Skin – The Mirror of the Soul
By Kamiar-K. Rueckert

Introduction

We humans tend to build our world with language. Whether it is philosophy, in which we describe our thoughts with word, in art as a part of communication with the other or in the sense of the Freudian slip or Lacanian Psychoanalysis with its idea of the unconscious being structured like a language. Language is everywhere, it influences us and forms our being by explanation. Medicine is not spared from this. Symptoms can, to some extent, be regarded as the language of the body. Doctors and Patients both can learn from careful listening. A short examination of poetry and common speech shows how we came up with many metaphors for the skin. For a long time, already the skin is referred to as "the mirror of the soul". We blush out of shame or tend to say, "I feel well in my skin". The connection between our mind and our skin seems obvious in the general population. We could summarize it under the sentence "our skin shows emotions" or "the skin speaks about our emotions". Just think of the last time you were scarred. Your skin showed that by lifting its hairs. Goose bumps display anxiety, sometimes even disgust.

Just like as our skin may display our emotions by blushing, goose bumps and rashes, skin disorders also influence our mind. Others recognize us by our outer appearance. "You look good today" or "You look well rested" are both observations made by looking at us. Patients suffering from Eczemas and other skin disorders may often feel ashamed, sad, angry and have a low self-esteem. Most of us, already have experienced this in puberty. Acne is common with a life prevalence of 90%. Especially teenagers with their burst of androgenic hormones are in the main group of patients. Being in puberty, struggling with a conflict of identity, looking for a romantic partner and acceptance by one's peers is struggling enough. In the case of acne, it may lead to social withdrawal, constant self-doubt and other specific forms of suffering.

Our modern science teaches us the close connection between emotions and physical symptoms. Cytokines are cell mediators, which our body uses to community among the cells. The may boost or decrease signals and other cell reaction. Cytokines influence our general immune system and can be influenced by emotions and distress.
Nowadays an entire industry has formed around these findings. Distress from work, family life shall be reduced by a new way of life, often based on some ancient tradition to sell and justify it. Meditation and other relaxation techniques help us to be less stressed, but whether they are helping us to get out of our distress and our internal conflict in the long run is doubtful.

Psychosomatic Medicine is the branch of medicine that connects health and illness with these emotional processes and social circumstances of the individual, thereby regarding the mind and the body as inseparable. The emotional (mental) etiopathogenetical factors of illness are slowly gaining more and more attention in Latvia and in western medicine.
The German literature often mentions four main illnesses in Dermatology with a strong emotional quality: Atopic Dermatitis (Neurodermitis), Psoriasis, Urticaria, and Acne vulgaris. Each of these illnesses has its own pathogenesis and own psychodynamic mechanism.

The careful medical student and well educated reader may already be cautious when the word "neuro" appears in neurodermitis. It is an old term for atopic dermatitis or eczema still used especially in the German-speaking countries. The term "neuro" or "derived from nerves" derived from the early idea that ectopic eczema originated from neural structure, thereby the doctors thought it was connected to the mind and emotions. In 1891, long before laboratory findings of cytokines and immune response, the doctors Brocq and Jacquet already mentioned psychosocial distress and inflammatory components as influential cofactors.
Though this text will only focus on Neurodermitis and Psoriasis, it should be mentioned it does not cover all disease. The text is structure in a way that may educate

doctors as well as patients. It is a report to show the emotional component of illness among health care professionals and the general population.
A division of skin disease into psychosomatic aspects will be shown later, so far let's just say: Dermatology displays in one of the best ways that at the core of treatment is no the disease but the patient or as Michael Balint put it "We treat the patient, not the disease". Every illness has an emotional quality to it and "health is state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".[1]

Division of Skin Disease into psychosomatic aspects

Nearly one third of the dermatological patients suffers from a psychological disorder.[2] Due to this large amount a classification into certain characteristics is necessary. On one hand, psychological disorders can function as a cause of illness or as an exacerbation of a chronic disease. On the other hand, these can also be part of a coping mechanism with an illness. Just as we are in distress when we cannot adapt to a situation, unfitted coping mechanism can increase the suffering in patients. Gieler et al. divides psychodermal disorders into three main classes based on the current scientific finding and practical experience.

