



Concept of Dermatological Disorders in Ayurveda

Satyapal Singh^{1} P.S. Byadgi² N.P. Rai³*

¹Research Scholar, ³Professor & Head, Department of Kayachikitsa, Faculty of Ayurveda, I.M.S., B.H.U., Varanasi, Uttar Pradesh, India.

²Assistant Professor, Department of Roga Nidana, Faculty of Ayurveda, I.M.S., B.H.U., Varanasi, Uttar Pradesh, India.

* Corresponding author

E-MAIL- spmairti@gmail.com

ABSTRACT

The objectives of the present review article include to discuss different aspects of *Kushtha Roga* (dermatological disorders in Ayurveda) i.e. etiopathogenesis, classification, clinical features and management etc. The authentic subject material has been reviewed from different Ayurveda literature. Different research and review article were searched in different journals. The subject material has also been searched on the internet. *Kushtha* is one of the most chronic disorders as described in Ayurveda. Most of the Ayurvedic texts categorise the *Kushtha Roga* into two groups, *Mahakushtha* and *Kshudrakushtha* which further divided in to seven types and eleven types respectively. Ayurveda described a wide range of etiological factors for dermatological disorders including its psychosocial aspect. Acharya Charaka, the author of foremost Ayurvedic classic on internal medicine, the *Charaka Samhita* clearly mentioned that there is a strong relationship exists between *Tvacha* (skin) and *Mann* (psyche/mind). Therefore, more than a cosmetic nuisance the skin disorders lead to different psychological ailments which impair the quality of life in the patients. The etio-pathogenesis involves the *Sapta Dravya* (seven factors), *Vata*, *Pitta*, *Kapha*, *Tvacha*, *Rakta Mansa* and *Ambu/Lasika*, which are responsible for manifestation of a wide range of dermatological disorders. Ayurvedic system of medicine described the psychosomatic approach of management for dermatological disorders including the pharmacological and non-pharmacological measures.

KEYWORDS

Kushtha Roga, Dermatological disorders, Sapta Dravya, Tvacha, Mann, Psychosomatic.

INTRODUCTION

Word *Kushtha* means a pathological condition which despises the skin. Skin is an important organ of communication with the external world. It is one of the five *Gyanendriyas* which responsible for *Sparsha Gyan* or touch sensation. Majority of the dermatological disorders have been described under the umbrella of *Kushtha* [1].

The skin is the largest organ of the body, having a surface area of 1.8 m² and measuring approximately 18% of body weight. It reveals both the normal and pathological state of an individual. Important function of skin includes protection from many physical, chemical & environmental insults, thermal regulation, energy

storage, vitamin D formation, excretion of important metabolic products and constitutes the most extensive sense organ of the body for the perception of the tactile, thermal & painful stimuli, etc. [2].

Most of the dermatological disorders are mentally agonising and have negative impact on quality of life. Here it is important to remember the citation of Acharya Charaka regarding the relationship between the *Tvacha* and *Mann*, *Tvacha* is considered as '*Chetah Samvayi*' i.e the skin has an eternal relationship with *Mann* (psyche/mind). Therefore, more than a cosmetic nuisance, dermatological disorders produce anxiety, depression and other psychological problems that affect the quality of life. Patients of skin disorder always experience physical, emotional & socio-economic embarrassment in the society, which further leads to aggravation of symptoms of existing disease. Normally 10 - 15% of the general practitioners work is with skin disorders and it is the second commonest cause of loss of work [3].

Ayurveda is the science and art of healing that deals with all aspects of an individual. In Ayurveda, psychological factors have been given equal importance as physical & physiological factors in the etio-pathogenesis of various dermatological disorders. *Kushtha Roga* is also considered as a *Papakarmaja Vyadhi* (a disease due to sinful activities) and a *Kulaja Vikara* (a hereditary disorder) in Ayurvedic system of medicine [4,5].

NIDANA (ETIOLOGICAL FACTORS)

Ayurvedic system of medicine described a wide range of etiological factors for dermatological disorders. The etiological factors include physical, physiological, psychological, psychosocial, hereditary and *Papakarma* (sinful activities) aspect. These can be classified into *Sannikrishta Nidana* and *Vipkrishta Nidana* as follows-

Sannikrishta Nidana

Saptko Dravya Sangraha i.e. seven *Dravyas* or factors involved in the pathogenesis of *Kushtha* are considered as *Sannikrishta Nidana*. The *Sapta Dravya* includes three *Doshas* viz. *Vata*, *Pitta* and *Kapha* and four *Dushyas* viz. *Tvaka (Rasa)*, *Rakta*, *Mansa* and *Ambu or Lasika* [6].

