

A LITERARY REVIEW OF DADRU (TINEA INFECTION) AND ITS VARIOUS TREATMENT MODALITIES ACCORDING TO AYURVEDA

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ABSTRACT

Skin being the outermost part of the body it is more susceptible for infection. Skin diseases are very common nowadays due to changing lifestyle and food habits. In Ayurveda all the skin disease are widely explained under the broad heading of Kushtha. Dadru is one of the most common skin conditions affecting all the ages of population. In India its prevalence rate ranges from 36.6% to 78.4% according to recent studies⁽¹⁾. It is classified as Kshudrakushtha by Acharya Charaka and Mahakushtha by Acharya Sushruta and Vagbhata. Samprapti of dadru mainly involves vitiation of pitta-kapha dosha and dushti of rasawaha and raktawaha strotas⁽⁴⁾. The main clinical features of dadru are Kandu (Itching), Raga (Erythema), Pidika (Eruptions), Mandalodagam (Elevated circular lesion). On the basis of clinical features it can be correlated with Tinea infection. Tinea is caused by group of fungi called as dermatophytes. The most common being Trychophyton Rubrum which is transmitted by contact with infected individuals. In Ayurveda kushtha is also mentioned as sankramanjanya vyadhi. There are many different symptoms and causes of Dadru is mentioned in different samhitas. Treatment of dadru is also mentioned in various samhitas in form of external and internal use. Hence in this study a review of Dadru disease is done described in different Samhitas and its various management is mentioned according to various classics.

KEY WORDS: Dadru, Kushtha, Tinea

INTRODUCTION

Skin diseases are very common nowadays. Skin being the outermost part of the body it is more susceptible for infection. due to increasing prevalence. It is a cause of great social concern to every person. Dadru is one of the most common skin condition seen in day to day life. its prevalence in India ranges from 36.6% to 78.4% according to recent studies⁽¹⁾. It is major emerging problem in developing countries like India due to

changing life style and food habits. Various reasons like poverty, unhygienic environmental conditions, poor sanitation, tight clothing, improper skin care etc adds to it. There is detail description of skin disease in Ayurveda under the broad heading of Kushtha. Dadru is also described under Kushtha disease. Dadru is mentioned as kshudrakushtha by Acharya Charaka⁽²⁾ and Mahakushtha by Acharya Shushruta⁽³⁾ and Vagbhata⁽⁴⁾. Clinical features of dadru is described as raga (erythema), kandu (itching), pidikotpatti (small eruptions), mandalodgam (elevated circular lesions)⁽²⁾. On the basis of clinical features it can be correlated with Tinea infection in modern medicine. Tinea infection is a type of infection which is caused by a group of fungi called as dermatophytes. The most common being *Trichophyton Rubrum* which is transmitted by contact with infected individuals. As the incidence rate of Dadru is increasing rapidly, it is very important to know the different causes, sign and symptoms, preventive measures and treatment of disease. In Ayurveda it is widely described in different Granthas having various causes, sign and symptoms. The treatment of Dadru is also mentioned separately in various Granthas. Therefore this review is done to understand the disease and its management mentioned in different Samhitas.

CLASSIFICATION OF DADRU

Dadru is classified as a type of kushtha. There are total 18 types of kushtha mentioned in samhitas which is divided as 7 mahakushtha and 11 kshudrakushtha⁽²⁾. Dadru is classified as kshudra kushta by Acharya Charaka⁽²⁾ and other granthas also mentioned Dadru as kshudrakushtha. But Acharya Shushruta⁽³⁾ and Acharya Vagbhata have classified Dadru as mahakushtha. This difference in classification may be based on the severity of lesion. The lesion having blackish discoloration and deeply rooted are considered under mahakushtha and the lesions which do not have blackish discoloration, not deeply rooted are considered as kshudrakushtha.

MATERIALS AND METHODS

For the present review article detailed study has been done. The detailed content, information and references are analyzed from available text. Principle texts referred here are Charaka, Shushruta, Vagbhata, Bhavprakash, Chakradatta, Vangsen and other Samhitas. Some other Ayurvedic book also has been referred. Some relevant references are also taken from modern books.

