were statistically significant ( $p<0.0001$ ). In the adjusted models, the mean stress scores were significantly higher in patients presenting with lichen and macular amyloidosis (201.4, 95% confidence intervals [CI]: 157.1, 245.6;  $p=0.001$ ), acne excoriée (156.4, 95% CI: 107.4, 205.5;  $p<0.001$ ), and lichen planus (128.5, 95% CI: 84.2, 172.7) compared with controls. Financial stress was reported by 70% of acne excoriée, 65% of lichen and

macular amyloidosis, 50% of lichen planus cases, and by 20% controls ( $p=0.007$ ). Marital conflicts were reported by 60% of lichen and macular amyloidosis, 45% of acne excoriée, 30% of lichen planus cases, and by 10% controls ( $p=0.007$ ). Similarly, family conflicts were reported by 70% of lichen and macular amyloidosis, 50% lichen planus, 40% of acne excoriée cases, and none of the controls ( $p<0.001$ ). *Conclusions:* Stressful life events were more commonly reported by cases compared with controls. Stress scores were highest in lichen and macular amyloidosis, and acne excoriée patients. These dermatological diagnoses were associated with different types of stressful events in life.

#### PP24

### PSYCHOSOCIAL HISTORY AND INTERVENTION OF FEMALE PATIENT WITH EPIDERMOLYSIS BULLOSA

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Epidermolysis bullosa is a genetically determined disorder characterized by blistering and erosions of skin after minimal trauma. A 60-year old female patient was seen at our outpatient dermatological department in Alcañiz Hospital in Spain. After taking a detailed history, followed by a dermatological examination, the diagnosis of epidermolysis bullosa was confirmed. No one had ever told the patient what her diagnosis was so it was necessary to give detailed explanation of treatment options. The patient showed signs of sadness and was very withdrawn and after a few visits the dermatologist asked the psychologist in the team to sit in with him to meet the patient and offer psychosocial support. The patient was born at home, in a small village in the region of Aragon. The family realized their daughter had a problem when her ears were pierced a week after birth. As a child, any fall or bump had dramatic effects on her skin. She recalls having had a very difficult time during adolescence when she became aware of how different she was to others. She retreated from social life and left her house only to go to school. At the age of 22 she decided to "normalize" her life and soon after she met her future husband. Her husband has epileptic crisis and a difficult temperament, not very empathetic towards his wife's illness or suffering. The patient's hands are deformed and she has no nails on hands or feet. She has alopecia in head and pubic area. She is especially worried about her sight as she is shortsighted and has cataracts, which are blinding her considerably. Her main fears are going blind or needing a surgical intervention and not being able to have it because of her illness. Several visits were scheduled with both the dermatologist and the psychologist. Little by little, the patient gained confidence in the staff and she began to unfold some of her "secrets" and the issues that were causing her suffering and worry. Some psychological screening tools were used (Symptom Checklist-90-R, Hospital Anxiety and Depression Scale), as well as a dermatology specific quality of life questionnaire (Dermatology Life Quality Index). She had a very impaired quality of life (DLQI=20), screened positive for depression and anxiety, and manifested the following symptoms: loneliness, nervousness, sadness, excessive worrying, fears, desire to cry, headaches and muscular pain. The patient continues having monthly sessions in the psychodermatology department of the hospital.

#### PP25

### WOMEN'S SELF-IMAGE - HOW WE PERCEIVE OURSELVES, HOW MUCH WE SACRIFICE FOR PERFECT LOOKS

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*Objectives:* Increasing access to aesthetic medical procedures as well as the cult of perfect appearance created by the media induced the authors to conduct research of the satisfaction level of self-image among a representative group of Polish women. What is more, an analysis was conducted, the aim of which was the assessment of women's views on the topic of surgical and non-surgical methods of appearance correction and their frequency. *Methods:* The study involved 143 professionally active women aged from 20 to 50 years old, mostly living in Silesian agglomeration's cities (80%). The research applied a survey method with the use of multiple choice as well as discussion and conjunction. The prepared survey contained an own authorship evaluation scale of satisfaction of certain parts of the body. The statistical analysis was conducted with the use of Statistica 10.0 program. *Results:* The level of satisfaction on self-image among Polish women is quite high and it is 74%. The face, according to Veale and collaborators, is characterized by the highest satisfaction level among Polish women (89%). The main sources of dissatisfaction are, on the other hand, the bottom parts of the body, especially thighs (27%) and belly (25%). 84.2% of the respondents attempt to change their nutritional and skin care habits in order to improve their appearance, however, only 11.9% of them succeed. 45% of the participants regularly (every three months) visit beauty salons. However, doctors of aesthetic medicine, used only by 6% of women, enjoy relatively little trust. Among medical procedures, the most popular is exfoliation, while cosmetic laser treatment is used the least often. None of the surveyed women has ever had a plastic surgery and only 5% consider such a possibility. *Conclusion:* One of the biggest research of the satisfaction level of self-image conducted by David Garner on an international group in the 90s showed that as far as 56% of the women involved were unhappy with the way their body looked. Modern Polish women seem not to undergo the medial pressure to strive for excellence at all cost and the level of satisfaction is considerably higher than the results gathered by Garner.

#### PP26

### DETERMINANTS OF PSORIATIC PATIENTS' PSYCHOSOCIAL WELL-BEING – RESULTS OF THE MULTINATIONAL STUDY.

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**Introduction:** Psoriasis is one of the best studied dermatoses with respect to quality of life (QoL) impairment. However, differences between various countries have not been analyzed well so far, especially regarding determinants of psychosocial well-being deterioration. **Objective:** The aim of this study was to compare the psychosocial well-being of patients with psoriasis in different European countries and to assess the major factors having influence on QoL impairment. **Material and methods:** This is an international multi-center observational cross-sectional study conducted in 13 European countries. A total of 662 patients (54.2% males and 45.8% females) aged 47±15.6 years were recruited. All patients completed a questionnaire with socio-demographic information, negative life events and suicidal ideation. Depression and anxiety were assessed with the Hospital Anxiety and Depression Scale (HADS), and QoL with Dermatology Life Quality Index (DLQI) and EQ-5D. **Results:** Significant differences regarding QoL, anxiety and depression were observed between psoriatics from various countries ( $p < 0.001$ ). The lowest anxiety and depression scoring was noted in patients from Denmark (HADS-anxiety: 5.0±4.4 points, HADS-depression: 3.2±3.2 points). The best QoL was observed in subjects from Spain (overall health status: 74.9±16.8%; DLQI: 3.7±4.9 points), while patients from Italy were the most impaired ones (HADS-anxiety: 10.6±3.9 points, HADS-depression: 9.6±4.4 points, overall health status: 55.6±22.2%, DLQI: 14.3±6.6). The most relevant parameters influencing the patients' well-being were pruritus severity (HADS-anxiety:  $r = 0.34$ , HADS-depression:  $r = 0.33$ , overall health status:  $r = -0.3$ , DLQI:  $r = 0.46$ ), satisfaction with the current dermatological treatment (HADS-anxiety:  $r = -0.22$ , HADS-depression:  $r = -0.19$ , overall health status:  $r = 0.17$ , DLQI:  $r = -0.2$ ) and to lesser degree gender, experience of serious economical difficulties in the past 5 years as well as having stressful life events during the last 6 months. Importantly, the level of anxiety and depression symptoms significantly correlated with suicidal ideation in the studied patients (HADS-anxiety:  $R = 0.37$ , HADS-depression  $R = 0.33$ ). **Conclusions:** Pruritus severity and satisfaction with the current dermatological treatment were shown to have the greatest impact on the psoriatic patients' well-being. Moreover, there was also found a clear link between the level of

anxiety and depression symptoms in psoriatic individuals and the presence of suicidal ideations.

#### PP27

### TRICHOTEMNOMANIA: THREE ADOLESCENT CASES WITH A VERY RARE DISORDER AND REVIEW OF THE CURRENT LITERATURE

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**Objectives:** Trichotemnomania (TT) is hair-loss due to cutting or shaving by patients which is an obsessive-compulsive habit. Prevalence of this condition is usually underestimated, whereas dermatologists can miss the diagnosis. Our aim in this study was to present three adolescent patients with TT. This is the first adolescent case-series of TT. **Methods:** Three adolescent patients with variable characteristics of TT were evaluated by dermatologist and child and adolescent psychiatrist. Dermatologic examination included medical history, physical examination and laboratory investigations. Detailed psychiatric assessments consisted of socio-demographic data, clinical history, Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version-Turkish Version (K-SADS PL), Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Social Anxiety Scale for Children-Revised (SASC-R). We have followed up all the patients for at least six months. **Results:** All patients admitted to dermatology clinic accompanied by their parents with sudden loss of hair. Dermatologic examination revealed a generalized hair loss and preservation of normal-length hairs at the margins of the affected area. The hair pull test was negative and there were neither exclamation point hairs nor yellow black dots in dermoscopy assessment. All the patients denied cutting or pulling scalp hair. After detailed psychiatric evaluation, case 1, case 2 and case 3 had the diagnosis of OCD. Total scores of Y-BOCS were 52, 55 and 61, respectively. Other comorbid psychiatric disorders were social anxiety disorder (in case 1 and case 2), general anxiety disorder (in case 3) and agoraphobia (in case 3). Case 1 and case 2 were started on sertraline 50 mg/ day. After 6 months follow-up, they were symptom-free for OCD (Y-BOSC total points were 7 and 9, respectively) and they had no more hair-loss. Case 3 and her parents refused the treatment. **Conclusion:** TT is a very rare disease. There are only a few case reports in literature. Dermatologists and psychiatrists don't recognize this clinical entity and most of the cases are left undiagnosed. Clinical characteristics of this disease should be investigated in large scale studies.

