

Review Article

A REVIEW OF SKIN DISEASES DEPICTED IN SANSKRIT ORIGINAL TEXTS WITH SPECIAL REFERENCE TO KSUDRA KUSHTHA

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Received: 09 Mar 2016 Revised and Accepted: 02 May 2016

ABSTRACT

Ayurveda has discussed all skin diseases under the name of Kushtha, and in other words it can be known as "Ayurveda Dermatology". Kushtha are mainly divided into seven types of Maha Kushtha and eleven types of Kshudra Kushtha. Generally, differential diagnosis and identification of a particular Kushtha is very difficult as there are no clear tools or no photographs presented in original Ayurveda texts. Hence, to overcome this problem, a deep study of literature on skin diseases was done in detail to reveal all the clinical features which presents in patients characteristically. Accordingly, scientific tools were prepared using photographs for selected number of common Kushtha, comparing the clinical features in the texts with the symptom of the patients who have presented to the hospital clinic. As a result, nine selected Kshudra Kushtha named as Gajacarma Kushtha, Eka Kushtha, Kitibha Kushtha, Dadru Kushtha, Vipadika Kushtha, Vicarcika Kushtha, Kacchu Kushtha, Sidhma kushtha and Carmadala Kushtha were diagnosed and confirmed with the help of critical and analytical study on the literature in original Sanskrit texts. These developed photographs which were prepared comparing with the clinical features of the texts and the symptom of the patients for Kshudra Kushtha will help to recognize them correctly.

Keywords: Ayurveda, Skin diseases, Sanskrit texts, Kushtha, Kshudra Kushtha

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INTRODUCTION

Skin is an outermost cover of the body, plays a chief role in maintaining barrier between internal and external environment. In addition, the healthy skin is the primary requirement for the beauty as well as having an attractive personality, which are the basic instincts of the human being. Any weakness at the skin becomes a great handicap for a person in the society, because it has a visible pathology. In Sri Lanka the only available measures of disease frequency related to skin disorders are from hospital-based clinic studies. They reflect only the patterns of clinic attendance, and the actual prevalence of skin diseases in the community is unknown [1]. Ayurveda treatments are very popular for skin diseases among Sri Lankans. Ayurveda has discussed skin diseases under the name of Kushtha, and in other word it can be listed as "Ayurveda Dermatology". It is not a correlation with skin diseases mentioned in allopathic medicine but can cover up all dermatological manifestations under eighteen subtypes of Kushtha.

According to Ayurveda, a disease that tears or pulls out and destroy the beauty of the body and any type of skin disease is called "Kushtha" [2]. The condition in which skin produce discoloration and if not treated properly then ultimately results in disfigurement known as Kushtha.

However, it is necessary to conduct a critical study of skin diseases because most of the time patients present with common clinical features with very little differentiations of the characteristics. Thus, it's not easy to diagnose the diseases one by one. Conducting a deep study on the skin diseases and preparations of diagnostic tools would help to overcome this problem.

Present review of the skin diseases has been done according to main three texts called Vriddhatrai: Caraka, Susruta and Ashtangahridaya Samhita and two commentaries from each of the above texts. The commentaries; Ayurvedaprdeepika and Jalpakalpataru (J. K. S. Com.) on Carakasamhita [3], Nyayacandrikapanjika (N. P. Com.) and Nibhandhasangraha on Susruta Samhita [4] and Sarvangasundara (S. Com.) and Ayurveda Rasayana (Ayu. R. Com.) on

Ashtangahridaya Samhita [5] were considered for the main three texts. Texts such as; Madhava nidana [6] and its two commentaries Madukasha Commentary and Atankadarpana commentary, Ashtanga sangraha[7], Bhela Samhita [8] and Bhavaprakasha [9] also considered to complete the knowledge gap. By giving a detail description for each skin disease category may help for the correct diagnosis.

According to texts, all Acharya have described eighteen types of Kushtha, and among them, seven considered as Maha Kushtha and eleven as Ksudra Kushtha but the nomenclature is different. Patients affected with Maha Kushtha were unable to notice during the research study [10].

Normally, diseases are originated with vitiation of one, two or all three humors. Vatadi three humours are vitiated (increase or decrease) proportionally one, two or all three according to etiological factors. The there combination and location such as in the skin and other tissues are dissimilar in different types of skin lesions. Therefore, clinical features such as color, where the patches originate, shape such as circular and size also are different.

