

## Scleroderma – Ayurveda Management

### Case Report

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### Abstract

Skin diseases are commonly observed day by day due to altered life style, improper hygiene, mental stress, over eating and nutrition deficiency. All the skin diseases in *Ayurveda* have been discussed under the broad heading of *Kushtha*, which are further divided into *Mahakushtha* and *Kshudra Kushtha*. *Kapala kushtha* is a type of *Mahakushtha* with symptoms like blackish red skin patches, which resembles pot sherds, dry, rough, thin, wide, of uneven edges with severe pain and less itching. It can be compared to scleroderma; the first specific clinical symptoms to suggest a diagnosis of scleroderma is skin thickening. Later the skin becomes hard, shiny, leathery and hardens like a stone. This article highlights a case study of *Kapala Kushtha* treated with the *Ayurvedic* principles in particular *Shodhana Chikitsa*; the therapy which expels out the morbid *Doshas* from the body. *Kushtha* is difficult to cure, so it is called '*Dushchikitsya*' but by the application of *Shodhana* therapy, cure of the diseases becomes easier due to removal of the root cause. Here is a case study of 67yrs/female having signs and symptoms of *Kapala kushtha*. The patient was admitted and managed with *Shodhana Chikitsa* (purification) which included *Raktashodhak Ksheer Basti* (medicated enema) and *Virechan* (purgation) followed by *Shaman Chikitsa* (pacification) and the results with rationality have been depicted in this article.

**Key Words:** *Kushtha, Kapala Kustha, Shodhana Chikitsa, Raktashodhak Ksheer Basti, Virechan, Dushchikitsya.*

### Introduction

Skin is the largest protective organ of the body for both internal and external environment. It reflects pathological, physiological, metabolic conditions of the body and thus it helps in diagnosis of disease. According to *Ayurveda*, *twacha* is considered as the first line of defence of the body. Disease which manifests in the seven layers of *twacha* are considered as *twakaroga* which involve 7 factors like 3 *Doshas* and 4 *Dushyas* i.e. *twaka, rakta, mamsa, lasika* (1). *Ayurvedic* classification i.e., *Mahakustha, Kshudrakustha* are all included in obstinate skin diseases in modern science. *Acharyas* have described that all *Kushtha* have *tridosha* involvement but the type of *Kushtha* depends on the predominance of particular *Doshas* (2). The nature of *Kushtha roga* is described by *Acharya Charaka* by the term *Dirgharoga* and its importance lies in the fact that, it is considered as one among the eight *Mahagadas* by *Acharya Vagbhata* and *Sushruta* (3). Changing lifestyle like eating ice cream at night, consumption of undigested & heavy food, unhealthy diet, stress enhance

the cases of *Kushta*. *Kapala kustha* is one of the *Mahakustha* in which we can see the patches in the skin looks like black and reddish pieces of *Kapala* and they are unctuous, rough, thick to touch and associated with excessive pain (4). According to *Ayurveda*, the etiological factors for *Kapala Kustha* are *Viruddha Aahara* and *Vihara* (unwholesome food and habits), *Panchkarma Mithyayoga* (improper *Panchakarma* procedures) hence causing vitiation of *Vatadi Dosh* (5). The treatment of *Kushtha* is carried out according to the predominance of the *Doshas* (6). In *Vata* predominant *Kushtha roga* oral intake of medicated ghee is indicated, in *Kapha* predominant *Kushtha roga* *Vaman* therapy (medicated emesis) should be done and in *Pitta* predominant *Kushtha roga* *Raktamokshana* (blood-letting therapy) and *Virechan* therapy (medicated purgation) are indicated (7). Other treatment modalities include *Basti* (medicated enema), *Nasya* (medicated nasal instillations), *Dhoomapana* (medicated inhalation therapy), *Lepa* (thin external application), *Pradeha* (thick external application), and use of internal medications (8). It can be compared to scleroderma; the first specific clinical symptoms to suggest a diagnosis of scleroderma is skin thickening that begins as swelling or puffiness. Later the skin becomes hard, shiny, leathery and hardens like a stone (9). The word scleroderma originates from Greek word "scleros" meaning hard and "derma" meaning skin. Scleroderma is mostly seen in women between 30-50 years of age and its prevalence is 250 cases in a million. Although the aetiology of scleroderma is not clear, genetic, and