#### PP28

### GENDER BIAS IN PREFERENCES FOR DERMATOLOGY AS A SPECIALTY AMONG DEPARTMENT OF HEALTH POST-GRADUATE INTERNS OF A TERTIARY HOSPITAL IN THE PHILIPPINES

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**Background:** There has been an increasing trend towards having more female dermatologists than males. Studies have shown that more women enter the field of Dermatology, while fewer of their male counterparts consider this specialty. Furthermore, gender and the roles assigned by the society have an impact in specialty

preferences. *Objectives:* In light of a program on Gender and Development, guided by the principles of the Philippine Magna Carta of Women, this study was undertaken to gain knowledge about medical interns' specialty preferences, to discover the possibility of gender gaps, especially for dermatology as a specialty preference, and to explore the reasons why it might exist. *Methods:* A questionnaire-based interview was conducted among Post-graduate Interns of East Avenue Medical Center between July to November 2014. Data were collated and statistically analyzed. Chi-square test was used to compare differences in proportions and test relations across gender. Statistical significance was based on  $p$ -values  $\leq 0.05$ . SPSS v20 was used in data processing and analysis. *Conclusion:* Gender has been a factor in deciding a specialization for medical interns. Controllable lifestyle has now been the topmost factor for males while anticipated income is now a top priority for females. With these factors, the field of Dermatology has been appealing to many post graduate interns but sadly, due to stereotyping of male dermatologists as gay, many males hinder themselves from applying.

### PP29

#### THE BARBIE EFFECT ON KINDERGARTEN GIRLS AND ON WOMEN SEEKING AESTHETIC PROCEDURES

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*Objective:* The aim of the survey is to show the impact of the Barbie effect on self-esteem and personal image on both young girls and women. *Material & Methods:* Parallel study among 48 kindergarten girls, aged 4–6 years old (mean age: 5), and 23 women, aged 22–38 years (mean age: 32), concerning beauty aspects related to Barbie image. The girls were asked a series of questions about Barbie dolls, and the answers were written by the teacher and dermatologist. The female patients were selected according to the following criteria: suffered from mild/moderate depression (Beck scale was used) for which they were undergoing treatment, and came for a dermatological procedure, botulinum toxin and/or hyaluronic acid injection, with unrealistic expectations, bringing photos of celebrities and asking for a “Barbie-like” appearance. *Results:* According to the survey, all girls own at least one Barbie doll (mean 3) and consider Barbie a role model; 58.33% (28 girls) wish to grow-up and look like Barbie. When asked what is the most beautiful thing about Barbie, 47.91% (23) answered face (69.56% - eyes (16); 30.43% - lips (7)), 25% (12) slim body, 14.58% (7) hair and 12.5% (6) dresses). Beck scale emphasized an interval from 14 to 27 points (mean value 20) showing mild (47.82%) or moderate (52.17%) depression. All patients were counseled by both dermatologist and psychiatrist and advised to reevaluate their expectations from the medical procedure. Photos of patients were photoshopped to point the outcome of the procedure according to the dermatologist point of view (a natural look) and to the patient's desire (Barbie-like look). Eventually all 23 patients accepted the dermatologist proposal and were injected with botulinum toxin and/or hyaluronic acid. Reevaluation of Beck score 2 months after the cosmetic procedure showed a mean decrease of 4 points in 69.56% (16) patients, with an improvement of self-esteem. However, within 3 months, 34.78% (8) of the 23 female patients returned to the dermatologist seeking for a second filler injection to provide more volume to the lips. *Conclusion:* The studies support the concept that Barbie influences girls' developing self-concept and body image, as well as women's beauty concepts and expectations in terms of beauty procedures.

### PP30

#### NEUROTIC EXCORIATIONS IN A BLIND WOMAN

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*Objective:* To emphasize a case of factitial dermatitis in a blind woman. *Material & Methods:* We report the case of a 53-year-old female, blind for almost a year (due to traumatism), undergoing treatment for moderate depression, who presented with multiple excoriations and scarring on the face, upper back and arms, evolving for 9 months. *Results:* Dermatological examination showed multiple excoriations in various stages of evolution and healing, post inflammatory hyperpigmentation and numerous scars, distributed over the face, upper back and extensor surface of the upper extremities, without associated pruritus. After complete loss of vision due to an accident, the patient became isolated and suffers from moderate depression (score on Beck Scale=21) for which she is undergoing treatment with venlafaxine and lorazepam. Skin lesions first appeared 3 month after she became blind. The patient was treated several times during the past months for folliculitis and scabies, without improvement. She denied skin picking, but she was carefully monitored by her tutor who observed the patient inducing skin lesions through compulsive, repetitive excoriation of her skin in areas easy to reach, thus supporting the diagnosis of neurotic excoriations which was made. Topical dermatocorticoid improved the aspect of lesions and the patient received a higher dosage of the psychiatric treatment as well as psychological counseling, with good result within 2 months therapy. *Conclusions:* Neurotic excoriations or skin picking is a psychocutaneous disorder; described as an uncontrollable urge to pick at normal skin or skin with mild lesions, in order to temporary alleviate depression. Detailed history, physical examination and collaboration between dermatologists and psychiatrists are essential in establishing the diagnosis and treatment of factitial dermatitis.

### PP31

#### COMORBID PSYCHIATRIC DISORDERS IN PATIENTS WITH HAIR LOSS

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Psychiatric disorders that are comorbid with hair pathology are characterized by significant polymorphism. They include a wide range of primary and secondary psychiatric disorders. Hair loss is associated with the loss of appeal and body image issues. It is an important trigger in the development of psychogenic (nosogenic) reactions. *Objective:* To study psychiatric comorbidities in patients with hair loss. *Methods:* Nine patients with hair loss were consulted using an interdisciplinary approach by a trichologist and a psychiatrist. The following diagnoses were established by the trichologist: androgenic alopecia ( $n=3$ ), diffuse telogen effluvium ( $n=2$ ), and alopecia areata ( $n=4$ ). Nosogenic reactions or adjustment disorders with depressed mood and with anxiety (F43.21-22 in ICD-10) were diagnosed by the psychiatrist. Severity of depressive and anxiety symptoms was measured with the Hospital Anxiety and Depression Scale (HADS). *Results:* According to the results of HADS, the level of anxiety was higher ( $8.5 \pm 4.1$  points) than the level of depression ( $5.75 \pm 3.3$  points). This reflects the fact that nosogenic disorders with phobic reactions were typical for patients with hair loss and were often ac-

accompanied by avoidance behaviour. There was a tendency to limit social life and escape a squeamish attitude of other people “caused by negative appraisal on patients’ hair quality”. However, no direct relationship between the severity of alopecia and the severity of reaction has been found. The severity of the reaction mostly depended on the personality dimensions of patients. More severe reactions were observed in patients with premorbid, over-valued attitude to hair quality (“hairdo must be perfect”, “hair must be silky” etc.).

### PP32

#### PSYCHOLOGICAL IMPAIRMENT IN PATIENTS WITH CHRONIC SPONTANEOUS URTICARIA

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**Objective:** Chronic spontaneous urticaria (CSU) is a common skin disorder that has been associated with psychological distress. We investigate psychopathological symptoms such as anxiety and depression in patients with CSU. **Methods:** This observational study included 70 patients with CSU attending the outpatient clinics of a reference Dermatology Department at a University Hospital in Barcelona, Spain, and 70 healthy subjects, who completed the Goldberg Health Questionnaire (GHQ-60), the Beck Depression Inventory (BDI-21), and the Spielberger State-Trait Anxiety Inventory. **Results:** Patients with CSU had significantly higher mean scores than controls in GHQ-60 (19.06 vs 5.18,  $p < 0.001$ ), BDI-21 (14.38 vs 4.0,  $p < 0.001$ ), and anxiety state (26.47 vs 14.18,  $p = 0.0005$ ). Statistically significant differences were also found between the CSU and control groups in mean scores for anxiety trait (31.23 vs 18.01,  $p = 0.0002$ ). **Conclusion:** Anxiety and depressive symptoms are significantly increased in our CSU population with respect to controls. Thus, management of CSU patients may benefit from a psychological approach and intervention in association with dermatological treatment.