Vipkrishta Nidana

Such types of etiological factors are not involved directly in the pathogenesis, but they aggravate the actual causative factor (*Sannikrishta Nidana*) and thus play an important role in pathogenesis of the disease. These are further categorized into three groups *Adibala Pravratna* or *Kulaja* (hereditary), *Poorva Janmakrata* and *Janmottarakalaja*.

Kulaja Nidana: *Kushtha* is considered as *Adibala Pravratna Vyadhi* (a hereditary disorder). Acharya Sushruta clearly mentioned that if, the male and female gametes are vitiated with *Kushtha* than it results into the birth of a *Kushthi* child i.e. the newborn baby also suffers from a particular dermatological disorder [7].

Poorva Janmakrata: According to Sushruta if the person suffered from *Kushtha* in his previous life and if he takes rebirth then he develops *Kushtha* in his present life also [8].

Janmottarakalaja: The etiological factors in present life can be categorized into three groups, *Aharaja* (diet & dietetic patterns), *Viharaja* (lifestyle related) and *Mansika* (psychological).

Aharaja Nidana

These Nidanas include the intake of excess *Guru* (heavy in digestion), liquid, *Snigdha Ahara*, *Mithya Ahara*, *Viruddha Ahara* etc. Taking excessive *Guru* and *Snigdha Ahara* produces *Dushti* in *Rasavaha Srotas* [9]. Acharya Charak has also described ‘*Gurubhojanam Durvipakakaranam*’ [10]. *Guru Ahara* also leads *Dusti* of *Mamsavaha Srotas* [11]. Excessive *Drava* (liquid) leads to *Dushti* of *Raktavaha Srotas* [12].

The *Viruddha Ahara* leads to impairment in *Agni* (digestive power). The vitiated *Agni* does not digest even the *Laghu Ahara* (food substance easy to digest), resulting in state of indigestion. The indigested food materials turns sour and acts like a poison, which is termed as *Amavisha* [13]. *Tridosha* gets provoked by such type of *Amavisha* [14]. In general, food substances and activities (*Vihara*) which are similar in quality to bio-humors (*Doshas*) and deleterious to the body elements (*Dhatus*) vitiate the body channels (*Srotas*). The vitiation results in *Srotodushti* i.e. malfunctioning of *Srotas*. The stages of *Srotodushti* are *Atipravritti*, *Sanga*, *Siragranthi* and *Vimarga Gaman* [15].

Intake of milk and fish together considered as *Veerya Viruddha* (contrary to potency). Milk and fish together leads to vitiation of *Rakta* (blood) and *Srotorodha* (obstruction of body channels) and formation of *Ama* [16]. Vitiated *Rakta* is considered an important factor involved in the etio-pathogenesis of dermatological disorders. *Ama* may generate immunological reaction which is mainstay in the etio-pathogenesis of many dermatological disorders. Both milk and fish are the rich source of protein and the combination may generate new type of protein molecules, which may exhibit molecular mimicry and generate auto-immunity [17].

Viharaja Nidana

Viharaja Nidanas are suppression of natural urges, excessive sun exposure, exposure to air conditioned, work place contradicting with hot and humid environment, over exertion and over exercises, day sleep, late night sleep and complications of *Panchakarma* therapy [18].

Mansika Nidana

Ayurveda described several factors like *Chinta* (worry), *Shoka* (sorrow), *Bhaya* (fear), abusing deities and teachers, different type of sinful activities and other forms of anti-rituals and anti-social activities which have a negative impact on the psyche/mind. This negative impact on mind leads to stress which in turn directly or indirectly plays a major role in the manifestation and or aggravation of dermatological disorders. Psychosocial stress and the related psychological factors are major culprits in the manifestation and or exacerbation of many dermatological disorders. Till date several studies suggested that most of the dermatological disorders are chronic inflammatory, immunogenic and psychosomatic in nature [19].

