Etiopathogenesis of Dadru in Ayurveda: A Review
Sharma Arun1, Yadav Yadevendra2, Mitra Shuchi3, Sharma Khem Chand4

1 Assistant Professor, Department of Rasa Shastra & Bhaishajya Kalpana, Rohilkhand Ayurvedic Medical College, Bareilly International University, Bareilly, Uttar Pradesh, India
2 Assistant Professor, P. G. Department of Rasa Shastra & Bhaishajya Kalpana, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar, India
3 Associate Professor, P.G. Department of Rasa Shastra & Bhaishajya Kalpana, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar, India
4 Professor and Head, P.G. Department of Rasa Shastra & Bhaishajya Kalpana, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar, India

DOI: 10.36348/sijtcmed.2022.v05i03.004

*Corresponding author: Arun Sharma
Assistant Professor, Department of Rasa Shastra & Bhaishajya Kalpana, Rohilkhand Ayurvedic Medical College, Bareilly International University, Bareilly, Uttar Pradesh, India

Abstract

In recent years, Twak Vikar (Dermatological manifestations) are common and more so frequent in the elder age. There is a definite increase in its incidence especially, in the tropical region and developing countries like India due to various reasons like unhygienic environmental conditions, poverty, poor sanitation, improper skin care etc. The patients of skin disease are additionally prone to experience physical, emotional & socio-economic embarrassment in the society due to disfigured appearance. Dadru is one of the commonly occurring skin diseases which can be defined as an entity manifested by intractable itching, scaling, erythema with the lesions discoid in shape.

INTRODUCTION

Skin is being the external covering of the body mostly affected by the fungus. In Ayurveda, Tinea infection is termed as Dadru. Dadru is a type of Kṣhṭra Ṛga, (Skin disease) which is characterized by the cardinal symptoms like Kandu, Utsāḥa manda, Raag and Pidika, and the lesions resembling the skin of a tortoise.

Historical Aspect

Acharya Charak considered Dadru in Kṣhṭra Kushta, and the predominant Dosha (regulatory and functional entity of body) of Dadru Kushta is Kaph–Pitta. As per his definition, the reddish colour Pidika (Papules) in the form of Mandal (Round swelling or lesion) with elevated borders and itching is known as Dadru [2]. Acharya Sushrut considered Dadru in Maha–kushtha and involved Dosha is Kapha having Atasi Puspha (flax flower) colour appearance with Tamra Varna (Copper colour) spreading Pidika [3]. Dalhana [4], commentator of Sushrut Samhita, has divided Dadru into two parts, Sita (White) and Asita (Black). Dalhana further differentiated these two by saying that ‘Sita’ type of Dadru is easily curable because it does not affect the deeper tissues. Also it is associated with fewer signs and symptoms. There is no
significant involvement of Tridosha. In comparison, ‘Asita’ Dadru is just opposite of Sita Dadru. Acharya vadhvat in Ashtang Samgraha mentioned that Dadru is Durvavata dirgha pratana, having Atasi flower colour appearance, elevated circle, itching and Anushangini symptoms [5]. Whereas, Acharya Kashyap demarcated Dadru as a skin disease having "Vridhimanta Mandala," i.e., disseminating discoid lesions with intense itching, burning sensation and discharge from it. Sometimes these lesions are dry, which is a crucial point through practical aspect [6].

Nidana Panchaka (five-fold approaches of diagnosis) of Dadru [7]

(1). Nidana

Acharya Sushrut stated Nidana Parivarjana (Removal of causative factor) as the first step of treatment [8]. So for the cure, the knowledge of Nidana of disease is most important. The understanding of etiological factor is valuable to deliver proper guidance for the prevention and treatment of the disease.

Ayurveda emphasizes different factors such as improper diet, routine, season, and even the supernatural power, which make the body vulnerable and susceptible to disease. In Ayurveda classics, specific aetiology for Dadru has not been described, but the general aetiology of Kusht (Skin disease). Since Dadru has been included under Kusht, its aetiology can be constructed based on general aetiology. Ayurveda texts have described general causative factors, i.e., Samanya Nidana for all types of Kusht instead of specific Nidana for a particular type of Kusht.

(2) Purvarupa

The symptoms which appear before the complete occurrence of disease are considered as Purvarupa (prodromal symptoms) [9]. But in case of Dadru, it can be seen that symptoms (Rupa) of disease like Raga (Redness), Kandu (Itching), Pidika (Macule/Papule), Utsannamandala (welts), Ruksha (Dryness), Daha (Burning), Visarpini (Spreading) appears as the Purvarupa of Kushta [10].

(3) Rupa

The signs and symptoms which appear after Doshan–Dusya Sammurchana (Blending of bodily humour and physiological regulatory entities) is called Rupa. Rupa appears during the fifth Kriyakala [11] (Stage of pathogenesis), and this 'Vyakti' stage may be quantified to be that of the appearance of the fully developed disease. In Dadru Kandu, Raga, Pidika, Mandala (Discoid lesion), etc, symptoms are manifested. Acharya Charaka [12] has defined Dadru as the reddish colour Pidikai in the form of Mandala with elevated borders and itching. Whereas, Acharya Sushrut [13] has described it as the Atasi (Flax seed) flower colour appearance with copper coloured spreading Pidika. Ashtang Samgraha [14] mentioned that Dadru is Durvavata Dirgha Pratana, having Atasi flower colour appearance, Elevated circle, itching and Anusangini (Ancillary).