### PP33

#### THE IMPORTANCE OF ILLNESS REPRESENTATIONS AND COPING FOR PHYSICAL IMPAIRMENT IN PATIENTS WITH ATOPIC DERMATITIS: A 1-YEAR-FOLLOW-UP STUDY

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**Background:** Leventhal’s common-sense model postulates that illness representations lead to a certain way of coping. Coping and illness representations are associated with physical impairment in patients with different chronic diseases like tinnitus, COPD or rheumatoid arthritis. Also, in patients with atopic dermatitis (AD), a relationship between illness representations, coping and bodily well-being has been shown using a cross-sectional design. However, this study is the first assessing whether illness representations and coping at the end of a stay at a rehabilitation clinic (T1) are associated with the self-rated severity of the disease and the well-being of the patients one year later (T2). **Methods:** 109 AD-patients filled in validated questionnaires to assess illness representations (Illness-Perception Questionnaire; IPQ) and coping (Ehrenfelder

Inventory of Coping; EBS) at T1. At T2, the same patients were asked to evaluate their current AD severity and physical well-being by means of the Patient-Oriented SCORAD (PO-SCORAD) and the questionnaire for assessing subjective physical well-being (FEW). The response rate was 55% ( $n=60$ ). **Results:** Linear regression analyses revealed that at T2 18.4% of the AD-severity could be explained by illness representations and coping ( $p=0.003$ ): The belief that the disease was caused by chance, that it will have a bad course as well as depressive reactions were positively associated with disease severity (POSCORAD). Moreover, at T2, 43.7% of self-rated physical well-being could be explained by illness representations and coping ( $p \leq 0.001$ ): The less the patients believed that bodily symptoms occurred due to their skin disease (low illness identity), the more they believed that they can influence the disease, the less depressive reactions they showed and the higher they scored on active problem solving, the higher was their bodily well-being (FEW). **Conclusions:** This study is the first showing that illness representations and coping at the end of a stay at a rehabilitation clinic predict the illness severity and self-rated physical well-being in AD patients one year later. The results point out that feeling powerless regarding the cause and course of the disease and being more depressed is associated with more physical impairment. Therefore, interventions teaching AD-patients strategies how to actively cope with their disease, also including cognitive restructuring, should be offered to this patient group.

### PP34

#### A COMPARATIVE STUDY OF THE PSYCHOSOCIAL EFFECTS OF HANSEN’S DISEASE ON MALE VERSUS FEMALE PATIENTS IN A TERTIARY GOVERNMENT HOSPITAL

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**Objectives:** Hansen’s Disease is a potentially disabling infectious disease caused by Mycobacterium leprae which has psychological and socioeconomic effects due to stigma. There are very few reports on the impact of this disease in relation to gender. This study aims to compare the psychosocial effects of Hansen’s Disease among male and female patients in a tertiary government hospital. **Methods:** This cross-sectional study documents 36 diagnosed cases of Hansen’s Disease (18 males and 18 females) in the outpatient department. A questionnaire was designed to assess the psychosocial effects of the disease. The Dermatology Life Quality Index (DLQI) was used to evaluate the impact of Hansen’s Disease on quality of life. Gender differences based on qualitative measures were assessed using Chi-square test. Data was analyzed with SPSS v20 program. Significance is based on  $p$ -values  $\leq 0.05$ . **Results:** More male patients sought medical attention a year after initial symptoms appeared ( $p=0.042$ ). Physical deformities and concern about health were the common triggers for seeking help in both men and women ( $p=0.721$ ). Upon diagnosis, informing the immediate family members was given importance but most males would not reveal their condition to friends. Discrimination and depression were more common among female participants. Possible problems arising from family life were of great concern in all participants initially but as the disease progressed, family life was more affected among females, while work and self-worth issues affected the males. Accessibility of medications and support from loved ones were the driving factors in starting and completing therapy. The

overall quality of life scores (DLQI) showed that Hansen's disease had a greater impact on the psychosocial well-being of females when compared to males. *Conclusion:* Both men and women are similarly affected by the stigma of leprosy with no statistically significant difference. However, females are more likely to hold self-stigmatizing attitudes that can interfere with their daily lives. Physicians and healthcare staff should be aware that the stigma and psychosocial impact of leprosy does not cease, even after treatment.

### PP35

#### LICHEN PLANUS AND COMORBID MENTAL DISORDERS

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*Objectives:* To study the relationship between lichen planus (LP) and comorbid mental disorders. *Methods:* 30 (19 female, 11 male; mean age=37.6 years) patients with LP affected skin were examined. Psychopathological, experimental-psychological methods were used. Dermatological status examination was performed by universal scales; – Clinical Symptoms Index (CSI) and Dermatologic Life Quality Index (DLQI). *Results:* There was a predomination of psychogenic manifestations/exacerbations of LP in 12 (40.0%) cases within reactive depressions, which preceded the development of clinical presentation of dermatosis (F43). In 15 (50.0%) cases nosogenic reactions were diagnosed (F43). Severity of depressive nosogenic reactions ( $n=7$ ) correlated with extensive area of affected skin and high CSI total score – 17 and moderate DLQI total score – 13 points. Structure of depression consists of depressed mood, anxiety about disease outcome, crying, irritability, sleep disorders, somatopsychic dysaesthesia without any strong connection with premorbid personality (PP) structure. Sociophobic nosogenic reactions ( $n=8$ ) had obsessive-phobic structure and included social anxiety with intrusive phobia of negative evaluation by others and situational avoidance behavior. Skin affection was predominantly localized on open skin areas; CSI - 13; DLQI – 14 points. Checking behavior and camouflage rituals occurred. Individuals with histrionic PP predominated. In 3 (10%) cases LP manifested secondary to comorbid recurrent depression (F33). Patients with avoidant and hyperthymic PP had depressed mood, melancholy, anxiety, irritability, ideas of hopelessness, intrusive thoughts about skin disease, daily rhythm with morning change for worse, and sleep disorders. *Conclusion:* In cases of LP manifestation, strong comorbidity with psychogenic disorders (reactive depressions) is revealed by the presentation by psychogenic mechanism of somatopsychic lability. Depressive nosogenic reactions predominantly depend on the extent and severity of skin affection. Sociophobic nosogenic reactions are associated with constitutional predisposition and develop both in severe and mild LP with localization on open skin areas. Recurrent depressions which are in phase with LP exacerbations remain major characteristics of classical depressive phase.

### PP36

#### QUALITY OF LIFE IN IRANIAN HIGH SCHOOL STUDENTS WITH ACNE VULGARIS

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*Objective:* Acne vulgaris as a common skin disorder may have considerable impact on quality of life (QoL), especially in young

people. The aim of this study was detection of the impact of acne and related factors on QoL in high school students as a main part of involved population. *Methods:* In this cross-sectional survey, 1,002 high school pupils in Tehran, Iran, were included. This sample was derived from all high school pupils in the city by divided, randomly organized steps from the 20 subdivision areas. The Global Alliance to Improve Outcomes in Acne was used for acne grading and Assessment of the Psychological and Social Effects of Acne (APSEA) questionnaire for assessing their QoL. *Results:* Nine hundred eleven pupils completed the questionnaire. The overall acne prevalence was 93.1%. Moderate to severe acne was observed in 14%. The mean APSEA score was 52.06 ( $\pm 20.58$  as SD). The impact of acne on QoL was associated with the severity of acne ( $p < 0.0001$ ). Female with moderate/severe acne had a greater APSEA score compared to similarly affected males ( $p < 0.0001$ ). Acne duration significantly influenced APSEA score, with higher score in females than males ( $p < 0.009$ ). We found no significant correlation between APSEA score and gender or age. *Conclusion:* Acne as a common disorder in Iranian pupils has a significant impact on their QoL. It is important to identify and treat such teenagers early to reduce the future socio-economic burden of their acne.

### PP37

#### PSYCHODERMATOLOGY OUTPATIENT CLINIC IN ROTTERDAM, THE NETHERLANDS: OVERVIEW OF A FIVE-YEAR EXPERIENCE

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Since November 2009 a joint psychodermatology outpatient clinic has been run every two weeks by a dermatologist and a psychologist where both specialists see patients concurrently at the dermatology department of the Erasmus Medical Centre in Rotterdam. Where appropriate we involved other specialist experts including psychiatrists, specialized skin nurses and skin therapists. *Objectives:* The aim of this overview is to assess the population visiting the psychodermatology outpatient clinic, regarding referral, DSM-5 disorder, and number of visits. *Methods:* The medical records of all the patient visiting our outpatient clinic were studied to assess the before mentioned parameters. *Results:* In total, 204 patients visited our clinic between November 2009 and January 2015. Most patients were female (62%) and referred by a dermatologist within our department (74%). Somatic symptoms and related disorders were the most frequent disorders in our patients (60%). The majority of patients needed only one consultation at our psychodermatology outpatient clinic (73%). Clarity of psychological or psychiatric diagnosis and opinion, and clear advice on treatment/follow-up arrangements were the key items of content in the written communication to the referring physicians. For the patients who were treated at our hospital (27%), a care plan was developed that addressed psychiatric and or psychological problems in an integrated way, with dermatology care that was both specific and tailored to the patient. *Conclusion:* The psychodermatology outpatient clinic is mostly used to assess psychological or psychiatric problems in dermatology patients and to guide them to the most suitable practitioner for follow-up and/or treatment. It is a valuable addition to fill the gap between somatic and psychiatric caregivers.