Class	Characteristics	Treatment
1.	Psychological and psychiatric disorder with a dermatological symptomatic	Treatment of underlying illness
2.	Dermatosis with multifactorial genesis, with a cause or course of psychological factors (ex. Neurodermitis and Psoriasis)	Psychotherapeutical and Dermatological treatment
3.	Psychologic disorders as a comorbid or psychological complication of a dermatological illness (somatopsychic disorder) (ex. Basaliom or nailmycosis)	Primary treatment in dermatology. Psychotherapeutical intervention if coping is problematic

Table 1 according to Gieler et al.

The evaluation of a patient's treatment with or without psychosomatic intervention should be based on a careful evaluation of the skin disease and its effect on the mood and psyche. While all skin disease influence the emotional world of a patient (though sometimes doctors as much as patients do not like to admit this), not all patients are in need for psychotherapy or psychosomatic assessment. A careful evaluation of the patient and the skin disease is important during the consultation. Possible treatment options include stationary or ambulatory psychotherapy, self-help groups or a basic treatment in psychosomatic by the General Practitioner or trained dermatologist. Table 2 displays an evaluation algorithm not only important from a sole health related topic but also from an economic perspective.
Yet cost-efficiency must be on the doctors and patients mind. In Germany cost of a treatment without specific psychosocial interventions per patient makes up 4420 Euro per year[3] and thereby cause a financial burden. The general cost of an additional psychotherapy per year in Germany are about 4000 Euro.

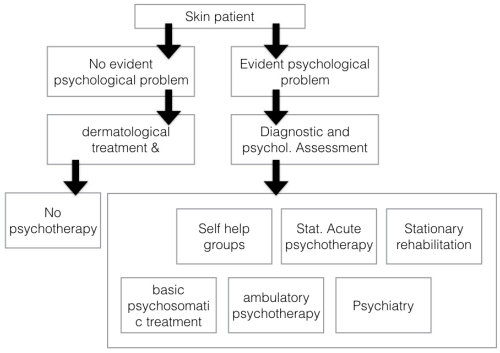

Table 2 Taken from Gieler et al. - Algorithm for the psychsomatic treatment options

Neurodermitis

As mentioned before "Neurodermitis" is a historic term which in nowadays is replaced by endogenic eczema or atopic dermatitis. I decided to use this term to remind us of the before mentioned history and the emotional component of the illness.

The disorder is a chronic-recurring disease, which resembles in its appearance a broad amount of skin disorders. One of its main characteristic is a strong sensation of itch, but not the only characteristic. The latest terminology "atopic" describes a predisposition to develop allergic reactions such as allergic asthma, rhinitis and skin inflammation.

Pathogenesis

Neurodermitis is a complex multifactorial illness. Factors include environmental, psychological and genetic factors. Without a genetic predisposition, this illness would not occur. Often a family anamnesis demonstrates this genetic component. A complicated interaction of many pathophysiological factors interacts with each other. The disease includes an increased permeability of the stratum corneatum to allergic agents.[4] In addition activated T-cells, IgE-Antibodies and phase specific cytokines play a key role.[5,6] As mentioned in our lecture, the main cytokines are IL-4, IL-5 and IL-13. Already a connection to psychosomatic medicine can be drawn. Contemporary psychoimmunology teaches us the close link between emotions and immunomodulatory. Immune cells and lymph nodes receive information from the brain via hormones and autonomic nervous system. Distress leads to increase cortisol and neurotransmitters. Cortisol for example, lowers the antibody production and the interleukin production.[7] Activation of the autonomic hormones lead to a decrease in the Macrophages[8], cells responsible for a proper immune system. Unfortunately no study has yet been performed to display the effect on stress and negative emotions on the IL-4, 5 and 6. Yet it is known that chronic distress and negative affects increase the active inflammation influencing allergic and autoimmune disease. Clinical studies showed that one third of patient's neurodermitis could be triggered by distress. The rest of the patient displayed no distress trigger. The before mentioned psychoneuroendocrine and psychoimmunological mechanism can be displayed in the following picture.