When etipathogenesis start to gathering at the body, three humors (Vata, Pitta and Kapha) and four dushya (skin, blood, muscles tissues and fluids) which are in normal condition in the body are begin to vitiate by the etiological factors. Then they become vitiate the skin, blood, tissues and the body fluids. Mixed humors finally spread through the all tissues. As a result, eighteen types of dermatitis are produced and they appear on the skin according to Caraka cikitsa chapter 7/3 [3]. Accordingly, Kushtha sub types are develop in the body. When considering about the treatments Kushtha, for predominant in Vata conditions, intake of ghee is recommended. Similarly, emesis in those predominant in Kapha and purgation followed by bloodletting in those predominant in Pitta is recommended. As regards blood letting, in minor types of Kushtha, scraping and in major types venesection is recommended. The patient of Kushtha having plenty of dosha should be evacuated frequently taking care of his strength because on excessive elimination of dosha, Vayu ruins the weak (patient) shortly. After

clensing the gastrointestinal tract and blood is let out, intake of ghee is prescribed because in weak patient after evacuation Vayu takes places quickly. According to basic texts, indulgence in incompatible foods and drinks, intake of too much liquids, fatty foods, and heavy diet, suppression of the emesis and other natural urges, doing too much of physical exercise and exposure to extreme heat after taking heavy meals, and irregular indulgence in cold or hot foods may initiate the etio-pathogenesis of Kushtha [3,4,5]. In addition, Acharya Sushruta has mentioned that kushtha is a type of communicable disease [4]. Therefore, person should prevent from the incompatible foods and as well as contamination of people who are having skin diseases.

Case study

Nine types Ksudra kushtha were selected to prepare the diagnostic tools and the clinically presented symptoms were compared with the symptoms of the basic Ayurveda texts. Then comparing the clinical features with the texts and prepared the diagnostic tools. Diagnosis of skin disease mainly involves a history and examination. To diagnose of Ksudra kushtha, twenty five patients were selected for each type and compared with the symptoms of the texts. Following steps were followed to diagnose the types of kushtha. Ethical clearance was obtained from the ethical committee of Institute of Indigenous Medicine and the study was carried out at the Ayurveda Teaching Hospital, Borella, Sri Lanka.

A basic method for history taking was followed according to following steps.

History

History taking is essential in any general medical cases. Detailed questions concerning the time of onset and duration of the skin lesion, past and family history and the medication used by the patient were considered as important data that may help in the diagnosis of skin diseases. Further, the factors such as; the overall duration of the rash, whether the onset of the rash was sudden or gradual also considered.

Family history

In addition to the inquiry concerning familial tendencies to diabetes, cardiovascular disease, and tumors, questioning concerning the familial incidences of allergic diseases were considered as they have great importance in a wide variety of skin conditions.

Age

As many other diseases, certain skin diseases are seen much more frequently in certain age groups. Hence, age was also considered.

Environment

The environment has an important role on the pathogenesis or exacerbation of certain skin diseases. Factors that will cause skin lesions such as hot humid climates, type of sports and activities and contact with others, whether people using their own clothes or others' clothes, standard of living, surrounding gardens, type of pets in the house such as cats, dogs, birds and others predispose to skin diseases were also considered.

Previous treatment and response

This is a major importance because in many patients with dermatitis, changes in large part the lesion due to the treatment that had been given to the primary skin disease. The clinical picture may be completely distorted due to some topical medications particularly with colored topical medications: eg lotions. Attention was given to this factor when taking the diagnosis.

Examination

Examination of the entire skin was done under a good daylight using a magnifying lens in every patient. An assessment of patient's

normal skin problems made at a glance with experience, but thorough examination was done not only at the site of the lesion but to other parts of the body also. Specific attention was given to hair, nails and the mucous membranes. The visibility of skin allows an instant diagnosis in some cases, but other factors such as the body site distribution, color, scaling and arrangement of lesions also examined. Whilst visual aspects, other sensory modalities were also used in examination; for example, palpation helped in determining indurations, quality of scaling and temperature changes and even smell helped diagnosis in some instances.

Further, detail examination was done according to the texts. Confidence of the patient or his/her parents towards the physician was also considered.

RESULTS AND DISCUSSION

Kushtha is the general term used in Ayurveda to denote diseases of skin. Skin is the protective organ of the body and reflects the health of the individual. According to Ayurveda, three humors: Vata, Pitta and Kapha are responsible for health and disease depending on their equilibrium and imbalance state of the body. Imbalance condition of body tissues is known as "Disease" and equilibrium is called as "Health" according to Caraka sutra chapter 9/3, Caraka sharira chapter 6/18 [3]. Improper usage of foods and drinks along with abnormal activities manifest diseases of respective humour predominance. Three humors circulate all over the body through minute and macro channels. Any slight disturbance at the level of these micro channels, either structurally or functionally leads to manifests a disease inside the body.