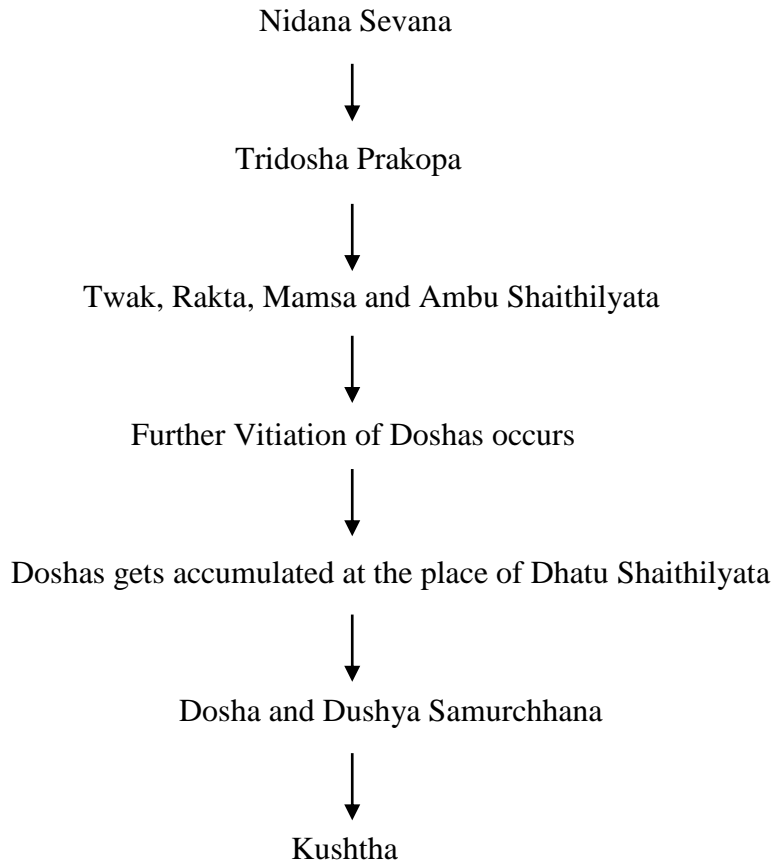
Sansargaja Nidana

Kushtha is considered as *Sansargaja Vyadhi* (communicable or infective disease) [20].

Pathogenesis (Samprapti) of Kushtha

Different types of *Hetus* (etiological factors) leads to vitiation of *Doshas* which spread throughout the body and vitiate *Dhatus* and thus help in the manifestation of *Kushtha Roga*. The whole process is known as *Samprapti* [21]. Acharya Charaka described the seven *Dravyas*, involved in the *Samprapti* [22], which are *Vata*, *Pitta*, *Kapha*, *Tvaka*, *Rakta*, *Mansa* and *Lasika (Ambu)*. Charaka has emphasized the dual part played

by *Nidana*, i.e. simultaneous vitiation of *Tridosha* and also *Shaithilyata* in the *Dhatus* such as *Twak*, *Rakta*, *Mansa* and *Lasika*. Thus, the vitiated *Tridoshas* gain momentum to vitiate *Shithila Dhatus* and hence the disease *Kushtha* gets manifested [23,24].



Dia.1. Schematic presentation of the pathogenesis of *Kushtha*

Acharya Sushruta described that *Doshaja* and *Karmaja Hetus* leads to aggravation of *Pitta* and *Kapha* which inturn produces *Avarana* of *Vata* and thus aggravation of *Vata*. Vitiating *Vata* enters into the *Tiryaka Siras* with two other vitiated *Doshas* and their spread leads further vitiation. Thereafter it reaches to *Bahya Rogamarga* (*Twaka*, *Rakta*, *Mansa* and *Lasika*) and spread throughout the body, producing *Mandala* (rounded skin lesion) at the gathering site of *Doshas*. If the *Doshas* are not treated properly at this stage, they enter into the deeper *Dhatus* of the body and produce complications [25, 26].

CLASSIFICATION OF KUSHTHA

The *Kushtha* is generally described as *Tridoshaja Vyadhi* but type of the *Kushtha* depends upon predominance of particular *Dosha*. Acharya Charak mentioned that *Kushtha* may be seven, eighteen or innumerable (*Aparisankhyeya*) types [27]. But almost all authors including Charaka divided *Kushtha* into two categories, *Mahakushtha* and *Kshudra Kushtha*, which further classified into seven types and eleven types respectively. As per the view point of Charaka, *Mahakushtha* includes *Kapal Kushtha*, *Udumber*, *Mandala*, *Rishyajivha*, *Pundarika* and *Kakanaka* and *Kshudrakushtha* includes *Ekakushtha*, *Charma*

Kushtha, Kitibha, Vipadika, Alasaka, Dadrumandala, Charmadala, Pama, Vishphota, Shataru and Vicharchika [28].