(4). Upashaya

Upashaya [15] is defined as those drugs, diet regimens, behavioural and other practices that are beneficial and provide recovery to the patients and have actions contrary to the aetiology of the disease. Upashaya is a beneficial diagnostic tool when the disease is not distinct, and it is challenging to diagnose the same. However, in Dadru roga sign and symptoms are very clear. Hence Upashaya is not required for diagnosis but very useful for treatment. No specific Upashaya of Dadru is found in the classical texts. Nevertheless, the description of Pathya (Ideal diet plan) about Kusht may be considered as the Upashaya.

(5) Samprapti

Samprapti (Etiopathogenesis) corresponds to the sequence of development of the disease. It includes the course of process or event from the inception of causative factors to the manifestation of the disease. According to Vaghbata's definition, the knowledge of Samprapti must include the idea about nature and manner of vitiation of Dosha, associated factors, their spread and nature of lodgement. When the causes of disease (Kushtha roga) persist for longer duration, the quality of skin gets depleted. It may effect the body either from inside or outside or both. Deficient transformation power at the Dhatu level may precipitate redundant materials inside the body, which may hamper the functions of Bhrajaka Pitta.

In healthy persons, the Bhrajaka pitta (A type of pitta found in skin) is the main principle in maintaining the functions of the skin. Improper actions of Bhrajaka Pitta may alter the structural firmness of the skin. As we know, the skin is one of the structural forms of Rasa (nutrient fluid) Dhatu. So, this can be considered as a part of Rasavaha Srotasa (Channel or passage). Causes which persist for longer duration may destruct the structural firmness of the skin at different level of the body, creating the “Srotovaiyguna.” Excess intake of those food items which vitiates Kapha Pitta Dosh are the leading cause of the disease. Dhatvagni mandhya (Cellular metabolic factor) may precipitate Malarupa (Excretory form) Kapha through excretory materials like sweat. Thus, vitiated Dosh and Malabahvas may find lodgement upon the skin in due course, making the skin deficient in resistance. Behind each symptom produced, there will be an altered Dosh as a precipitating factor. Circumscribed itchy lesions with chronicity indicate the role of Kapha Dosh. Erythematos itchy lesions with discharge, which aggravate on sweating indicate the role of Pitta Dosh.

Samprapti Ghatika

(i) Doshan- Tridosha
(ii) Dusya - Tvaka, Rakta, Mamsa
(iii) Adhisthana - Tvaka  
(iv) Srotasaa - Rasavaha and Raktavaha  
(v) Srodusti- Samga and VimargAmana  
(vi) Agni- Bhranjak Agni

(a) Dosha
All the Kushth are Tridoshasha. However, each of them can be differentiated as Dosha entity based on the dominance of Dosha in them. The involvement of Dosha in the symptoms of Dadru is analyzed and summarized as follows:

Table 1: Dosha Symptoms

<table>
<thead>
<tr>
<th>S. No</th>
<th>Symptoms</th>
<th>Dosha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kandu</td>
<td>Kapha</td>
<td></td>
</tr>
<tr>
<td>Raga</td>
<td>Pitta</td>
<td></td>
</tr>
<tr>
<td>Pidika</td>
<td>Pitta</td>
<td></td>
</tr>
<tr>
<td>Utsanna mandala</td>
<td>Kapha</td>
<td></td>
</tr>
<tr>
<td>Atasi puspa varna</td>
<td>Pitta</td>
<td></td>
</tr>
<tr>
<td>Tamra varna</td>
<td>Pitta</td>
<td></td>
</tr>
<tr>
<td>Visarpana</td>
<td>Vata</td>
<td></td>
</tr>
</tbody>
</table>

(b). Dushya
Acharya Charak has described four Dushyas as Tvaka (Skin), Rakta (Blood cell), Mamsa (Muscle cell) and Lasika (Lymph) Dhatu [16], which are primarily involved in the manifestation of Kushth. Chakrapani interprets that when the vitiation is limited up to these four Dushyas, it should be considered as ‘Samanya Dushthi’ & when the Samprapti traverse these four Dhatus to involve, furthermore in-depth Dhatus it may be considered as ‘Vishesa Dushthi.’ Generally, ‘Samanya Dushthi’ occurs in Kshudra Kushth while ‘Vishesa Dushti’ is traceable in Maha Kushth. The analysis of Dhatu Dushti in the symptoms of Dadru is as follows