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environmental factors have been held responsible for the onset of this condition (10). First degree relatives of scleroderma patients have a high probability of developing the disease. Silica powder, vinyl chloride, L-tryptophan, silicone breast implants and organic solvents are among the environmental factors which were suspected to cause this condition. For present study, we have reported a 67-year female patient having symptoms of *Kapala Kushtha* (Scleroderma) since last 4 years. The patient was treated with *Shamana Chikitsa* (pacification) and *Shodhana Chikitsa* (purification) with *Ayurvedic* oral medications and *Pathya* (wholesome diet) regimen. Patient started feeling better within 20 days with moderate relief.

**Materials and Methods**

- Study design: It is a single case study.
- Informed consent was taken from the patient in their language before starting the treatment.
- For the present study 67 years old female patient having symptoms of *Kapala Kushtha* for 4 years has been discussed in detailed manner.
- Assessment criteria: Subjective parameters were assessed according to the gradation of signs and symptoms.
- Patient was treated with oral medications and *Panchkarma* therapy.

**Case Report**

A 67-year Hindu female patient residing in Moshi, Pune came to OPD of Kayachikitsa Department of Dr. D. Y. Patil Ayurveda Hospital on the date 25 September 2019; with the following complaints:

- **Chief Complaints:** *Ubhaya Hasta and Manya Pradeshi Rookshata, Kharata, Daha, Kandu, Krushnavarni twaka vaivarnya.*
- **History of Present illness:** She was well before 4 years then she shifted to her native place where she was constantly exposed to sun rays because of farm work. Then gradually her skin became excessively dry & rough associated with on and off itching all over body. Due to severe dryness and itching, gradually she developed blackish discoloration of skin. She took allopathic treatment for the same from general practitioner which provided temporary symptomatic relief followed by recurrence of symptoms and hence she came to Dr. D.Y Patil Ayurveda Hospital for ayurvedic line of management.
- **History:** K/C/O Hypertension and Diabetes Mellitus from the last 5 years. On Regular Medication Tab Amlodipine 5mg 1OD, Tab Glycomet 500mg 1OD, Tab Ecosprin 75 1OD.
- **Family History:** Nil
- **Personal History:**
  - Appetite- Normal
  - Addiction- No
  - Bowel Habit- Normal 1 time/day
  - Urine- Normal

- Sleep- Disturbed due to itching & burning sensation
- Diet- Vegetarian diet, mainly of salt predominance food intake.

• **Investigations:**

- All investigations mentioned below are dated on 26/09/2019
- CBC- Hb-11.5gm/dl, WBC- 6800/cumm, Platelet- 3.11 lac/cumm
- Blood Urea- 15 mg/dl,
- Sr.creatinine- 1 mg/dl
- Urine routine & microscopic- NAD
- BSL (F)- 177 mg/dl, BSL (PP)- 236 mg/dl

• **Skin examination:**

- Inspection:
  - Blackish discoloration of skin over neck, both hands.
  - Palpation: Moisture- dryness
  - Temperature- Warmth on lesion
  - Texture- dry
  - Itching and burning sensation increases when exposed to sun and dusty winds.

• **Differential Daignosis:**

- *Kapala Kushtha*
- *Mandala Kushtha*
- *Udumbara Kushtha*

**Diagnosis**

Disease was diagnosed as *Kapala Kushtha* (Scleroderma), based on following parameters which is given below in Table No.1.

**Table No.1 Parameters**

Sr.No.	Parameters	Findings	Grading
1	<i>Kandu</i> (Itching)	Absent	0
		Mild (Occasional)	1
		Moderate (Frequently)	2
		Severe (Disturbs sleep)	3
2	<i>Daha</i> (Burning sensation)	Absent	0
		Mild (Occasional)	1
		Moderate (Frequently)	2
		Severe (Disturbs sleep)	3
3	<i>Rukshata</i> (Dryness)	Absent	0
		Mild (Not seen felt by touch)	1
		Moderate (Stretching of skin)	2
		Severe (Chapping of the skin)	3
4	<i>Kharata</i> (Roughness)	Absent	0
		Mild roughness on touch	1
		Moderate roughness on touch	2
		Severe roughness on touch	3
5	<i>Twak Vaivarnya</i> (Discoloration of skin)	Absent	0
		Mild brownish discoloration	1
		Moderate brownish discoloration	2
		Severe blackish discoloration	3