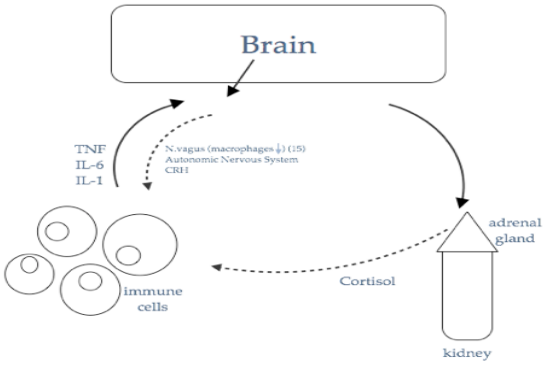

Table 3 - according to Kamiar-K. Rückert's lecture "Is Psychosomatics real?"

An interesting study connecting emotions and neurodermitis comes from Japan. A correlation between emotions and the exacerbation of neurodermitis was found, by documenting an exacerbation of 38% of the neurodermitis patients after an earthquake in japan. Only 7% of the earthquake free zones displayed recurrent neurodermitis. An interesting effect was also found in 9% of the patient, which showed an improvement in their symptoms, while only 1% of the control group improved. [9]

Itching Scratch Circle

As patient and doctors know, neurodermitis is a disorder with a strong burden due to its itchy character. A large amount of studies shows the relationship between emotional distress and the intensity of the itch sensation. Cognitive Behaviour therapy focuses on breaking the itching scratch circle, while psychodynamic

treatment focuses on the etiopathogenesis of these symptoms. While American and western countries often focus on CBT due to its cost efficiency and easy testability in scientific research, it should not simply be regarded as the best treatment. Psychodynamic treatment regards our mind to be dynamic. We have unconscious wishes, conflicts and anxieties, which cause problems to our conscious life. According to the theory everything which is unconscious wants to be expressed and heard. Psychosomatic and Psychodynamic medicine would regard this itch or rash as a symptom of the unconscious. It is shown that the intensity of the itch is in relationship to a quite subjective emotional excitability. This may be anger, rage, excitement and seldom joy.[2] In treating the patient rather than the disease, facing this emotional quality may be more beneficial than just treating the rash with drugs.
CBT does not focus on these factors, but rather changes the behaviour, since it regards behaviour as being learned by conditioning. Specific personality structures, anxieties, conflicts and self-esteem problems are often better approached in a psychodynamic treatment. Yet, each approach should be discussed carefully during the doctor-patient consultation.

Personality structure

Personality testing should be regarded with a pinch of suspicion. We tend to think and try to put people into categories. This may be great in some moments, yet among patients and doctors it develops a distance and leads to overseeing acute problems and personal points of view. Heterogeneity lies at the core of our practice.
Patients with Neurodermitis often display tension, insecurity, aggressive tendency or a feeling of inferiority.[2] Yet these psychosocial characteristics could not be put into a "neurodermitis character" or a special personality structure.
Psychodynamic anamnesis found out that nearly all neurodermitis patients had a reduced or limited behaviour regarding contact. Patients regarded this as an effect of their eczema and the insecurity connected to it and not as a cause for the eczema.[10] Psychodynamic research may show in the future which characteristic conflicts could be underlying such disorders. Gieler at al. puts the aggression-processing due to a depressive distress and low irritability at the core of psychological approach.