**PP38****ERYTHROMELALGIA: IS A PSYCHODERMATOLOGICAL DISEASE?**

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Erythromelalgia (or Mitchell's disease) is a rare neurovascular peripheral pain disorder in which blood vessels, usually in the lower extremities or hands, are episodically blocked (frequently on and off daily), then become hyperemic and inflamed. There is severe burning pain (in the small fiber sensory nerves) and skin redness. The attacks are periodic and are commonly triggered by heat, pressure, mild activity, exertion, insomnia or stress. Erythromelalgia may occur either as a primary or secondary disorder. The most prominent symptoms of erythromelalgia are episodes of erythema, swelling, a painful deep-aching of the soft tissue and tenderness, along with a painful burning sensation primarily in the extremities. These symptoms are often symmetric and affect the lower extremities more frequently than the upper extremities. Symptoms may also affect the ears and face. The neuropathological symptoms of primary erythromelalgia arise from hyperexcitability of C-fibers in the dorsal root ganglion. Specifically, nociceptors (neurons responsible for the sensation and conduction of painful stimuli) appear to be the primarily affect neurons in these fibers. This hyperexcitability results in the severe burning pain experienced by patients. This disease rarely occurs in children, that is why there is a considerable interest in the existing observation of the 10-year-old boy. Often the only way to stop the acute pain attacks – is self-destruction (dipping of limbs in boiling water, application of chemicals, needle sticks, rubbing snow, etc.), which lets to «displace» the neuropathic pain with the help of the psychological mechanism. The self-inflicted behavior leads to the formation of non-healing ulcers that imitate the symptoms of necrotizing vasculitis. Also, quite interesting is the fact of extreme heterogeneity of descriptions of painful sensations: arching burning pain, fever, pricks inside, twisted pain, etc. Long-term persistent pain syndrome inevitably leads to the formation of psychopathological nosogenic reactions predominantly of depressive and hypochondriac spectrum. The best effect in the relief of a complex neuro – and psychopathological symptomatology is achieved by taking the typical antipsychotics. Thus, the combination of features allows us to talk about Erythromelalgia as a psychoneurosomatic formation.

**PP39****SELF-INFLICTED SKIN LESIONS: A CASE REPORT**

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Self-inflicted skin lesions (SISL) are symptoms clearly related to mental disorders, yet the dermatologist is sometimes the first health professional to be visited by these patients. A coherent multidisciplinary approach and good communication between the involved caregivers is important when dealing with such cases. We present a case report of a 40-year-old woman attending in a dermatology outpatient clinic for self-inflicted skin lesions. The patient (Juana from now on) had heard that our clinic also offered psychoderma-

tology and she asked from the beginning to be attended in a holistic manner. Juana was born in Germany. Her mother was Spanish and had gone to work there when she was 18 years old. She married a German citizen and they had two daughters. Juana was born first and her sister was five years younger. Juana was born with a cleft palate and lip, and had various surgical interventions as a child, with long hospitalizations and few visits from her family due to the long distances between the hospital and their home. There is also a history of sexual abuse, from the age of 5–15 years old, as well as physical abuse. Juana started cutting and burning herself from the age of 8. She started smoking when she was 11 because an aunt had died of lung cancer and she wanted to die too. At 15 she began serious self-harm with suicide attempts and she was hospitalized for 9 months. She recalls this time as very helpful and the therapy she received helped her to become aware of the sexual abuse she had been submitted to. That is when she decided there would be no more. Going back home was difficult and she left when she was 17. At 18 she was admitted into an adult psychiatric hospital, but it was different to the last place she had been to and she never quite adapted. Juana had years of psychiatric and psychological treatment in Germany, both as an inpatient and as an outpatient. In Spain, Mental Health professionals see her on a regular basis. She has been diagnosed Borderline Personality Disorder, Major Depression and Post-Traumatic Stress Disorder. At the age of 30, the patient came to live in Spain, to be near an aunt (her mother's sister) whom she had kept contact with. She has stopped serious self-harm and only picks and scratches her skin. Her body, however, is full of scars from previous attempts of suicide and self-harm.

**PP40****BURNING MOUTH SYNDROME. EVALUATION OF ITS MANAGEMENT IN HOSPITAL DEL MAR (BARCELONA) PATIENTS**

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*Introduction:* Burning mouth syndrome (BMS) is defined as a chronic pain condition mainly characterized by a burning, stinging, or painful sensation of the tongue or other oral sites in the absence of any specific oral lesion or any visual alteration. This generally determines a significant delay in diagnosis. Its pathogenesis is still unclear, being probably multifactorial, and most treatments remain unsatisfactory. *Objectives:* The aim of this study is to evaluate the main clinical symptoms associated psychopathological disorders and outcome after psychoactive treatment of patients with BMS. *Methods:* Hospital del Mar is the main hospital in an area of 15 km<sup>2</sup> providing healthcare to 305,237 inhabitants, which represent 18.5% of the population of Barcelona. In this study we conducted a retrospective review of the clinical records of 191 patients with diagnosed BMS in our Dermatology Department from June 2005 to June 2013. Clinical characteristics and psychopathological profiles were determined by appropriate instruments. *Results:* In our study, 165 patients were women (86%) with an average age of 67 years. The median time of delayed diagnosis was 21 months. In relation to symptomatology, 91% of the patients expressed burning and/or stinging and/or pain; the remaining ones complained of dysgeusia, inflammation, or paresthesia. In addition, 34% of patients also experienced xerostomy (negative anti-Ro and anti-La antibodies in all the cases). Candida albicans was isolated from oral mucosa samples in 28 patients (11 of them used dental prosthesis). Anti-



fungal therapy did not improve symptoms in any of these cases. In 13 patients (6.8%) we also found oral lichen planus. Three patients had associated vulvodynia. Regarding the trigger, 30% of patients expressed a stressful life event before the onset of symptoms, and 10% a previous dental procedure. Psychiatric disorders proved to be the most frequent comorbidity; 15% of patients had a diagnosis of anxiety/depression and 12% had cancerophobia. Seventy-five patients underwent the Hospital Anxiety and Depression Scale (HADS) test, revealing depression and anxiety traits in 32% and 50% of patients, respectively. The most frequently associated medical conditions were, in first place, diabetes mellitus (17 patients), followed by hypothyroidism (14 patients) and fibromyalgia (14 patients). Laboratory examinations were performed in each patient and revealed 10 subjects with iron deficiency, 6 cases with B12 vitamin deficiency, 3 subclinical hypothyroidism, and 1 case of folic acid deficiency. No patient showed improvement after replacement therapy. A breath test to detect *Helicobacter pylori* was carried out in 55 patients with dyspepsia, with 30 testing positive. Eradication treatment did not improve symptoms in any case. Patch-testing was performed on 102 patients, showing positive results in 34 of them, but only 4 were considered clinically relevant. Concerning treatment, we treated 180 patients with psychotropic drugs (in most of them combining several drugs), and 50% received at least one complementary topical treatment. A follow-up conducted after 18 months showed that 55% of the patients had experienced an improvement in symptoms whereas 8.3% had experienced no changes or had worsened. In the remaining 33.6% of subjects, no follow-up was possible. **Conclusions:** BMS is a chronic condition difficult to manage. Typical patients are post-menopausal women. There is no relevant association with other medical or dermatological diseases, and psychiatric comorbidity (depression and/or anxiety) is very common. The most relevant triggers include stressful life events (death and/or cancer in relatives or close friends) followed by dental procedures. Analytic alterations are not frequent, and in cases of hormonal or nutrition deficiencies correction of these does not improve oral symptoms. Identification of *Candida albicans* in oral mucosa samples is not rare, especially in dental prosthesis users. The use of patch-testing is controversial, forcing a correct selection of patients, as well as *Helicobacter pylori* eradication. The therapeutic approach with psychoactive drugs in the management of BMS should be the main treatment, especially combined therapy, having led to improvement in more than half of the patients in our study.