Skin is the largest sensory organ of the body and it is responsible for sensation. The etiological factors mentioned under the skin diseases, mainly vitiate and imbalance of three humors and four tissues such as skin, blood, muscles tissues and body fluids. When these seven materials become imbalanced, kushtha begins as an outcome. It will lead to loss of sensation also.

Differential diagnosis and identification of skin diseases mentioned in Ayurveda texts are difficult because most of the practitioners do not have sound knowledge regarding these cutaneous lesions and their spectrum of presentation. In this study, literature review was done analytically and critically using Sanskrit original texts and their commentaries to identify the clinical features of the kushtha. Commentators explained the clinical features as in original texts with additional explanations. Patients affected with Maha kushtha were unable to notice during the present study. In Kshudra kushtha, Eka Akushtha, Carmadala, Kitibha, Vipadika, Dadru, Kacchu, Vicarcika, Sidhma and Carma are common types and most of the symptoms including in texts were appropriately tally with the symptoms of the patients. Other types of Kshudra kushtha are rare.

It is necessary to converse some important symptoms in sub types of skin diseases which were mentioned in Ayurveda texts. Acarya Susruta mentioned Dadru kushtha comes under Maha kushtha in Susruta nidana chapter/5/8 [4] and as a type of Kshudra kushtha in Caraka samhita [3]. According to Susruta samhita, Nidana Chapter/5/8-N. P. Com. [4], Dadru kushtha has two types as Asita dadru and Sita dadru. Symptoms such as itching, redness, papules, circular patches were cited under Dadru kushtha in Caraka samhita [3] are the signs similar to Sita dadru. Symptoms of Asita dadru are number of circular skin lesions, itching, rich in small boils/pustules with faint blue and the lesion is incurable. In addition, Ashtangahridaya samhita explained that elongated and spread out similar to Durva grass with colour resembling the flower of Atasi [(Linuni usitatissimum (flower-faint blue))] and raised patches with itching and persisting for a long time. Itching, redness, eruption of papules, elevated circles and circular in shape are commonly mentioned symptoms. Asita dadru and Sita dadru were differentiated specially with colour and curability (fig. 1).



(a) Asita dadru on flanks



(b) Asita dadru (Papules with elevated tips)

Fig. 1: Dadru kushtha

General symptoms of Eka kushtha are absent of perspiration, extensive in size, removing of scales of skin (just like scales of fish or as scales of graphite), and black or red. In clinical observation, it was noted that skin becomes either black or red in patients suffering from Eka kushtha. Further, inflammatory

signs also present in most of the patients with slight swelling in subcutaneous tissues in the acute stage. However, according to the available literature, wrinkled in nature is not mentioned but patients really showed this symptom at the chronic stage of the disease (fig. 2).



(a) Black scales with exudates



(b) Red scales with exudates

Fig. 2: Eka kushtha



Fig. 3: Gaja carma (Carma) kushtha in leg

In Carma kushtha, commonly mentioned symptoms are rough/dry, ample eruption, similar to elephant's skin, hard/harsh and thick skin as an elephant. In some texts, the lesion was stated as black, but it is different in some clinical cases because sometimes skin becomes light brown. Generally, the lesions could be seen in feet as well as in hands (fig. 3).

In Kitibha kushtha, dark brown, callous forming, rough to touch, excessively itching and black can be cited as ordinary symptoms. Color of the lesion is different according to vitiated humor. In Susruta samhita [4], color is revealed as "red and black". Red is due to Pitta humor and lack is owing to Vata humor. Some patients complained severe itching with black skin lesion of Kitibha kushtha. It is very clear that it may be Vata and Kapha humors combined condition, which was mentioned in Susruta (Su. S./Ni. Cha./5/14). When considering the initial stage of Kitibha, lesion initiates as small eruptions and later they are joined and cover the large area of the body. Kitibha patches were not always round as mentioned in Susruta samhita nidana chapter 5/14[4]. Some times they cover large areas of the body. In Caraka commentary for cikitsa chapter 7/14-J. K. S. Com.[3] was explained that Pitta predominant Kitibha types are present in thoracic region (fig.4).