Basis of classification for Kushtha as Mahakushtha and Kshudrakushtha

Basis of classification includes [29-31]

- *Dosha Arambhata*
- *Uttarottar Dhatu Anupraveshta*
- *Lakshanas* (Clinical features)
- *Chikitsa* (Treatment)

Table.1. Showing difference between *Kshudrakushtha* and *Mahakushtha*.

<i>Mahakushtha</i>	<i>Kshudrakushtha</i>
<i>Bahu Dosha Arambhata</i>	<i>Alpa Dosha Arambhata</i>
<i>Bahu Lakshana</i>	<i>Alpa Lakshana</i>
Excessive discomfort	Less discomfort
Penetrates into deeper <i>Dhatu</i> s	Less tendency to penetrate in deeper <i>Dhatu</i> s
<i>Mahat Chikitsa</i>	<i>Alpa Chikitsa</i>

On the basis of Dosha predominance

On the basis of *Dosha* predominance *Kushtha* can be grouped into three categories [32]

- *Vataja*
- *Pittaja* and
- *Kaphaja*

On the basis of Dhatugatva

Kushtha can be classified into seven categories on the basis of penetration in the particular *Dhatu*, which is as follows [33]-

1. *Rasagata*
2. *Raktagata*
3. *Mansagata*
4. *Medagata*
5. *Asthigata*
6. *Majjagata* and
7. *Shukragata*

CLINICAL FEATURES

Clinical features depend on the severity and type of particular *Kushtha*. The clinical features of different types of *Kushtha* are as follows [34-37]-

Kapala Kushtha: It is reddish black in colour like reddish black earthenware, irregular and associated with dryness and pain.

Udumber Kushtha: It is associated with burning, itching, pain and redness. The hairs are greyish or greyish white in colour at the site. It is just like fruit of ficus in colour.

Mandala: It is characterizes by stable, rounded and indurated plaques attached with each others. It is white or red in colour and difficult to treat.

Rishyajivha: Characterizes by hard skin lesions which are similar to tongue of *Rishya* (a special type of beer) in shape. The colour is reddish black in centre and red in periphery and associated with pain. It is also associated with *Krimi* (probably primary or secondary infection).

Pundarika: The lesions of *Pundarika* are indurated and associated with burning sensation. It is similar to the colour of the red lotus. *Pundarika* is also associated with pustulization and *Krimi*.

Sidhma: The lesions are usually localizes to chest and similar to the flower of Alabu (gourd) in colour. The lesions release powder on rubbing and associated with mild pain and burning.

Kakanaka: It is similar to the *Kakanantika* in colour (red and black). It is never pustulizes and associated with severe pain or discomfort.

Ek-kushtha: Characterizes by large scaly plaques. Scales are similar to the fish scales.

Charma Kushtha: Its lesion covers a vast area. The skin becomes very thick like elephant skin.

Kitibha Kushtha: Characterizes by reddish black and rough skin lesions associated with severe itching. The lesions are round in shape and occasionally associated with secretions.

Vipadika: There is cracking of palms and soles which is associated with severe pain. Acharya Sushruta described the cracking of only soles which is associated with burning, pain and itching.

Alasaka: The skin lesions are red in colour and associated with itching.

Dadrumandala: It is characterizes by nodular lesion associated with erythema and itching.

Charmadala: The skin lesions of *Charmadala* are red in colour and blisters or skin cracked with pain and associated with itching and paraesthesia.

Pama: It is characterizes by nodular skin lesions which are white or reddish black in colour and associated with severe itching.

Visphota: White or red colour nodular lesions with thin skin.

Shataru: Characterizes by red or reddish black skin lesions and associated with burning and ulcerations (multiple ulcers).

Vicharchika: Vicharchika is characterizes by blackish nodular lesions associated with itching and secretions.

Clinical features of *Kushtha* according to the *Dosha* predominance are as follows

Vataja Kushtha

Skin lesions are rough, dry, reddish black and associated with pain. *Vataja Kushtha* is also characterizes by stretching of skin, numbness, anhydrosis, swelling and hoarseness of voice.

Pittaja Kushtha

It is associated with burning, erythema, secretions and blister formation. Also characterizes by pustulisation, removal of dead tissues from fingers, nose, ears etc. and super infections.

