Stress and psoriasis: An overview

Kanhaiya Agrawal and Satyapal Singh

Abstract
It is well known in the present time and has been known since antiquity in Ayurveda, that a connection exists between skin and mind. Psoriasis is the best known for its association with stress and by far the most intensively studied for this association. Stress or related factors directly or indirectly involved in the etiopathogenesis of many dermatological disorders including psoriasis and vice versa. Psoriasis is associated with mental and socio-economic embarrassment in the society which leads to psychological stress and aggravate the pre-existing disease. Studies reported that 40–60% cases of psoriasis triggered by stress. Psoriasis produces anxiety, depression, and other psychological problems. These have a psychosocial impact on behavior of the patients and affects quality of life, the affection can be compared with the Arthritis, Asthma or other disabling illnesses.

Keywords: stress, psychosomatic, psycho-social, psychological, psoriasis, quality of life

Introduction
Psoriasis is a chronic inflammatory skin disorder clinically characterizes by erythematous sharply demarcated papules and rounded plaques covered by silvery micaceous scales. Psoriasis is non-infectious and notoriously chronic and is well known for its course of remissions and relapses [1]. Since skin serves as an external protection therefore, skin is a major target for toxic insult by a broad spectrum of physical (i.e. UV radiation) and chemical (xenobiotic) agents that are capable of altering its structure and function. Skin is the largest body organ which provides a protective envelope that is crucial for homeostasis. Several environmental pollutants catalyzes the production of reactive oxygen species (ROS) directly or indirectly. ROS are believed to activate proliferative and cell survival signaling which leads to alteration in apoptotic pathways that may be involved in the pathogenesis of psoriasis, disorders of photosensitivity and in some types of cutaneous malignancies. ROS acts through the molecular pathways that play important roles in diverse pathologic processes including ischemia–reperfusion injury, atherosclerosis, and inflammatory responses. But, the skin possesses an array of defense mechanisms that interact with toxicants to obviate their deleterious effect. These include non-enzymatic and enzymatic molecules that function as potent antioxidants or oxidant-degrading systems.

Ayurveda recognizes the connection between skin and mind and the connection believed to be more than a physiological fact. Skin disorders can impact by several means on quality of life. Reciprocally, skin diseases can be evoked by psychological problems. The Ayurvedic scripture Charak Samhitahas described the skin (Tvachaa) as ‘Chetah Samvaayi’ i.e. the skin has an eternal relationship with Manas (psyche/mind). Therefore, any mental stress due to any cause has a direct impact on the skin. Thus, we can say that stress and skin diseases have an eternal relationship with each other [2].

Stress and Psoriasis
It is well acknowledged that stress and related factors have a unique role in the pathophysiology of numerous dermatological disorders. However, the strength of association between stress responses and the onset, recurrence or exacerbation of various skin diseases varies. Among the skin disorders psoriasis is well for its association with and by far the most intensively studied for this association with 40–60% of cases triggered by stress [3-7]. Stress activates several neural pathways. The main stress response systems are the sympathetic-adrenal medullary system and the hypothalamic-pituitary-adrenal (HPA) axis [8]. Psychological factors like stress and other related factors have traditionally been associated with the onset, development and persistence of skin disease. Stress is emphasized as one of the...
Non-pharmacologic management for psoriasis includes both structured and unstructured interventions, reduce psychological distress, and improve the functional status of the affected individual. Non-pharmacologic techniques are often referred to as psycho-cutaneous interventions. Psycho-cutaneous interventions may not be disease-specific. All techniques can produce improved autonomic status and physiological calming (parasympathetic activation). There is a significant psychosomatic/behavioral component in psoriasis, hence complementary non-pharmacological psychotherapeutic interventions like biofeedback, CBT, hypnosis etc. have positive impacts on psoriasis [27-30].

The strategies for non-pharmacological management of psoriasis include Daivavyapashraya Chikitsa, Satavayjaya Chikitsa, Pathyapathya (do’s & don’ts regarding diet and behavioral conducts), non-pharmacological Rasayana like Achara Rasayana & others and Yoga therapy [31].

Conclusion
Now a days it is well acknowledged that the stress and related factors are the major culprits responsible for the initiation and or exacerbation of a wide range of disorders. Psoriasis is the disease which extensively studies for its relation with the stress. Psoriasis exerts more psychosocial impact on the sufferser due to its visibility or ugly nature of skin. It is need of time to promote the various pharmacological as well as non-pharmaceutical strategies which should be couples the ancient wisdom of Ayurveda, to educate the patients about psoriasis so that they can cope with psoriasis.

References
9. Satyapal Singh JS, Tripathi NP Rai. Preventive measures...