Psychotherapy and relaxation techniques

Psychotherapy can, quite roughly, be divided into three different areas. CBT (cognitive based therapy), psychodynamic psychotherapy and the classical psychoanalysis or psychoanalytical psychotherapy. Though no studies are available for the later one, the first two are used as an additional treatment next to the classical dermatological treatment as mentioned before. For patients who stigmatize this form of treatment it might be helpful to show that psychotherapeutical treatments show to be as affective as treatment with corticosteroids[11] and displayed a longer symptoms-free period than patients without psychotherapy.[12]

German psychodynamic psychotherapy follows the OPD-2, which divides the anamnesis of patients into different axis to give a more profound inside into the patients psyche. One of these axis concentrates on different conflicts of a patient. The term conflict describes two opposing entities which struggle to coexist. Psychodynamically the conflict of "Closeness and Distance" is predominant. Often it is associated with shame, and feelings of disgusted about ones one skin.[2]
Psychotherapy should always be a treatment, if stressors are leading to a worsening of neurodermitis. If patients are unwilling to go to a psychotherapy (or if it is a financial burden) a scratching diary can be suggested. The patient can thereby write down psychosocial influences which lead to an exacerbation.[13] Unfortunately, no studies comparing the diary approach and psychotherapy have been performed.

A broad variety of relaxation techniques is present ranging from mindfulness meditation to a more sport-centred approach like Yoga. Autogenic training is often used and can be learned. Relaxation techniques have shown to be affective in Neurodermitis patients.[14] A broad variety of applications for smart phones are now present and often free of charge. This could be a cost-effective and accessible

approach for patients living far from treatment centres.

Conclusion

The multifactorial character of this disease should in its broadness be explained to the patient. Patients should not only be taught the general pathophysiology, but also be educated about the psychosocial link. Using and explaining the term “atopic Neurodermitis” may help to explain the illness.
Psychosomatic medicine, as described in the beginning, should be explained in a “non-spiritual” way, but rather as a science of empathy, understanding and opportunity for help without glorification. After all it is a scientific approach to the holistic character of a disease.
In Germany and Sweden educational classes for patients play a major role in the educational processes and can be a cost-effective way to reach a broader audience among all social classes of patients. These Classes may give the opportunity of meeting other people, listening to other stories and be a social gathering under the supervision of a doctor.

Psoriasis

Psoriasis is a chronic and persistent skin disease characterised by overgrowth of skin cells with a formation of itchy, dry patches with a silvery scale. The chronic character and the appearance of the disease lead to a long-standing suffering of the patients. Like so many other diseases Psoriasis too is a multifactorial disease taking with a strong genetic predisposition. Exacerbation occur mainly in proximity to stressful life events. This interaction between psychosocial distress is researched well[15,16,17] and accepted by the gross majority of dermatologist. These life events can be everyday distress, exams in students, accidents, death and psychological trauma. Negative emotions and torment may also arise from the physical symptoms of painful itchiness, but also from its coping mechanism. A facial manifestation often interferes with the social life of the patient and a bodily manifestation may lead to discomfort in the romantic life of the patient. The acclaimed primary goal of treatment is to stop the skin cell grow leading to the symptoms and thereby offering a significant relieve. Samir Stephanos, a German professor of psychiatry and psychotherapy and a psychoanalyst examined Psoriasis from a psychoanalytical point of view and suggest an effective treatment only after resolution of an intrapersonal conflict.[18,19] While Stephanos, as a Psychoanalyst, focuses on unconscious conflicts, a study among 72 interviewed Dermatologist in France revealed that all 72 dermatologist thought the course of the disease to be influence by distress.[20] Thereby emphasising once again that health is functioning on a biopsychosocial model.[1]

Coping with the disease

Gieler et al. describes the psoriasis as a limiting disease in many areas. Physical, psychological, social limiting are part of the disease. Pain, Itching and lack of sleep may have an impact on the psyche. Low self-esteem and a sense of helplessness may lead to depressive symptoms and a feeling of stigmatization and disgust. Patients tend to develop a social phobia and avoid public facilities such as swimming pools, gyms, restaurants or hair dressers. Gieler et al. further sees a limitation in the sexual, professional and everyday life. Shame and disgust lead to a subjective and objective sense of unattractiveness. In the professional life, the illness may cause absence from work and thereby a fear of unemployment. The everyday limitation is mainly due to the personal care involving frequent changing of cloth, frequent bathing and time consuming skin care. On top of this it leads to a financial burden among patients.