Table 2: Dushti symptoms

<table>
<thead>
<tr>
<th>S. No</th>
<th>Symptoms</th>
<th>Dhatu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kandu</td>
<td>Rasa, Rakta</td>
<td></td>
</tr>
<tr>
<td>Raga</td>
<td>Rakta</td>
<td></td>
</tr>
<tr>
<td>Pidika</td>
<td>Rakta, Mamsa</td>
<td></td>
</tr>
<tr>
<td>Utsanna mandala</td>
<td>Mamsa</td>
<td></td>
</tr>
<tr>
<td>Atasi puspa varna</td>
<td>Rakta</td>
<td></td>
</tr>
<tr>
<td>Tamra varna</td>
<td>Rakta</td>
<td></td>
</tr>
<tr>
<td>Visarpansila</td>
<td>Rakta</td>
<td></td>
</tr>
</tbody>
</table>

(c). Srotasa
Rasa and Raktavaha Srotasa plays a vital role in the pathogenesis of Dadru. Amongst four types of Sroto-dushti, Sanga and Vimargagamana are observed in Dadru. Tiryagagamana of the vitiated Dosha suggests Vimargagamana. There is Srotorodha due to Samga in Srotasa.

(D) Agni
Agnimandhya (Diminished digestive power) is the root cause of all the diseases [17]. Agnimandhya occurs due to Aharaja (food-related), Viharaja (lifestyle-related) and Acharaja Nidana. It leads to the formation of Aamavisha [18]. Here the referred Agni is Bharajakagni, and its derangement causes the formation of Aamavisha (end product of improper digestion and metabolism) at the local level. This Aamavisha then spreads to the nearby area & disturbs the standard configuration of the Dhatus, thereby leaving them prone to receive the Aamavisha. This susceptibility of the Dhatus progresses further. The three Doshas and Poshaka Ansha (nutritive element) of four Dushyas reach the susceptible Dhatus and settle there to start the pathology, which leads to the manifestation of local symptoms.

Samprapti concerning Shadhavidha Kriyakala
Acharya Sushrut has described six stages of Samprapti (Six stage of disease pathogenesis). All those six stages can be exploited to understand the Samprapti of Dadru as follows:

(a) Samcaya: Samcaya means accumulation or stagnation. The process of Samprapti starts from Samcaya. In the initial stage, Dosha increases in their place and stagnate there. This stagnation is termed as Dosha Samcaya. The rate of Dosha accumulation is directly proportional to the potency of Nidana. Nidana causes Bhujagakagni Mandhya with subsequent formation of Aamavisha [18] at the local level. This Amaivasa obstructs the Srotas.

(b) Prakopas: In this stage, the Dosha, which had previously accumulated and stagnated in their natural habitat, get further aggravated, but due to Aamaja Srotorodha, they could not move from that place, so they get provoked.

(c) Prasara: In this Kriyakala, the Prakupitta Doshas are stated to expand and overflow the limits of their respective locations through Tiryaga (Three dimensional) Sira (Vein).

(d) Sthanasamshraya: The process of extension of Dosha to the other parts of the body & their localization to a specific place or part of the body is known as Sthanasamshraya (localization). This stage marks the beginning of particular disease at that specific part of the body. The place of localization should be favourable for the Doshas to settle there. This place is known as Khavaigunya (Defect in channels of transportation and transformation). Some factors of Nidana cause Khavaigunya. Purvarupa of the disease occurs in the Sthanasamsraya stage. In Dadru, Kandu and Raga occur in the Sthanasamsraya stage.

(e) Vyaakti: This stage may be stated as the manifestation of the fully developed diseases, the result of Dosha-Dushya Sammurchchan, as represented by its characteristic symptomatology. In Dadru; Kandu, Raga, Pidika, Mandala etc. symptoms are manifested.
**Bheda:** At this stage, **Dosha** reaches to the deeper **Dhatu**, but **Dadru Kushth** is **Kshudra Kushth**, and **Kshudra Kushth** never pervades to the consecutive or deeper **Dhatus**. However, in this stage, **Dadru** can be defined in terms of their chronicity.

![Fig 1: Schematic illustration of etiopathogenesis of Dadru](https://example.com/dadru-etiopathogenesis)

**Chikitsa**

There is no specific treatment is mentioned for **Dadru**, but common treatment protocol of **Kusta** is used to treat on the basis of vitiated **Dosha**. **Bahu-Shodhana** (Frequent **Virachana and Vaman** [19], **Shamana** (palliative therapy) and **Bahiparimarjana** (Peripheral bio-cleansing) **Chikitsa** like Edgajadi lepa [20], Dadrughn Lepa [21] is used to treat it since ages.

**CONCLUSION**

In Ayurveda, fungal skin infection is termed as **Dadru** (Tinea/Ringworm). It affects population of all the age group. There is no separate description of **Nidana, Poorvarupa, Samprapti** of **Dadru**, but the **Samanya Nidana, Poorvarupa** mentioned for **Kushtha** can be considered here. Incidence rate of **Dadru** gradually increasing day to day because of improper **Vihara** like uncleanliness of body, sharing cloths of others and improper way of food intake etc., so this type of **Dadru** considered as **Sankramika Vyadhi** (communicable disease). The knowledge of **Nidana** is helpful for the proper diagnosis, prevention of disease and treatment.

**REFERENCES**