NIDANA (MAIN CAUSE)⁽⁶⁾

Specific Nidana of Dadru is not mentioned in Ayurvedic classic, Hence, Nidanas of Kushtha can be considered as Nidanas for Dadru Kushta. These are categorized under following headings.

1. Aharaja and Viharaja nidana

Acharya Charaka and Acharya Vagbhata mentioned the Nidanas for Kushta are Adhyashana, Vishamasana, Atyashana, intake of food during Ajeerna, Satata and Atisevana of Madhu, Phanita, Matsya, Lakucha, Mulaka, Kakamachi excessive Snehana, Vidahi Ahara excessive intake of Amla and Lavana Ahara Rasa, Navanna, Dadhi, Masha, Mulaka, Pishtanna, Kshira, Guda, excessive Drava and Snigdha Ahara and Guru Ahara are the Aharaja Nidanas. Diwaswapna, Chardhi Vegadharana, drinking cold water after coming from sunlight, Ativyayama, Ati Santapa Sevana. Acharya Shushruta added Dushivisha. Acharya Harita added Dushita Jala as the etiological factor for Kushta. Acharya Bhavamishra added excessive intake of Gramya, Anupa, and Audaka Mamsa to the above said Nidanas.

2. Achara nidana

If the disease is present since birth, it is considered as Karmaja Vyadhi. Even after the best and last treatment of patient if doesn't achieve any satisfactory results then it is considered as Papakarmaj vyadhi. Which is also one of the causative factor of kushtha.

3. Beeja Dosh Nidana⁽⁵⁾

Kushtha is Adibala Pravrutta Vyadhi. Dushita Shukra or Shonita results in the birth of Kushthita Shishu. All these indicate the role of physical and psychological behavior as well as hereditary predisposition in causation of Kushtha.

4. Manasika nidana

Ati Bhaya, Ati Shoka and Ati Chinta are explained as Hetu that causes Kushta. Any imbalance in the mind affects the skin appearance and any abnormalities of the skin affect the mind, which forms a vicious cycle.

5. Aupasargika Nidana⁽³⁾

A very important factor about Kushtha has been mentioned by Acharya Sushruta. Kushtha can be spread to the healthy person through the contact of diseased person called infectious or contagious disease. A Kushta spreads from one person to another by Nishwasat (Inhalation of fungal spores in infected environment directly), Gatrasamsparsa (by contact and touch), Sahashayyasana (by sharing beds), Vastra (sharing clothes, fomites etc). The mode of spread of Dadru Kushta is similar to these; hence Dadru Kushta is an Aupasargika Vyadhi. In modern literature explains the similar causes as sharing food, clothes, fomites, beds, soaps etc. articles which are infected by the fungal spores. Here Acharyas have explained the contagious nature of Kushta.

6. Krimi Nidana

Kushtaja Krimi is a type of Rakthaja Krimi which causes Kushta according to Acharya Sushruta.

7. Chikitsa Vibhramsha Janya⁽⁷⁾

Sthambhana treatment in initial stage or Amavastha of disease may lead to Tiryak Gati of Dosha and thus causes Kushtha e.g., Raktharsha, Rakthapitta, Amatisara etc. Not following Panchakarma procedures in correct way and not following Pathya-Apathya or Peyadi Karma doing after Panchakarma or doing Panchakarma without guidance of Vaidya undergo Tridosha Dushti along with Raktha Dushti it leads to Dadru Kushta.

SAMPRAPTI⁽²⁾

Due to consumption of causative factors which are mentioned above, the tridodhas(vata,pitta,kapha) gets vitiated. The vitiated vata along with pitta and kapha goes to sideward or oblique direction(tiryakgati) and pervades the surrounding channels of the body like twacha(skin), rakta(blood), mansa(flesh), and lasika(lymph) from all sides. Then the distributed dosha produces mandala(lesions) at the places where it travels. In this way, the dosha that enters the skin of the body increases there and causes various type of kushtha. In dadru mainly pitta and kapha dosha are involve

Samprapti Ghataka

Dosha - Kaphapitta Pradhna Tridoshaja

Dushya - Twak, Rakta, Mamsa and Lasika

Srotas - Rasava, Rakthavaha, Mamsavaha and Lasika Srotas

Srotodushti - Sanga and Vimargagamana

Agni - Jatargnijanya Mandya

Ama - Agnijanya Mandya

Udbhava Sthana - Amashaya

Sanchara Sthana - Rasayani

Adhithana - Twacha

Roga Marga - Bahyarogamargad.