#### PP41

### PSYCHODERMATOLOGY IN THE NETHERLANDS: A NETWORK OF PSYCHOSOCIAL CARE PROVIDERS

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**Objectives:** As psychosocial factors play a role in >40% of skin diseases, it is important to recognize psychodermatological problems and to refer to a psychosocial care provider if necessary. In a previous study we found that Dutch dermatologists refer only eight patients on average per year to a psychosocial care provider. Lack of psychosocial care providers with an expertise in psychodermatology was the main reason that dermatologists referred such a low number of patients. In the present study we aimed to examine 1)

how many patients with psychodermatological problems are seen by psychosocial care providers, 2) why patients were referred, 3) which diagnostic and therapeutic interventions psychosocial care providers use, and 4) whether psychosocial care providers are interested in psychodermatological training. **Methods:** We invited all Dutch hospital psychologists and psychosocial care providers who were a member of the Dutch Society for Psychodermatology ( $n=511$ ) to complete a 16-item study-specific questionnaire, including questions with regard to the number of patients with psychodermatological problems that are seen, the reasons for referral, the questionnaires and types of interventions that are used, and interest in psychodermatological training. **Results:** 182 (36%) psychosocial care providers responded. Of those, 129 providers (71%) indicated that patients were referred to them because of psychodermatological problems, on average 12 patients (SD 24.9) per year. Most patients were referred by their dermatologists (66%) with a range of indications, e.g., (a combination of) coping problems (59%), itch/scratch problems (49%), mood problems (42%), acceptance problems (41%), and impaired quality of life (29%). 48% used questionnaires to screen patients for problems. Respondents used both unimodal and multimodal interventions, e.g., (a combination of) cognitive behavioral therapy (64%), relaxation techniques (61%), cognitive therapy (49%), and patient education (52%). 35% were (very) interested in more psychodermatological training, especially covering psychodermatological problems in general (61%), treatment of itch/scratch problems (46%), and screening (44%). **Conclusion:** To further facilitate the referral of patients with psychodermatological problems and to improve multidisciplinary approaches, we constructed a network of psychosocial care providers with specific interest and expertise in psychodermatology. Also, we developed a specific training in psychodermatological issues.

#### PP42

### PSYCHOGENIC PRURITUS: A DERMATOLOGIST'S DILEMMA

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**Introduction:** Pruritus is a common symptom associated with many dermatoses, systemic abnormalities, and psychiatric/psychosomatic diseases. Psychogenic pruritus has received limited diligence, partly due to lack of training of dermatologists in this realm. We present herein fifty cases of psychogenic pruritus. Awareness and pertinent treatment of this disorder by dermatologists will lead to a more holistic treatment approach and better prognosis. **Materials and methods:** 200 cases of chronic pruritus who presented to our Outpatient Department over a period of one year were included in the study. Detailed cutaneous and systemic examination with investigations were performed to rule out cutaneous and systemic causes of pruritus. No organic cause was found for 67; they were then referred to a psychiatrist for evaluation. **Results:** Of 67, there were 42 females and 25 males in the study, with 35 patients above 30 years of age. There were 40 (59.7%) cases of localized (anogenital) and 27 (40.29%) cases of generalized pruritus. The most common disorder seen was obsessive compulsive disorder (OCD) seen in 20 (30%), 19 (28.35%) body dysmorphic disorder, and 16 (23.88%) were suffering from depression and anxiety in various grades and 12 (17.9%) of stimulations and psychotic disorders. The patients with OCD, body dysmorphic disorder, and depression were started on Selective Serotonin Reuptake Inhibitors. The patients with OCD were given a higher dose. **Discussion:** Pruritus or itch refers to an

uncomfortable sensation and emotional experience associated with an actual or perceived disturbance to the skin that provokes the desire to scratch. Chronic pruritus and induced scratching behavior could have a significant impact on disease course, life quality, and healthcare costs. Additionally, pruritus is one of the most intractable symptoms due to its complex pathogenesis involving an increasing number of mediators and receptors, undefined neurophysiologic pathways, unclear cerebral processing, and psychophysiology interaction. Psychogenic pruritus (PP) is a poorly defined entity in which the patient has intractable or persistent itch, not ascribed to any physical or dermatological illness. PP can be generalized or localized. The most common sites of predilection are legs, arms, back, and genitals. Often there is history of a major psychological stress preceding the onset of PP. Recognition of this condition is important as it can be managed effectively if diagnosed early.

#### PP43

### TRICHOTILLOMANIA: A CASE SERIES FROM NORTH INDIA

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**Introduction:** Trichotillomania is a behavioral disorder characterized by compulsive hair pulling. It presents as a pattern of hair loss with no clear biological or overt traumatic explanation. It is seen more commonly in females than males and in children more than adults. In the present study we were able to detect trichotillomania in 30 out of 1,000 patients who presented in the clinic with hair loss. **Materials and methods:** In all patients a detailed questionnaire was filled regarding information about demographic data and associated disorders. The clinical presentation was noted, and detailed examination carried out including the hair pull test and trichoscopy. Wherever required, laboratory investigations were carried out, such as complete haemogram and thyroid function tests. **Results:** Of 30 patients, 18 were children below age of 14 years and 12 were adults. In all cases, the pattern of hair loss was bizarre and hairs were twisted and broken at various distances from the clinically normal scalp. In 3 patients, all adults, the hairs were affected at other sites also; 2 (beard) and 1 (eye brows). All cases were managed by us. Two cases required the intervention of a psychiatrist. Treatment in children was primarily behavioral therapy, while adults were managed with selective serotonin reuptake inhibitors (SSRIs). **Discussion:** Though the diagnosis of trichotillomania is straightforward, the management can be frustrating at times. The differential diagnoses include tinea capitis, alopecia areata, and monilethrix. These can be excluded by taking a history, physical examination, trichoscopy, KOH examination, fungal culture, and scalp biopsy. In adults the response to SSRIs was striking.

#### PP44

### THE EFFECT OF THE INTERNAL DISEASE PATTERN ON THE COURSE OF CHRONIC URTICARIA.

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Any disease, in addition to its impact on original mental processes, states, and psychological properties of the "premorbid personality", induces formation of an "internal disease pattern" (IDP). It is possible that it is the IDP that determines a patient's attitude toward disease, the estimation of his own state, and, as a result,

the patient's commitment to the prescribed therapy. We examined 67 patients with chronic urticaria (CU) at the age of 24 to 65 years (mean age 42±3.5); 25 males, 37 females. Patients were divided into two groups depending on severity of the disease (urticaria). Patients with severe (30 points) and moderate (37 points) CU were enrolled in the study. All patients received a background therapy with antihistamines. The psychological status of patients was assessed using self-administered validated questionnaires, including Taylor Manifest Anxiety Scale and Beck's depression inventory. The anxiety scale contains a built-in lie scale to assess the reliability of the responses. Commitment to therapy during the past six weeks, care-seeking, and treatment were evaluated based on an analysis of outpatients' cards. In the group with moderate severity of the disease (CU) high levels of anxiety (38±2), were reported; mean levels of depression=19±3 points. It is noteworthy that patients in this group scored low on a built-in lie scale, and their commitment to treatment remained high; only 3 (6.6%) patients skipped medication or avoided treatment. In the group of patients with severe CU anxiety and depression levels were lower (21±1.5 and 7±1 points, respectively). However, the fact that 21 (70%) patients enrolled for the survey scored more than 6 points on the built-in lie scale raises doubts concerning the results of anxiety and depression assessments. The same patients showed low levels of compliance and repeated omission of medication intake, repeated requests to replace the administered drug, and refusal of treatment. The results for the group of patients with moderate CU disease are in agreement with the worldwide concept of mental change in those patients marked by increasing anxiety and depression. The results for the group of patients with severe CU raise questions about the origins of such a variant of clinical course of the disease. It is possible that a special IDP forms in those patients, marked by denial of the very fact of disease and as a consequence, reduced compliance, poor commitment to treatment, and, accordingly, to a more grave condition.