Kaphaja Kushtha

Skin lesions are cold and dense and associated with itching, secretions, discolouration and heaviness of the body.

The clinical presentation of *Kushtha* according to the penetration in the particular *Dhatu* is summarizes as follows-

Tvakagata or Rasagata Kushtha

Characterizes by loss of sensation, excess sweating, mild itching, discolouration and dryness.

Raktagata Kushtha

It is characterizes by numbness, goose flesh, excess sweating, itching and pus formation.

Mansagata Kushtha

Characterizes by general body swelling, appearance of stable nodules, pricking pain and cracking of skin.

Medagata Kushtha

Medogata Kushtha is associated with *Durgandha*, *Malavraddhi*, pus formation, super infection and general bodyache.

Asthi and Majja Gata Kushtha

Such type of *Kushtha* is characterizes by redness of eyes, super infected ulcers and hoarseness of voice.

Shukragata Kushtha

It is characterizes by deformities in fingers, reduced movement of body parts, general bodyache and appearance of fast spreading ulcers. It is also characterizes by inheritance of *Kushtha Roga* to the next generation.

SADHYATA / ASADHYATA (PROGNOSIS)

The *Kushtha* having involvement of single *Dosha*, *Vata-Kapha* predominant *Kushtha* and *Rasagata*, *Raktagata* and *Mansagata Kushtha* is easily curable. *Pitta-Kapha*, *Vata-Pitta* predominant *Kushtha* and *Medagata Kushtha* have some bad prognosis and are difficult to cure. The *Kushtha Roga* with involvement of all three *Doshas*, the patient is weak and having thirst & burning, associated with *Krimi* and *Asthi*, *Majja* and *Shukragata Kushtha* have very bad prognosis and are incurable [38,51].

MANAGEMENT

Ayurveda emphasizes on three fold therapeutic management of the diseases viz; *Samshodhana* (bio-purification), *Samshamana* (pacification) and *Nidana Parivarjana* (avoiding causative factors) for almost all types of disorders including dermatological disorders [39].

The type of *Samshodhan* (as per the view point of Acharya Charaka) used is *Vaman* (therapeutic emesis) in *Kapha* predominant and *Virechan* (therapeutic purgation) & *Raktamokshana* (therapeutic blood-letting) in *Pitta* predominant *Kushtha* [40]. Acharya Sushruta advises the use of *Nasya Karma* (nasal medication) every third day, *Vaman* on every fifteenth day, *Virechan* on every month and *Raktamokshana* on every six month for the management of *Kushtha Roga* [41].

The *Samshodhan* helps to maintain the *Dosha* and *Dhatu Samya* i.e to maintain the homeostasis & thus, leads to the repair and regeneration of different body tissues and also modulate the body immunity and cleanses the body channels by eliminating toxins out of the body. Therefore, *Samshodhan* is very important preventive as well as therapeutic measure for a wide range of disorders including dermatological disorders [42].

The palliative therapy in the form of drugs and diets may not be effective unless the body channels are properly cleansed and toxic materials are eliminated. *Samshodhan* is believed to purify or cleanse all the body tissues and bring about the harmony of bio-humors (i.e. *Vata*, *Pitta*, *Kapha*, and *Raja & Tama*) to obtain long-lasting beneficial effects [43].

According to Charaka the principle for the management of *Vata* predominant *Kushtha* is *Ghrita Pan* (oleation therapy). Acharya Charaka described the use of the drugs with predominance of *Tikta* and *Kashaya Rasa* for palliation of *Kushtha* [44].

According to the current concept, the pathogenesis involved in the most of the dermatological disorders is complex interplay between immunologic, genetic and environmental factors. Psychological stress and related factors are major culprits involved in the etio-pathogenesis of dermatological disorders. Most of the drugs described for the management of dermatological disorders in Ayurveda are enriched with *Rasayana* property. Various studies on *Rasayana* drugs suggest their following action [45] –

- Immunomodulator
- Adaptogenic
- Antioxidant
- Nootropic and
- Antistress

Therefore, *Rasayana* drugs are very important for the management of dermatological disorders. Skin health can be restored and maintained by directly targeting the different layers and cells of the skin involved in the process of skin aging & dysfunction and also in the pathogenesis of a disease.