Vyadhi Svabhava – Chirakari

PURVARUPA ⁽⁸⁾(PRODORMAL SYMPTOMS)

There is no separate purvarupa mentioned for Dadru disease. Purvarupa of kushtha can be considered as purvarupa of Dadru.

Following are the general premonitory features of Kushtha roga in different classics.

Sr no	Purvarupa	A-7 C.S.	A-33 S.S.N	A-14 A.H.	A-14 A.S.	A-49 M.N.	A-54 B.P.
1	Sparsha-agytvam (loss of touch sensation)	+	-	-	-	+	-
2	Sveda asveda (excessive sweating/absence of sweating).	+	+	+	+	+	+
3	Vaivarnya (Colour change)	+	+	+	+	-	+
4	Koth (Rashes)	+	-	-	-	+	-
5	Lomharsha (Horripilation)	+	+	+	+	-	+
6	Kandu (Itching)	+	+	+	+	-	+
7	Toda (Piercing pain)	-	-	+	+	-	+
8	Shrama (Physical fatigue)	+	-	+	+	-	-
9	Klama (Mental Fatigue)	+	-	-	-	-	-
10	Vranana Amdhikam shoolam	+	-	+	+	-	+
11	Shigrotpattischirsthic (Early manifestation along with chronicity)	+	-	+	+	+	+
12	Daah (Burning sensation)	+	-	+	+	-	+
13	Suptaangata (Numbness)	+	+	+	+	+	+
14	Kshatavisarpana	-	+	-	-	-	-
15	Ruksha (Dryness)	-	-	-	+	-	+
16	Atishlakshna (Smoothness)	-	-	+	+	-	+
17	Kharasparsha (Roughness)	-	+	+	+	+	+
18	Asrijah Kashranya (Blackish discoloration of blood)	-	+	+	+	-	+

RUPA (CLINICAL FEATURES)

Following are the various clinical features of Dadru mentioned in different texts.

Rupa	C.S. C A-7	S.S.N A-5	A.N. A-14	K.S. Ch	B.P. A-54	M.N. A-49
Kandu(itching Sensation)	+	-	+	+	+	+
Raga(Redness)	+	-	-	-	+	+
Pidika(pustule/vesicles)	+	+	-	-	+	+
Madalodgam/Utsanna mandal(Elevated circular patches)	+	-	+	+	+	+
Atasipushpa Varna(purple colored)	-	+	+	-	-	-
Tamra Varna(copper colored)	-	+	-	-	-	-

Visarpini(spredding in nature)	-	+	-	-	-	-
Durvata Dirghpratana(large spreaded area)	-	-	+	-	-	-
Anusangini(stays for longer time)	-	-	+	-	-	-
Ruksha(Dryness)	-	-	-	+	-	-
Daha(burning Sensation)	-	-	-	+	-	-
Srava(secretion)	-	-	-	+	-	-
Vridhimati(increasing in size)	-	-	-	+	-	-

SADHYASADHYATA

Acharya Charaka has mentioned dadru as Kruchhasadhya.

UPASHAYA⁽⁶⁾

Ahara: Shali (Oriza sativa), Shastik Shali (Oriza sativa), Yava (Barly), Godhuma (Wheat), Koradoosha (Paspalum scrobiculatum), Shyamaka (Echinochlova frumentacea), Uddalaka (wild variety of Paspalum scrobiculatum). The above-mentioned grains should be one year old and matured flesh of Jangala animals devoid of fatty matter.

Vihara: To be sincere and to be dutiful to God, Teachers, Gurus, to offer prayers, perform Yagna, Homas, give donation to poor and needy.