#### PP45

### THE COMBINATION OF DISORDERS OF THE SKIN AND URINARY RETENTION IN WOMEN INFECTED WITH HERPES SIMPLEX VIRUS II, I OR VARICELLA ZOSTER VIRUS

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Acute urinary retention is the leading cause of medical emergencies in men in urology. In our practice a common cause of acute urinary retention in women, with the exception of mental and acute neurological disorders, was infection; primarily genital herpes and herpes zoster with the main defeat of the lumbosacral spinal cord. The study included a total 17 women (mean age of 27 years) who addressed urgently with acute urinary retention. All of the women also had pain, burning sensation, or itching in the genital and anal area. Also, all women had skin lesions in the form of popular eruptions which transformed into single or multiple vesicles from one side or on both sides symmetrically. Skin disorders were frequently diagnosed by the physician at the examination. About 50% of women had general weakness and an increase in temperature. Women were counseled by urologist, gynecologist, neurologist, and dermatologist. The Ultrasonography of abdominal, urinary system and reproductive system was done. We also conducted laboratory diagnostics (PCR, EIA) with ve-

rification HSV II, I or VZV, screening for sexually transmitted infections HIV 1,2, hepatitis B and C, syphilis. Our experience in the diagnosis, treatment, and monitoring of all patients benefited from the use of urethral catheter Folley for 3-5 days and treatment with antiviral drugs (acyclovir, valacyclovir), and quinolones fluorinated, in accordance with clinical guidelines. For the treatment of herpetic and postherpetic neuralgia, anxiety reduction and stabilization of sleep, we used drugs for the treatment of epilepsy (gabapentin, pregabalin) and non-steroidal anti-inflammatory drugs (ketoprofen). Psychotherapy sessions were also conducted with patients to adapt to the problem, understand the causes of disease, and deal with the security problems of life while respecting the rules of treatment. Patients were informed of the possibility of recurrence of the disease and measures for its prevention. As a result we consider the acute urinary retention in combination with disorders of the skin at women infected with HSV II, I or VZV as an example of acute neurogenic bladder dysfunction due to ganglionevritia through the defeat of the peripheral nervous system. We believe that the treatment of this problem should be complex. Important joint consultations should be conducted with urologist, gynecologist, neurologist, and dermatologist. This will improve the quality of diagnosis and treatment of disease, and also reduce the risk recurrence of a disease.

#### PP46

### AFFECTIVE DISORDERS IN PATIENTS WITH ATOPIC DERMATITIS AND PSORIASIS

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**Background:** Atopic dermatitis (AD) and psoriasis (PS) are chronic, relapsing, itching dermatoses. The link between emotional stress factors, psychiatric disorders, AD and PS is the subject of research. Manifestation and exacerbation of these dermatoses is considered to be resulted from immune, genetic and environmental abnormalities and epidermal barrier defects. Depression, anxiety, social withdraw and other behavioral disturbances are implicated in the comorbid pathology and are considered to influence on disease processes, including the frequency and duration of exacerbations. The aim of the study was to evaluate the link between severity of dermatoses and psychological parameters in patients with AD and PS. **Methods:** Scoring of Atopic Dermatitis (SCORAD) and Psoriasis Area and Severity Index (PASI) were used for the assessment of dermatological status. Hamilton Depression Rating Scale (HAM-D) and Hamilton Anxiety Rating Scale (HAM-A) were used to assess depression and anxiety parameters. **Results:** 19 AD patients (23–79 years old, 9 men, 10 women with moderate severity of AD, SCORAD 41.6±14.6) and 25 patients with PS (18–59 years old, 15 men, 10 women, with mild PS, PASI 19.7±12.9) were examined. Both groups of patients had no severe somatic pathology, acute infections or treatment with psychotropic agents of 3 months before the participation in the study. Assessment of psychological status was also conducted in 52 healthy controls (21–58 years old, 16 men, 32 women with no history of mental disorders or treatment with psychotropic agents). HAM-D scores of patients revealed moderate depression (17.8±6.2) in AD patients and mild depression (13.4±7.06) in patients with PS. HAM-A scores revealed moderate anxiety (20.2±10.02) in AD patients, but not among PS patients (14.8±7.3). Strong correlation between anxiety and depression parameters ( $r=0.8, p<0.001$ ) and weak cor-

relation between SCORAD and anxiety levels ( $r=0.3, p=0.048$ ) in patients with AD were observed. Moderate correlation between severity of anxiety and depression ( $r=0.6, p<0.001$ ) was observed among PS patients. No depression and anxiety 7.0±6.6 and 7.9±6.1 accordingly were observed among healthy volunteers. **Conclusion:** Our data support the finding demonstrating comorbidity of depression and anxiety in AD and PS patients. Furthermore, the data suggest a positive correlation between severity of AD and severity of depressive symptoms.

#### PP47

### MULTIMODAL PSYCHOTHERAPY OF ONYCHOPHAGY IN CHILDREN

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Onychophagy is an obsessive-compulsive disorder involving nail biting with subsequent swallowing of the fragments. It is generally common in children. Parents usually complain to the dermatologist about peeled and broken skin on the cuticle of the nail bed of fingers and even toes. On visual examination, fingernails are usually equally bitten to approximately the same degree and damaged skin in the cuticle of the nail bed can be observed. Patients are followed by both dermatologists and psychiatrists. The purpose of the study was to assess the efficiency of combined psychological approaches in the treatment of onychophagy. 96 children of age 7-14 were observed and were divided into two groups. Main group (n=48) received complex multilevel medical and behavioral counseling including: first level – metabolic (medication) – Phenibut, according to age and weight, sedative herbal infusion; second level – neurophysiological, including psychological diagnosis and the correction of complex psychomotor developmental blocks of the child's mental activity; third level – syndromal, consisting of a combination of intellect-developing games and devices (biological feedback mechanism device) which allows for identification of different elements of the syndrome; fourth level – behavioral, consisting of different types of behavioral therapy in relation to cognitive, emotional and suggestive methods; fifth level – personality, the use of different types of individual psychotherapy aimed at solving internal and external psychogenic conflicts, development of personality, effective interaction with adults and other children. In addition, salt water baths, topical regenerative ointments, antibacterial topical therapy and anti-keratic creams were used as indicated. The control group (n=48), received only medication therapy (the first level) coupled with the same topical ointments as in the main group, when indicated. Psychological tests such as Luscher, Toulouse-Peyronie and child-parent relations test and drawing tests proved to be very informative and helped to diagnose and evaluate the efficacy of treatment. **Results:** the main group (Complex treatment): recovery – 41% (20 children), improvement – 37% (17 children), no change in behavior – 4% (2 children), recurrence of symptoms was noted in 18% (9 children). In the control group (use of only topical drugs) the results were as follows: recovery – 30% (14 children), improvement – 21% (10 children), no change in behavior – 20% (10 children), and recurrence – 29% (14 children). **Conclusion:** the use of complex psychotherapy, which is the treatment of choice in Russia, consisting of psychotherapy in combination with topical dermatological treatment proved to be a highly effective method in optimizing therapy of children with onychophagy.

## OTHER ABSTRACTS

**OAI****PROBLEMS OF PREVENTION OF SEXUALLY TRANSMITTED INFECTIONS***Boris Alekseyev**NVSMU I.I. Mechnikov, Saint-Petersburg, Russia*

The prevalence of STI in Russia is still very high. This situation indicates the failure of preventive measures. STIs are the result of risky sexual behavior (RSB). In our country infectionists and venereologists deal with the prevention of STIs. But their methods are often directed to treatment but not to RSB correction. The RSB problem concerns other specialist as well: sexologists and psychologists, who are trained to learn to understand and act on appropriate behavior. However, the order for the prevention of STIs is not submitted for these specialists. In this regard the evidence based sexual education is needed. To solve this problem, it is necessary to introduce training program "Sexology" in medical and pedagogical universities, refer teachers to these trainings, prepare the professional structure of psychologists to conduct together with teachers screening of children and adolescents to identify groups with risk of deviating psychosexual development, prepare therapists to correct deviant sexual behavior in children and adolescents; create a school for parents about sexual education of children and adolescents.

**OAI****PEMPHIGUS AND PSYCHOSOMATIC DISORDERS***D. Katranova, Igor Dorozhenok, N. Tepljuk**I.M. Sechenov First Moscow State Medical University, Moscow, Russia*

**Objectives:** The aim of this study was to investigate the psychosomatic aspects of pemphigus. **Methods:** We examined 9 (5 female, 4 male; mean age 57.6 years) patients with pemphigus (6- vulgar form, 3- seborrheic form) in process of steroid therapy. **Methods:** psychopathological, experimental psychological, dermatologic. **Results:** 3 patients with anxious premorbid personality manifested pemphigus when exposed to the psychogenic factors: grave disease of mother, divorce, forced sale of real estate. In 4 patients with premorbid deficiency of somatic awareness, tolerance to manifestations of grave disease in absence of hypochondria fixation we noted nosogenic mental disorders of masked hypochondria type. Despite the vital threat and disabling complications of steroid therapy there was noted the rational attitude to treatment with inclusion of therapeutic activities in the regular daily routine and the strict adherence to the therapy courses. There was also noted no social anxiety caused by cosmetic defects. In 2 cases with cycloid premorbid personality we detected comorbid hypomania manifesting before the initiation of steroid therapy. Patients suffered the severe manifestations of disease without manifesting nosogenic disorders. **Conclusion:** Despite the detected relation between pemphigus and exposure to psychogenic factors in one third of observations, the structure of comorbid psychosomatic pathology is radically different from other dermatoses. Presumably the accumulation of cases of masked hypochondria in pemphigus with paradoxical ignoring of somatogenic and vital factors correlates with the newest data on dissociative nature of nosogenic disorders in oncologic practice. One should also clearly divide the mental disorders comorbid with pemphigus and iatrogenic mental disorders, such as affective disorders and psychotic episodes.