Ahara (diet or dietary supplementation) is very much emphasized in Ayurvedic system of medicine for the prevention as well as management of wide range of disorders including dermatological disorders. The diet rich in *Amla*, *Lavana* and *Katu Rasa*, milk, curd, jaggery, heavy diet and diet which aggravated *Kapha Dosh*a should be avoided. The recomended diet for the patients of *Kushtha Roga* includes old wheat, old

barley, pulses like *Moonga*, *Masoor*, *Arhar*, honey, *Patola*, *Neem*, garlic, *Triphala*, old *Ghrita* and diet rich in *Tikta Rasa* [46].

Non-pharmacological therapies

Non-pharmacological therapies for the management of *Kushtha Roga* includes [47-49]-

- *Daivavyapashraya Chikitsa*
- *Satvavajaya Chikitsa*
- Life style modification

Gayadas, the commentator of Sushruta Samhita has been quoted that the two types of treatment modalities viz *Yuktivyapashraya* and *Daivyapashraya* has been mentioned in Ayurveda for the management of *Kushtha Roga*, as the disease *Kushtha* is originated due to derangement of *Doshas* and *Paapakarma* (sinful activities).

Daivavyapashraya Chikitsa is a divine therapy or psychological therapy. It include chanting *Mantras*, *Aushadhi* and *Mani Dhaaran* (spiritual use of herbs and gems), *Mangal Karma* (propitiatory), *Bali* (offering oblations), *Homa*, *Prayashchita* (ceremonial penances), *Upavasa* (fasting), *Swastyayana* (rituals for social well being) etc. All these ritual activities directly or indirectly exert a positive impact on the mind (*Manas*) and therefore, lead to reduction in stress.

Sattvavajaya in principles is full-fledged Psychotherapy. It is a method of restraining or withdrawal of the mind from unwholesome objects (*Arthas*). Therefore, it is a therapeutic for mental or emotional stresses and disturbances.

It is well acknowledged that positive and negative impact of lifestyle related factors like discipline of food intake, activity level, sleep, surrounding environment etc. play a major role in health and disease respectively. There are some lifestyle related factors which influence the psychosomatic health of an individual, which are economic and social status, social support networks, education and literacy, surrounding social environment, family environment, sanitation, culture etc. Therefore, modification of these lifestyles related factors are very important for the management of dermatological disorders. Other measures for lifestyle modification or better living in Ayurveda are application of principles of *Dincharya*, *Ritucharya*, *Achara Rasayana* & other forms of non-pharmacological *Rasayana*, *Sadvratta*, etc.

Ayurveda described proper application of *Trayaupastambha* (three subsidiary pillars) of life in daily life for promotion of psychosomatic health and better living. *Trayaupastambha* includes *Ahara* (diet), *Nidra* (sleep) and *Brahmacharya* (celibacy). The whole range of *Dincharya*, *Ritucharya*, *Sadvritta*, *Achara Rasayana* and *Yoga* described in the Ayurvedic classics is designed to foster a healthy life style for better living to everyone as a promotive and preventive health care and also for the management of a diseased individual.

KSHUDRAROGA

Some of the dermatological disorders are described under the heading of *Kshuraroga* in Ayurveda. The word *Kshudraroga* has two components *Kshudra* and *Roga*. *Kshudra* means *Alpa* or minor or brief and *Roga* means disease. Hence, *Kshudraroga* are minor diseases or described briefly. *Nidana* (etiology), *Lakshan* (clinical features) and *Chikitsa* (treatment) of *Kshudraroga* are described in *Kshudra* i.e. in short or brief . Some common examples of *Kshudra Roga* includes *Yovan Pidika* (acne), *Khalitya* (alopecia) etc. [50]

CONCLUSION

Kushtha is one of the oldest known diseases to mankind. It is described as one of the most chronic disease in Ayurvedic system of medicine. Ayurveda described a wide range of dermatological disorders including its classification, etio-pathogenesis, clinical presentation, prevention and management. Skin is an important organ of communication with the external world, seat of *Saparshanendriya* (organ responsible for touch sensation) and has an eternal relationship with *Mann*. Therefore, any type of psychosocial stress, directly or indirectly involved in the manifestation and or exacerbation of dermatological disorders. In the present era, stress and altered immunity are the major factors responsible for the manifestation of a wide range of dermatological disorders. The pharmacological and non-pharmacological measures for the management in dermatological disorders as described in Ayurveda are good immuno-modulators and anti-stress agent. Therefore, these measures, when used properly are cost effective and provide management in natural way with no or adverse effects.

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