ANUPASHAYA⁽⁶⁾

Ahara: Mamsa (Flesh of birds), Vasa (Oily part of flesh), Dugdha (Milk), Dadhi (Curd), Tila Taila (Sesame oil), Kulatta (Dolichos biflorus), Masha (Phaseolus mungo), Nishpav (Dolichos lablab), Preparations of sugar and Jaggery, Pistiamla (Articles having sour taste), Viruddha Ahara (incompatible food), Vidahi (Food which can cause obstruction to channels), Vidagda (food which cause acidic eructation's).

Vihara: Diva Swapna, Vegadharana, Ativyayama, Ativyavaya, Abusing elders, Gurus, teachers.

MANAGEMENT OF DADRU

There is no any specific description for chikitsa sutra is available in Samhitas for Dadru. But various kalpas have been mentioned for treatment of Dadru for internal and external use.

SHODHAN CHIKITSA

In Charak & Vagbhata Samhita for samanya chikitsa of kushtha it is motioned that the kushtha predominant in vata, intake of ghee is recommended. Similarly, emesis in those predominant in kapha and purgation followed by blood-letting in those predominant in pitta is recommended. In case of kushtha, the emetic and purgative formulations said in the section of kalpasthan should be prescribed. In minor type of kushtha prachhna karma (scraping) is advised and if it is deeply rooted then siravedh(venesection) is advised. After shodhan karma snehapana is given. They have also mentioned to give asthapan and anuvasan basti. In shushrut samhita it is mentioned that when Kushtha is situated on skin ,shodhan and alepan karma should be done .When Kushtha incubates in blood shodhan, alepana,kashaya pana,raktamokshna should be done.When Kushtha reaches in mansa dhatu, shodhna,lepa, Kashay pana,Rakmokshana,asava-arishta,mantha,avleha should be used.When Kushtha is situated in medodhatu, sanshodhan and raktamokshana karma should be done then bhalltaka, shilajeeta, swarnamakshika,guggulu,agru,twak,Kahdir,Asana and ayakruti therapy should be avocated.When kushtha reaches in asthi dhatu it becomes asadhya.

SHAMAN CHIKITSA

Various permutations and combinations have been described for internal and external use for treatment of Dadru in different Samhitas.

Bharat Bhaisajya Ratnakar

Part 1	Part 2	Part 3	Part 4	Part 5
Kasisadi ghrut	Gunjadi lepa	Bhallatak avleha	Manjishtadi kwath	Haridradi churna
Avartikyasava	Chakramardadi lepa	Nimbadi ghrurt lepa	Vidangadi Leha	Kshar ghruta lepa
Ekvinshtiko guggul	Chandrashuradi lepa	Darvyadi suryapaka lepa	Manashiladi taila	Sinduradya taila
	Chinchpatra ras prayog locally	Bhallatak taila	Marichyadi taila	Somraji Taila
	Tumbarvadi Udvartan	Dardadi lepa	Medhyavik taila	Haridradi taila
	Talkeshwar rasa	Durvadi lepa	Rudra taila	Shringberadi lepa
	Triphaladi gutika	Pamadadru-kushthahar lepa	Mahamarkar ghrut pana	Sidhdhrthadi lepa
		Putakadi lepa	Vasarudra taila	Snuka lepa
		Prapunnatatdi lepa	Vidravana taila	Haritaladi lepa
		Bollajalam lepa		Hemkshiyradi lepa
		Nagarjun vati		
		Panchanimbadi churna		
		Paribhadra rasa		

*The oils which are mentioned here are for local application

C.S.C. A-7	S.S.C. A-9	A.S.C. A-21	B.P.M A-54	Y.R.	H.S.A-39
Edgajadi lepa	Lakshadi lepa	Aragwadhadi shata pradaha	Panchnimbk avleha	Triphala gutika	Aragwadhadi kwath
	Saindhavadi lepa	Mustadya avchurna	Mahabhallata k avleha	Bhallatak avleha	Bhallatak taila
	Swarnakshiridi lepa	Kanakshiryadi taila	Laghumanjishthadi kwath	Mulakbijadi yoga	Tila taila
	Karanjapatradi lepa	Edgajadi lepa	Laghumarichadi taila	Aragwadhpata yoga	Nimbadi ghruta
		Lakshadi lepa	Mahamarichadi taila	Prapunnata yoga	Bhrungrajadi lepa
		Durvadi lepa	Kushthvidang	Durvadi yoga	

			adi lepa		
			Durvaharidra di lepa	Vidangadi lepa	
			Gandlikadi lepa	Laghumarich yadi taila	
				Dardadi lepa	
				Gunjadi udvartan	
				Lakshadi lepa	
				Brihatmarich yadi taila	