**OAI****A STUDY OF ANXIETY IN PATIENTS WITH ACNE EXCORIÉE, LICHEN AND MACULAR AMYLOIDOSIS, AND LICHEN PLANUS***Ram Malkani, Sakina Rangwala, Amit Desai, Maninder Singh Setia**Jaslok Hospital & Research Centre, Mumbai, India*

**Objectives:** The present study was conducted to compare anxiety scores in three dermatological conditions (acne excoriée, lichen and macular amyloidosis, and lichen planus) and those without any dermatological condition, and factors associated with anxiety scores. **Methods:** We assessed anxiety using the Hamilton Anxiety Rating Scale (by a psychiatrist) in 20 cases each of acne excoriée, lichen and macular amyloidosis, and lichen planus, and 20 controls. We collected demographic data and stressors in all participants, and clinical data in 60 cases. We used multivariate linear regression models to study the factors associated with anxiety scores. **Results:** The mean age (standard deviation [SD]) in acne excoriée, lichen and macular amyloidosis, lichen planus, and controls were 25.2 (5.5), 39.4 (12.7), 35.7 (14.1), and 38.5 (11.6) years, respectively ( $p < 0.001$ ). The proportion of females were higher in the acne (65%), and lichen and macular amyloidosis (65%), compared with lichen planus (55%) and controls (40%); the difference was not statistically significant ( $p = 0.53$ ). The mean (SD) anxiety scores were highest in patients with lichen and macular amyloidosis (15.9 [7.1]), followed by lichen planus (12.5 [6.8]), acne excoriée (9.8 [4.5]), and controls (4.4 [3.5]); the differences were statistically significant ( $p < 0.0001$ ). In the adjusted models, the mean anxiety scores were significantly higher in patients presenting with lichen and macular amyloidosis (10.74, 95% confidence intervals [CI]: 4.58, 16.89;  $p = 0.001$ ), and lichen planus (7.65, 95% CI: 2.69, 12.61;  $p = 0.003$ ) compared with controls. There were no significant differences in mean anxiety scores in patients with acne excoriée compared with controls (4.40, 95% CI: -1.33, 10.12;  $p = 0.13$ ). None of the stressful events (death, marital problem, family concerns, financial concerns, others) were significantly associated with high anxiety scores. Among clinical cases, the mean anxiety scores were significantly higher in those who had lesions on the scalp (16.02, 95% CI: 6.09, 25.94;  $p = 0.002$ ). **Conclusions:** Lichen and macular amyloidosis, and lichen planus were independently associated with high anxiety scores, even after adjusting for stressful life events. Although, we had also expected high anxiety levels in patients with acne excoriée, this was not reflected in our psychological testing.

**OAI****A STUDY OF DEPRESSION IN PATIENTS WITH ACNE EXCORIÉE, LICHEN AND MACULAR AMYLOIDOSIS, AND LICHEN PLANUS***Ram Malkani, Sakina Rangwala, Amit Desai, Maninder Singh Setia**Jaslok hospital & Research Centre, Mumbai, India*

**Objectives:** The present study was conducted to compare depression scores in three dermatological conditions (acne excoriée, lichen and macular amyloidosis, and lichen planus) and those without any dermatological condition, and factors associated with depression scores. **Methods:** We assessed depression using

the Hamilton Rating Scale for Depression (by a psychiatrist) in 20 cases each of acne excoriée, lichen and macular amyloidosis, and lichen planus, and 20 controls. We collected demographic data and stressors in all participants, and clinical data in 60 cases. We used multivariate linear regression models to study the factors associated with depression scores. **Results:** The mean age (standard deviation [SD]) in acne excoriée, lichen and macular amyloidosis, lichen planus, and controls were 25.2 (5.5), 39.4 (12.7), 35.7 (14.1), and 38.5 (11.6) years, respectively ( $p<0.001$ ). The proportion of females were higher in the acne (65%), and lichen and macular amyloidosis (65%), compared with lichen planus (55%) and controls (40%); the difference was not statistically significant ( $p=0.53$ ). The mean (SD) depression scores were highest in patients with lichen and macular amyloidosis (11.4 [5.8]), followed by lichen planus (10.6 [6.3]), acne excoriée (8.5 [3.4]), and controls (3.4 [3.0]); the differences were statistically significant ( $p<0.0001$ ). In the adjusted models, the mean depression scores were significantly higher in patients presenting with lichen and macular amyloidosis (6.03, 95% confidence intervals [CI]: 0.73, 11.34;  $p=0.03$ ), and lichen planus (5.87, 95% CI: 1.60, 10.15;  $p=0.008$ ) compared with controls. There were no significant differences in mean depression scores in patients with acne excoriée compared with controls (3.25, 95% CI: -1.70, 8.19;  $p=0.19$ ). None of the stressful events (death, marital problem, family concerns, financial concerns, others) were significantly associated with high depression scores. Among clinical cases, the mean depression scores were significantly higher in those who had lesions on the scalp (11.83, 95% CI: 3.60, 20.07;  $p=0.006$ ) and oral cavity (7.01, 95% CI: 1.58, 12.44;  $p=0.01$ ). **Conclusions:** Lichen and macular amyloidosis, and lichen planus were independently associated with high depression scores. Interestingly, such an association was not found in acne excoriée patients. Thus, regular screening and management of depression, irrespective of the presence or absence of stressful events, may be warranted.

#### **OA5** **PATIENTS WITH DELUSIONAL INFESTATION** **MAY NOT ADMIT TO TAKING RECREATIONAL** **DRUGS**

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**Objectives:** Our objective was to find out the prevalence of drugs of abuse causing secondary delusional infestation in a dedicated psychodermatology clinic in the UK and whether patients will tell health care professionals honestly about taking them. **Methods:** We conducted a prospective study to evaluate the prevalence of recreational drug use in patients with delusional infestation. 24 consecutive patients seen in psychodermatology clinic between 1<sup>st</sup> December 2014 and 1<sup>st</sup> March 2015 who had a diagnosis of delusional infestation were asked to provide urine samples during their consultation. The purpose of the urine sample was to screen for drugs of abuse and this was explained to patients. Informed consent was obtained from all 24 patients. The urine drugs of abuse screen tests for amphetamine, benzodiazepine, buprenorphine, cannabinoids, cocaine metabolite, methadone, monoacetyl morphine and opiate. **Results:** Of the 24 patients requested to provide a sample, 6 (25%) patients did not provide a urine sample to the clinic nurse. 13 (54%) urine samples tested negative for drugs of abuse. 5 (21%) urine samples tested positive for drugs of abuse. 2 urine samples tested positive for amphetamines, 2 urine samples tested positive for cannabinoids and 1 urine sample tested positive

for amphetamines, benzodiazepines and cannabinoids. On review of the histories for these patients, the 5 patients who had positive urine tests for drugs of abuse all denied recreational drug use and were not prescribed any of the above drugs tested by health care professionals. The 6 patients who did not provide a sample also denied recreational drug use and were not prescribed any of the above drugs tested by healthcare professionals. **Conclusion:** This study highlights the importance of screening for drugs of abuse in patients presenting with delusional infestation to help differentiate between primary delusional infestation and secondary delusional infestation. Treatment can then be targeted towards referring patients who will engage to drug and alcohol services. Also, patients may not own their recreational use of drugs and so health care professionals may need to use a screening urine test with a patient's consent to look for this secondary cause.

#### **OA6** **SATISFACTION OF DERMATOLOGICAL OUT-** **PATIENTS IN THIRTEEN EUROPEAN COUNTRIES**

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**Objectives:** Patient satisfaction in dermatology has an impact on quality of life and it can foster high levels of adherence. A multi-center observational cross-sectional study was conducted in thirteen European countries organized by the European Society of Dermatology and Psychiatry. The purpose of the international study was to investigate the psychological burden of common skin conditions. One of the goals of the study was to explore patient satisfaction. **Methods:** There were 5,369 participants; 4,010 adult out-patients from the participating dermatology clinics and 1,359 controls were assessed. Patient satisfaction with the dermatologist was measured with a 11-degree scale (0=not satisfied at all; 10=extremely satisfied). **Results:** Patients' average age was 47.06±17.97 years. Percentage of females was 56%. The most frequent skin diseases were psoriasis (17%) and non-melanoma skin cancer (10.6%). Patient satisfaction (7.59±2.55) was reported to be the highest in the following participating centers: Szeged, Hungary (9.29±1.69), Stavanger, Norway (8.64±2.3), and Zaragoza, Spain (8.59±1.53). Female patients' satisfaction scores (7.68±2.58) were significantly higher ( $t=-2.560$ ,  $p<0.05$ ) than male patients' (7.46±2.52). Satisfaction was reported to be the highest by patients with the following diagnoses: non-melanoma skin cancer (8.44±1.92), malign melanoma (8.36±2.23), and ulcer cruris (8.27±3.01). Levels of satisfaction differed along certain dimensions: socioeconomic level (chi square=17.665,  $p<0.05$ ), experiencing serious economical difficulties in the last five years (chi square=12.447,  $p<0.05$ ), how concerned the patient was about the skin disease (chi square=77.198,  $p<0.01$ ), and whether the patient knew the diagnosis of the skin disease or not (chi

square=222.814,  $p<0.01$ ). *Conclusion:* dermatological out-patients in thirteen European countries reported high levels of satisfaction with their dermatologists, and certain factors were identified that can influence levels of satisfaction. These results can contribute to enhancing adherence in the treatment of dermatology patients.