(where +++ = 3, ++ = 2, + = 1, - = 0)

**Table 2: Samprapti ghatak (Etiopathogenesis)**

Dosha	Vata Pradhan tridosha
Dushya	Rasa, Rakta, Mamsa, Lasika
Strotas	Rasavaha, Raktavaha, Mamsavaha
Strotodushti	Sanga, Vimargaman
Adhistan	Twaka
Udhhavasthana	Amashaya
Vyakta sthana	Ubhaya hasta & manya pradeshi twaka

**Treatment Plan**

- Shodhana- Virechana, Basti
- Shaman Chikitsa like Vata Shaman aushadi, Rakta Prasadak aushadi along with Bahirparimarjan Chikitsa.

**Table 3: Shaman Aushadhi and Bahirparimarjan chikitsa**

Medicine	Dose	Anupan	Route	Duration
Aampachak Vati	250 mg	Lukewarm water	Oral	2 tab twice daily
Gandhak Rasayan	250 mg	Lukewarm water	Oral	2 tab twice daily
Raktashodhak Vati	250 mg	Lukewarm water	Oral	2 tab twice daily
Maha Manjisthadi Kashaya	40 ml	Lukewarm water	Oral	40 ml twice daily
Panchatitkta Ghrita	10 ml	Lukewarm water	Oral	10 ml twice daily
Gandhakadi Malhar	As required	-	Local application	Twice a day

**Contents of RaktaShodhak Vati**

It is the combination of drugs of Kandughna Mahakashaya and Kushthaghna Mahakashya explained in Charak Samhita in Shadvirechanshatashritiya Adhyaya. The ingredients are illustrated in table 4 (11).

**Table 4: Contents of RaktaShodhak Vati**

Sr.No.	Sanskrit Name	Latin Name
1	Nimba	Azadirachta indica A. Juss
2	Amlaki	Emblica officinalis Gaertn
3	Haritaki	Terminalia chebula Retz.
4	Bibhitak	Terminalia bellerica Roxb.
5	Daruharidra	Berberis aristata Dc.
6	Manjistha	Rubia cordifolia Linn.
7	Sariva	Hemedismus indicus R. Br.
8	Yashtimadhu	Glycyrrhiza glabra Linn.

**Table 5: Shodhan chikitsa**

Procedure	Medicine	Dose	Duration	Route
Snehapana	Goghrita + Panchatikta Ghrita (1:1)	Starting from 40 ml in the increasing order up to 160 ml.	4 days	Oral
Sarvanga abhyanga and Swedana	Nimba taila Bashpa sweda	As per requirement	13 days	Local application
Virechan	Abhayadi modak-2, Icchabhedi rasa-1, Triphala kwatha - 50 ml, Castor oil - 20 ml	-	1 day	Oral
Basti	Raktashodhak Kashaya Ksheerabasti (Sariva, Manjistha, Nimba, Khadira, Triphala, haridra, Karanja each 3gms, milk 250ml, water 250ml)	250 ml	10 days	Anal

**Observations and Results**

The Results observed after the treatment: By the end of 20<sup>th</sup> day moderate relief was seen in Ubhaya Hasta and Manya pradeshi Rukshata (dryness), Kharata (roughness), Kandu (itching), Daha (burning sensation) & Twaka vaivarnya (discoloration) which are shown in Table No.6 below.

**Table 6: Showing overall result of treatment**

Symptoms	Before treatment	After treatment
Kandu	+++	+
Rukshata	++	-
Daha	+++	-
Kharata	+++	-
Twaka vaivarnya	+++	++

Figure No.1 Before treatment

(a) (b)

Figure No.2 After treatment

(a) (b)





## Discussion

In the present study *Shodhana* (purification), *Shaman* (pacification) and *Bahirparimarjan Chikitsa* (liniments) were advised to the patient. First as *Deepan – Pachana* (increasing digestive fire), *Amapachak Vati* was given, which contributes to *Agnivardhan* and *Amapachan*. After that, *Snehapan* was given with the *Panchatikta Ghrita* for 7 days for *Abhyantar Snehana* and *Vatashamana*. *Nimba tail* was used for the purpose of *Bahyasnehan*, which reduced the dryness, provided the moisturization, improved the blood circulation. *Sarwanga Swedan* was followed after *Snehan*, it does the *Doshavilayana* (liquefies the *doshas*) and brings them from *Shakhas* to *Koshta* to eliminate them. It also removes the *Strotorodha* (obstruction in the *strotas*).