VANGSENA A-25	CHAKRDATT A A-50	NIGHNATRAT NAKAR	GADANIGRAH A A-36	BHAISAJYAR ATANAVALI A-54
Triphaladi gutika	Kushthghna shata pradeha	Lakshadi udvartan	Majisthadi mahakashya	Aragwadhadi kwath
Panchnimbadi churna	Dwitiya vidangadi lepa	Gunjadi lepa	Edgajadi udvartan	Laghumanjishtha di kwath
Khadiradi ghruta	Gajendra sinha pralepa	Mulabijadi lepa	Nirgundipatra lepa	Uday bhaskara rasa
Trina taila	Prapunnatadya udvartan	Prapunnta bijadi lepa	Lakshadi lepa	Rajeshwar rasa
Bruhatruna taila	Chakramarda bijadi pralepa	Vidangadiu lepa	Mustadi udvartan	Paribhadra rasa
Marichadi taila	Trunak pradeha	Prapunnatadi lepa	Tumbarvadi udvartan	Maha bhallatak guda
Gandiradi taila	Kasmarda pralepa	Dardadi lepa	Haritaki yoga	Gandirikyadi taila
	Aragwadhpa aptra pralepa	Hemkshiradi lepa	Haritaladi lepa	Somraji taila
	Mulakbija pralepa	Manjishthadi kadha(dvitiya)	Shringberadi lepa	Rudra taila
	Guhya dadruhar yoga		Sudarshan mula lepa	Kandarpasar taila
	Gandirikyadi taila		Mulakbija lepa	Aragwadhptra lepa
			Vidangadi lepa	
			Laghu vishgrabha taila	

			Brihatmarichyadi vishgarbgah taila	
			Padadadaro bakuchi yoga	

Some other combination of drvyas for local application are mentioned as followed

Sharangdhar Samhita(A-11)

1. Chakramrda Beeja, Bakuchi, Sarshap, Tila, Kushtha, Haridra, Daruharidra, Musta, With Takra
2. Swarnakshiri, Vidang, Singraf, Gandhak, Chakramarda Seeds, Kutha, Sindur, With Dhatur, Nimb, Tambul Patra Swaras Bhavna
3. Durva, Haritaki, Saindhava, Chakramarda, Tulsi With Takra
4. Durva and Haridra
5. Sarshap, Haridra, Kustha,, Chakramarda, Tila

Vangasena Samhita(A-25)

1. Amalaki, Snuhi, Sarjarasa, Chakramarda, With Tushodak Or Kanji
2. Shringatak, Karkatimula, Hapusha, Bharangi, For Oral Intake
3. Edgaj, Kustha, Saindhva, Souvira, Sarshap, Vidang
4. Kasmarda Root With Kanji
5. Mulak Beeja, Sarshap, Laksha, Haridra, Daruharidra, Chakramarda Seed, Saral Gond, Trikatu, Vidang, Kustha With Gomutra
7. Snuhi, Sala Truna, Chakrmarda, Haritaki With Kanji
8. Chakramarda Seed with Mulak Rasa
9. Chakramarda Seed with Sudarshan Roots
10. Durva, Abhaya, Saindhav, Chakramarda, Vana Tulasi, With Kanji And Takra
11. Trinak Patra Grown In East Direction, root and leaves of Trina
13. Laksha, Shrivesthak, Kustha, Haridra, Sarshap, Trikatu, Mulak Seeds, Chakramarda Seeds With Kanji

Gadanigraha(A-36)