(a) Red conjugated lesion in thoracic region



(b) Dark color, hard lesion in legs



(c) Glossy and oily patches

Fig. 4: Kitibha kushtha

In Carmadala kushtha, red blisters, piercing pain, itching, eruption, intolerance to touch and splitting or bursting of skin are general symptoms. Burning sensation and sucking a pain in the palms and soles as mentioned in *Susruta samhita nidana chapter 5/10* [4] was not seen in patients. According to *Ashtangahridaya samhita* [5] S. Com. and 14/27-Ayu. R. Com. Symptoms in the skin such as

breaking in nature and spreading of cutaneous eruptions could be seen. Carmadala kushtha occurs due to an excess of Pitta kapha humours. Symptoms such as red blisters or pus formed blisters, cutaneous spreading, splitting or bursting of skin, secretions can be identified clearly among different patients in Carmadala skin lesions (fig. 5).



(a) Carmadala kushtha with Sphota



(b) With cutaneous spreading

Fig. 5: Carmadala kushtha

Kacchu kushtha was mentioned only in *Susruta samhita*. Papules, ruptured papules, burning sensation and vesicles appearing in palms, feet and buttocks are the general symptoms of Kacchu kushtha. In addition to that, *Madhava nidana*[6] and *Bhava*

prakasa[9] explained that severe pain and itching present with the disease. Further, according to commentary *Mad. Com. of Madava nidana* [6], ruptured, comparatively large boils can be seen in patients (fig. 6).



(a) Pustules in Foot



(b) Ruptured pustules in palms

Fig. 6: Kacchu kushtha

Vicarcika kushtha was mentioned as a separate type of Ksudra kushtha in Caraka samhita [3] and is starting as a result of vitiated Kapha humour. In Susruta samhita [4], severe itching, severe pain and dry streaks or lines present on limbs were cited as the symptoms of Vicarcika kushtha. Commentary for Susruta samhita [4] N. P. comments that Vicarcika kushtha and Vipadika are originate with Pitta humours as a Pitta predominant disease. It was further illustrated that rough and dry skin in feet with fissures is called Vipadika and these symptoms present in palms are "Vicarcika". Further, when Kapha Vata humours are predominant, symptoms such as itching and bursting also present

according to N. P. commentary [4]. According to the Susruta Ni. S. Com.[4] that Vicarcika as a skin disease with the symptoms present in both palms and feet and it has streaks or lines, were rough to touch (dry manner), severe itching with severe pain. According to Madhava nidana, Mad. Com. [6] itching, severe secretions and dark brown are due to Kapha, Pitta and Vata humours respectively. In Bhela samhita [8] dark brown as well as red, much wet lesion was named as Vicarcika. However, severe itching, eruption of papules, dark blue/black and profuse discharge can be considered as commonly mentioned symptoms of Vicarcika (fig. 7).

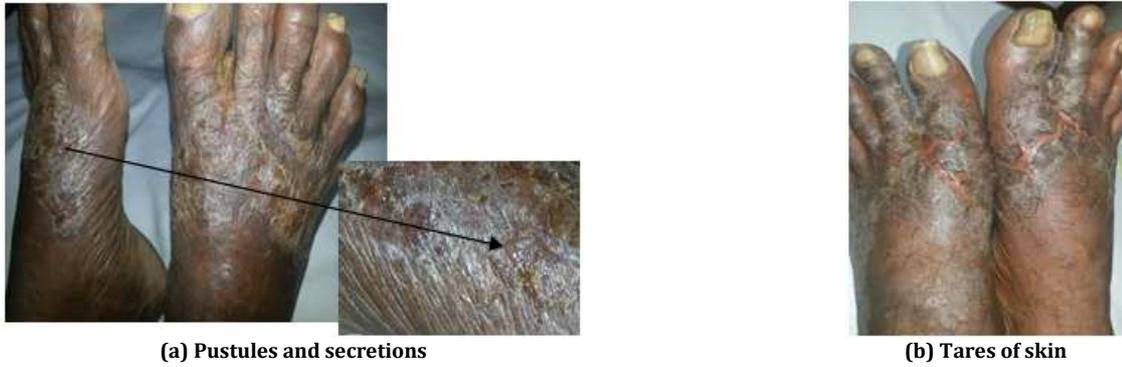


Fig. 7: Vicarcika kushtha

Author Caraka [3] was mentioned that Vipadika present in palms and feet. Bursts and fissures in feet and hands with acute, severe pain are the main symptoms. Author Dalhana of Ni. S. Com.[4] cited that, dark streaks, rough to feel, itching, painful, increased tone as symptoms and these may be present at either in palms or in feet.

Author of N. P[4] commentary, Sri Gaydasa was mentioned that eruption of papules occurs with itching or with burning as symptoms of Vipadika. As Vipadika is a very common type of skin disease in Sri Lanka, above mentioned all symptoms are very clearly present clinically (fig. 8).