Coping with Psoriasis is a problematic topic. The before mentioned limitations as well as the emotional quality mainly fear and disgust cause additional distress. For patients the psychological distress and the social limitations are bigger factor for distress than the physical manifestation.[21] Because of the non-linear progression of this disease a sense of helplessness accompanies the disease.[22]

While all of the before mentioned limitations and negative emotions display an intense burden, a research regarding the emotional-based coping mechanism gives hope for a proper treatment as well as underlines the close treatment choice with psychosomatic medicine. Like Stephanos’ suggestion of

resolving intrapsychic conflicts in his paper, Stangier et al. illustrates that patients display a lower limitation due to their illness if they find emotional based coping mechanism.[23] Doctors can help during consultation to cope with a disease by suggesting different approaches and offering psychosocial support.

Personality structure

In a study with 80 psoriasis patients 72,2% displayed a psychiatry diagnosis after the DSM-III-R. 35% of the patients had a personality disorder (Above all dependency disorders. 17 % showed an affective disorder (mainly depression) and 12.5 showed a generalized anxiety disorder and phobias.[2] 6.25% displayed a psychotic disorder. No Psoriasis-specific personality disorder has been found. Due to the unconscious quality of conflicts, defense mechanism and often strong coping mechanism a scientific examination of intra-psychological conflicts is hard.

Psychoanalytical perspective

This chapter is solely influenced by the two writing of Stephanos from 1975 and 1983. According to him Psoriasis patient have a higher prevalence of conflicts with their motherly caregiver and an ambivalent conflict between independence and dependency as well as aggression and affection. He connected this ambivalent personal life with their ambivalent relationship to the disease. Most of the patient were aware of their longing for help and companionship, yet suffered from their longing for such. Their feeling of powerlessness to overcome this longing for the omnipotent (motherly) object is a life-long struggle in the personal experience of the patient and the main source for psychological distress. Gieler et al. concluded Stephanos approach as the following: „*Die Psoriasis imponiert aus dieser Sicht als ein Problem der erotisch geprägten, auswegslosen Verschmelzung und der zugleich aggressiv gehemmten, verzweifelten Abgrenzung.“ (*english: Psoriasis imposes, from this point of view, a problem of erotic-connoted, hopeless merger and at the same time an aggressively-inhibited, desperate (wish) for boundary.)

Patient-Doctor Relationship

Niemeier et al. emphasizes the patient doctor relationship and objects to the solely unproblematic and symptom orientated communication. The burden and suffering can often only be measurable after a psychosomatically orientated interview.[24] A common practice in the Anglo-Sachsen and German speaking countries are Balint groups among general physicians and specialist to understand the psychoanalytical terms of transference and counter transference. These groups help doctors in the approach with “difficult” patients and to discuss ways to better approach the patient’s disease.

Conclusion

Psoriasis is a multifactorial disease involving the three intertwined entities of biological, social and psychological factors. In the light of the development in genetics and immunopharmacology, the main focus of the doctors has been shifted to the physical treatment. Psychological and social problems, though based in the biology, are sometimes neglected or “out-sourced” to psychologist. Psychosomatic counselling should play a key role in the treatment. A psychosomatic counselling will not only aid with coping mechanism and the burden from the illnesses limitation, but additionally may help to overcome unconscious conflicts. Psychosomatic groups under the supervision of a doctor may be a good idea as well as educational lectures for patient. In Germany Psycho-dermatological clinics and rehabilitation hospitals are established for patients for a long-term treatment.

General Conclusion

Dermatological problems account for 15% to 20% of all family practice visit.[25,26] Dermatologist are aware of the psychosocial component of the before mentioned illnesses. The metaphors for skin in our language show the populations understanding of this factor two. Psychodermatology is a branch of Dermatology and Psychosomatic medicine which formed due to the increased interest and displayed prevalence of psychological factors in patients with skin disease.[27]This link should not be neglected and patients should be lead by their doctors in a not to obvious way to

understand the etiopathogenesis of these disorders.

But not only the psychological etiopathogenesis should be approached. Counselling can help the patient to deal with the stigmatization, distress and the low quality of life. The effect of this skin disorders and its distress is known to be comparable to “more serious disorders[28] and should be approached in cooperation with Psychosomatic Department.

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