1. Aragwad, Edgaj, Karanj, Adulsa, Guduchi, Madanphala, Haridra, Daruharidra
2. Shrivesthak, Devdaru, Khadir, Dhava, Vidanga, Karvira
3. Granthi, Pippalimula, Bhojaptra, Rasona, Shirish, Jatamansi, Guggula, Krishnagandha
4. Fanijjaka, Vatsak, Saptaparna, Pilu, Kustha, Jasmine Flower
5. Vacha, Harenu, Nishoth, Bhallatak, Geru, Rasanjan
6. Manashila, Hartal, Gruhadhuma, Kutha, Kasis, Lodhra, Arjuna, Motha, Sarja Rasa

Bhaisajyaratnavali(A-54)

1. Shalavruksha, Tusha, Chakramarda Seed, Haritaki, Odan, Kanji
2. Vidang, Chakramarda, Kushtha, Nisha, Saindhav, Sarshap, Kanji
3. Chakramarda, Kustha, Saindhav, Shweta Sarshap, Vidang, Kanji
4. Chakramarda Seeds, Shigru Root Bark With Mulak Swaras
5. Mulak Seed, Sarshap Seed, Laksha, Haridra, Chakramarda Seed, Gandhviroja, Trikatu, Vidang, Kutha With Gomutra
6. Chakramarda Seed, Tila, Sarshap, Kutha, Pippali, Trilavana Mix With Mastu And Keep It For Three Days. After Fermentation make it paste and apply
7. Suddha Parad, Gandhak, Shankha, Manashila Bhasma, Indrayan Root, Chakramarda Seed, Gandhanakuli, Choulai, Chitrak, Langli, Bhallatak, Gruhadhuma, Agastya Vruksha, Snuhi Dugdha, Nimb Patra, Puran Gud, Madhu, Bakuchi all in same quantity. First make kajjali with Parad and Gandhak then make paste with Gomutra or Kanji.

8. Latakaranj, Arka, Snuhi, Amaltas, Jasmine Leaves With Kanji

Ashtanghridaya(A-20)

1. Vidang, Adrij, Madhu, Sarpi, Khadir Churna

2. Musta, Amruta, Kantakari, Kasis, Kampillak, Kutha, Rodhra, Gandhopal, Sarjarasa, Vidang, Manashila, Karvira Avchurnan

3. Laksha, Vyosh, Prapunnata, Shrivestak, Haridra, Takra, Mulakbija Lepa

DISCUSSION

Skin is the outermost organ of body hence it is most susceptible for infection. Twacha has direct relation between Dosha-Dhatu-mala which are known to be structural and functional unit of life. Hence it is important to understand the various skin conditions and its management. In Ayurveda all the skin diseases are described under broad term of Kushtha. Dadru is one of the most common skin conditions affecting all the ages of population. It is described as kshudra kushtha by Acharya Charaka and mahakushtha by Acharya Sushruta. According to clinical features it can be correlated to tinea infection in modern medicine. On the basis of above study it can be seen that there is no separate causes mentioned for Dadru. Hence causes of kushtha can be considered as causes of dadru. The various lakshana of dadru is also described here which are mentioned in different Samhitas. The most common symptoms seen are kandu (itching), raga (erythema), pidika (eruptions), mandalodgama (elevated circular lesion), Daha (burning sensation), rukshata (dryness), tamra varna (copper color) etc. The treatment for Dadru can be done by samanya chikitsasiddhanta mentioned for kushtha which are snehana, shodhan by vaman, virechan, raktamokshan. For shaman chikitsa various kalpas are also mentioned for internal use. But it can be seen that bahya chikitsa (external application) is mentioned in more texts for dadru management. For the external application various lepa, oil, ghrut are described. Hence there is wide and detail description of dadru mentioned in ayurveda along with treatment. Therefore it can be treated successfully by Ayurveda approach to the patient for diagnosis and management.

CONCLUSION

On the basis of above study it can be concluded that Dadru is widely explained in Ayurveda. Different kind of treatment modalities are also described to treat Dadru. For the management of Dadru various kalpas have been described in different samhitas. Hence Dadru can be diagnosed and treated well with Ayurvedic approach to the patient.

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