#### OA7

### TRICHO-DENTO-OSSEOUS SYNDROME

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Tricho-dento-osseous (TDO) syndrome is an autosomal dominant genetic disorder that belongs to a group of ectodermal dysplasias. 3 children (one boy and two girls) in our clinic had this syndrome. The relatives of one girl had this syndrome too. She had disabled siblings. Tricho-dento-osseous syndrome is characterized by ectodermal affection of the hair, teeth, nails, and/or skin. The following signs are presented in this syndrome: kinky or curly hair; absent mineralization of tooth enamel; and unusual thickness and/or denseness (sclerosis) of the skull (calvaria) and/or the long bones of arms and legs. In some cases, thin, brittle nails or premature closure (fusion) of the fibrous joints between bones in the skull (craniosynostosis), resulted in dolicocephaly, can be revealed.

#### OA8

### NEUROIMMUNOLOGICAL MECHANISMS OF THE PATHOGENESIS OF ACNE

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*Introduction:* Acne vulgaris is a skin disorder of the sebaceous follicles that commonly occurs in adolescence and in young adulthood. The treatment of acne typically applies a diversity of methods therapy, in combination with systemic drugs (with moderate and severe forms of acne) aimed at key stages of pathogenesis. It is shown that in 14-22% of cases, exacerbation of acne is due to emotional stress. With approximately 50% of acne in patients there are various pathologies, including neuroses, asthenoneurotic syndrome, or depression. Therefore, today an important aspect in the study of the role of regulatory peptides in the pathogenesis of dermatoses, in particular acne, is the definition of a cascade of cytokines, growth factors, their receptors and antagonists of receptors in target tissues and the systemic circulation. *Purpose:* To determine the neuroimmunological mechanisms of acne. *Materials and methods:* 126 patients with acne (age 17-47 years, 23,0±2,6), 45 male (35.7%), 81 female (64.3%). Severity of acne included 18 (14.2%) - with mild, 46 (36.5%) - with moderate, and 62 (49.2%) with - severe acne. We investigated IL-1, IL-6, growth factor vascular endothelial (VEGF), insulin-like growth factor (insulin-like growth factor 1, IGF 1) in the serum of patients with acne depending on the severity of the acne and the level of anxiety. *Results:* Studies have shown a significant increase proinflammatory cellular mediators: IL-1, IL-6, VEGF, IGF 1 in the serum of patients with acne which positively correlates with the severity of acne and level of anxiety. Thus, a detailed study of cytokine system, which integrates regulatory mechanisms at different degrees of severity of the acne and the level of anxiety can be used for further studies of molecular neuroimmunological mechanisms of development of

acne. The obtained clinical results show the feasibility of complex examination of patients with torpedo flowing forms of acne with the appointment of adequate therapy to achieve clinical recovery and restore mental and emotional health of patients.

#### OA9

### STUDY COGNITIVE DECLINE OF PATIENTS WITH LOCALIZED SCLERODERMA

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Localized scleroderma (LS) is one of the most common chronic diseases of the connective tissue. The problem of cognitive impairment is now attracting the attention of doctors of various specialties. Mild cognitive problems in patients with dermatoses are often the first clinical signs of the maladjustment of the organism in response to pathological effects of various external factors, changes in the internal homeostasis, as a result of various diseases of the central nervous system [1–6]. *Objective:* Study of the spectrum of cognitive impairment in patients with LS. *Methods:* To achieve this goal we conducted clinical and psychological examination of 39 patients with generalized form of LS using evaluation techniques memory (mechanical and associative), concentration and logical thinking. Projective techniques with pictograms were used to diagnose cognitive problems. Statistical, mathematical processing of the data was performed using the statistical software package Statistica 6.0, BIostat, programs "Microsoft Office Excel 2007" and "Microsoft Office Word 2007". *Results:* 39 patients with LS with anxiety and depression underwent clinical-psychological examination of cognitive problems. 23 (58.9%) patients had cognitive problems. Among them, impaired memory and logical thinking were dominant. Violations of associative memory were detected in all 23 patients with cognitive impairment (100%), violation of the logical course of thinking in 19 (82.6%), impaired concentration in 12 (52.2%), and violation of mechanical memory in 9 (39.1%). The severity of cognitive impairment did not reach the degree of dementia, and met criteria for mild cognitive impairment (ICD-10). Cognitive impairment prevailed in patients with higher education: 69.6% of patients with cognitive impairment had higher education. Affective distribution revealed a significant correlation between cognitive impairment and apathetic affectivity ( $p<0.01$ ). *Conclusions:* The majority of patients (58.9%) revealed cognitive impairment: memory, attention, and logical thinking. The severity of cognitive impairment did not reach the degree of dementia and meets the criteria for mild cognitive impairment (ICD-10). In most cases, infringements of associative memory and logical thinking, often manifested in the form of difficulties in establishing logical relationships.

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### **OAI0**

#### **ANXIETY DISORDER AND DEPRESSIVE SPECTRUM FOR PATIENTS WITH LOCALIZED SCLERODERMA**

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Localized scleroderma (LS) is - a chronic connective tissue disease, mainly affecting the skin and underlying tissues. In recent years, more and more researchers have paid attention to studying the role of stressful factors and anxiety and depressive disorders in the origin and dynamics of dermatoses, which impair their adaptation of patients and lead to a decrease in quality of life [1–5]. *Objective:* To study the spectrum of anxiety and depressive disorders in patients with LS. *Methods:* To achieve this goal we conducted the ICD-10 psychiatric diagnosis of conducted anxiety and depressive disorders in 39 patients with generalized form of LS. Evaluation of the structure and intensity of anxiety and depressive disorders was performed using the Hospital Anxiety and Depression Scale (HADS), the Hamilton Anxiety Scale (HAM-A), the scale depression Montgomery-Asberg Depression Rating Scale (MADRS), and perceived stress PSS10. *Results:* Among the patients with generalized form of scleroderma anxiety and depression were determined. There was a dominant affect of anxiety (69.2%); and anxiety was characterized by dysphoria in 7.7% of cases. After clinic-psychopathological examination it was possible to identify a number of syndromes for anxiety disorders and the depressive spectrum in patients with LS. At the same time the anxiety had a distinct relationship with the severity of feelings of guilt and loss. *Conclusions:* in all cases of LS we revealed stressful factors preceded anxiety and depression. LS is characterized by the predominance of anxiety than depression in accordance with the structure of psychopathological syndromes.

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### **OAI1**

#### **COPING WITH ATOPIC DERMATITIS DEPENDING ON THE TIME OF THE INITIAL MANIFESTATION OF THE DISEASE**

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*Objectives:* In most patients, atopic dermatitis occurs in early childhood. Development prior to adulthood is significantly influenced by the impairment of their skin. However, there is a difference in patients whose skin disease occurred for the first time "only" in adulthood. As part of a psychological concept of activity, it is believed that patients with a late manifestation of atopic dermatitis have more problems in coping with the disease than patients who already had to deal with it while growing up. *Methods:* For this purpose, we tested 103 patients (average age=25.7 years) with an early manifestation of atopic dermatitis and 35 patients (average age=34.0 years) with a late manifestation. In each group, two-thirds of the patients were women and one-third were men. The Marburg atopic dermatitis questionnaire and the itch-cognition questionnaire were used to learn about how the patients coped with the disease. Additionally, the complaints registration questionnaire for measuring psychological comorbidities and the Trier Inventory questionnaire for testing the chronic stress level, were applied. *Results:* Patients with a late manifestation of the disease experienced their quality of life to be significantly less impaired. However, they showed notably more physical and psychological comorbidities. The latter was mainly related to an increased tendency towards phobia and brood within the context of more complex neurotic disorders/complaints. They also showed more social anxieties, and experienced more social isolation and less social support. *Conclusion:* From the active-psychological point of view, long-term confrontation associated with an early manifestation of the disease leads to more confidence in dealing with atopic dermatitis. In late manifestation, however, and with regard to potential psychotherapeutic interventions, it should be noted that the study also provides evidence that the disease is apparently embedded in a more complex mental/psychological disorder in these patients, which does not seem to be the case with early manifestation. Therefore, more complex psychotherapeutic objectives/goals should be given for patients with late manifestation.

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