Fig. 8: Vipadika kushtha

Different Authors expressed their views regarding its' interconnection of humors in different aspects. According to Gangadhara commentary [3], Vipadika is mainly Vata-Kapha predominant disorder. Author Susruta and Sri Dalhana mentioned some Pitta symptoms under Vipadika kushtha. Authors Gangadhara, Susruta and Vagbhata mentioned Kapha symptoms in addition to other two humours. Etiological factors of Vipadika are mainly as same as that of kushtha.

particularly not mentioned in texts and thus, common premonitory symptoms of Kushtha can be considered as the premonitory symptoms of Vipadika. In clinical study, most of the patients who were having Vipadika kushtha complained on roughness of the palm, feet or in both as prodormal symptoms.

According to Caraka cikitsa 28/30 [3], when vitiated Vayu is located in tvak (skin), the skin becomes rough, have cracks, associated with piercing pain and stretching are present. All these symptoms of Vata humour can be seen in Vipadika. Further, as said by Ashtangahridaya sutra chapter, 11/8 [5], roughness is a symptom of decrease the quality of skin. Prodormal symptoms of Vipadika were

Further, as quoted in Ashtangahridaya [5], vitiated Vata symptoms such as black discoloration, roughness/scaling, dryness, and black and brown discolorations were noticeably present among the patients. Burning sensation, red lines, wetness, suppuration, secretions, redness and heaty feelings in palms and feet are main property of Pitta humour and the Pitta symptom of kushtha [5]. According to Ashtangahridaya [5], sub type of Pitta called Brajaka Pitta helps the production of normal and abnormal color and normal and abnormal temperature of the skin and itching is mainly due to

Kapha humour. Because of the vitiating nature, vitiated Vata, Pitta and Kapha vitiates all tissues and minute channels in the body according to Caraka vimana 5/9 [3]. These factors make clear that Vipadika is not an incurable kushtha.

According to texts, Caraka cikitsa chapter 7/12-Ayu. P. Com.[3], Sidhma kushtha is mostly present in the thoracic region (fig. 9) and is occasionally present in the other places also. Sidhma kushtha has

two types: Pushpika sidhma and Sidhma. Pushpika sidhma is mentioned in Susruta samhita Nidana 5/12 [4] as a curable disease. Sidhma is mentioned in Caraka samhita under Maha kushtha as a disease which was difficult to cure according to Ni. S. Com.[3]. Commonly mentioned symptoms are rough edges, self-fallen fine dust, white, coppery red, thin/scanty and mainly in upper part of the body. Although it is cited as Kapha Vata humors prominent disease, most symptoms are associated with Kapha.



(a) Back side



(b) Fine dust in the lesion

Fig. 9: Sidhma kushtha

According to Ashtangahridaya [5], kushtha which has the predominance of all three humors should be rejected. Those having fatal signs of kushtha and that invading in bones, bone marrow, semen. Those residing in medo dhatu (fat tissue) is controllable but persisting for long periods, those which are caused by combination of Pitta with any other humors that reside in blood and muscle tissues are difficult to cure.

In all types of kushtha, symptoms of the vitiation of skin, blood and muscle tissues are very clear. Among the symptoms of skin, ematiation and pain are common. Dryness of the skin can be seen due to vitiation of blood and muscular tissue according to Dosha divijngniya adhyaya/19/4 of Ashtanga samgraha [7]. In addition, vitiated blood produces many boils or pustules.

CONCLUSION

Diagnosis was confirmed by scientific tools in terms of photographs which were prepared for Kshudra kushtha named such as Gajacarma, Eka kushtha, Kitibha kushtha, Dadru kushtha, Sidhma kushtha, Carmadala kushtha, Kacchu kushtha, Vicarcika kushtha and Vipadika kushtha comparing with the clinical features of the texts and the genuine clinical symptom of the patients can be used as specimens so far the diagnosis is concerned.

ACKNOWLEDGEMENT

National Centre for Advanced Studies for Humanities and Social Sciences, Ward place, Colombo 7, Sri Lanka, is acknowledged for financial assistance.

CONFLICT OF INTERESTS

Written consent was taken prior to the study and confidence of the patient or his/her parents towards the physician was also considered.

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How to cite this article

- Hewageegana Hgsp, Arawwawala Ldam, Ariyawansa Has, Tissera Mha, Dammaratana I. A review of skin diseases depicted in Sanskrit original texts with special reference to Ksudra Kushtha. J Crit Rev 2016;3(3):68-73.