### Mode of action of Oral medications

- *Amapachak* causes *Amapachan* (digest toxins) and *Agnideepan* (improves metabolism).
- *Raktashodhak Vati* acts as *Varnya* (improves complexion) and *Raktashodhan* (blood purification) (11).
- *Gandhak Rasayan* acts as *Kandughna* (anti-itch), *Dahaprasaman* (reduces burning sensation), *Raktashodhan* (purifies blood), *Krimighna* (anti-microbial) (12).
- *Mahamanjisthadi Kashya* has properties like *Varnya* (improves complexion), *Kapha Pittashamak*, *Shothahara* (Oedema reducing), *Kushtaghna* (Curing skin diseases), *Vranropak* (Wound healer) (13).
- *Panchatikta Ghrita* has properties like *Deepan* (improves metabolism), *Pachana* (digest toxins), *Strotoshodhaka* (removes obstruction of bodily channels), *Raktashodhaka* (blood purification), *Kushtaghna* (cure skin disease), *Kandughna* (anti-itch) and *Varnya* (improves complexion) (14).
- *Gandhakadi Malhar* is *Kushtaghna* (cure skin disease), *Kandughna* (anti-itch) and *Varnya* (improves complexion) (15).

### Mode of action of Panchakarma therapy

- *Nimba taila* used for *Bahya Snehana* has *Vata-pitta Shamak* activity, along with other properties like *Krumighna* (antimicrobial), *Shothahara* (anti-inflammatory) and *Ropana* (wound healing) (16).
- *Swedana*: Hot fomentation at the local site of pain with *Dashamoola* decoction does downward movement of *Vata*, reduces stiffness and heaviness from the body (17).
- *Virechan*: *Virechan* drugs like *Abhayadi Modak*, *Ichhabhedhi Rasa*, *Triphala*, and *Eranda taila* are having *Ushna*, *Tikshna*, *Sukshma*, *Vyavayi*, *Vikasi* properties, and *Adhobhagahara prabhav*.
- *Basti*: *Basti* is directly contraindicated by *Acharyas* because it is said to aggravate *Kushtha roga* but it is indicated in some conditions like in excess of *Vayu*, *Avarabala vyadhi* and *Vruddha* by using *Yukti pramana*. *Basti* is said as best line of treatment for *Vata* predominant diseases. Also, patient visited us in *Varsha ritu* which is *Vata dosha pradhan kala* with signs & symptoms of aggravated *Vata* (*Rukshta*, *Kharta*, *krushnavarni twkavaivarnya*) hence *Basti*

*Chikista* was planned. *Ksheera basti* is categorized under *Niruha Basti* though it serves as both *Mridu Shodhan* and *Brimhana* action. *Ksheera* possesses the property of *Madhura*, *Sheeta*, *Snigdha* and *Pushtikar*. Due to its *Mridu*, *Snigdha*, *Slakshna* and *Picchilaguna* it counters *Rukshtawa*. Also, as it is *mridu rechaka* it pacifies vitiated *pitta dosha*. As there were associated symptoms of *Pitta* and *Rakta dushti*; *Rakta prasadak dravyas* like *Sariva*, *Manjistha*, *Nimba*, *Khadir*, *Triphala*, *Haridra*, *Karanja* are used for *Basti* dravya preparation.

## Conclusion

All *Kushtha* are difficult to treat. In modern medicine, mostly steroids are used which give only symptomatic and temporary relief, in contemporary view of *Kapala Kushtha*. Long period of treatment in the form of suppressive and symptomatic are necessary in both therapies. While *Ayurveda* herbs along with *Panchakarma* therapy shows highly encouraging results in *Vataja Kushtha*. We have specially focused on action of *Raktashodhak Ksheer Basti* in this condition. All these drugs perform the therapeutic pharmacological action based on innate qualities i.e., *Rasa* (Taste), *Guna* (Properties), *Veerya* (Potency), *Vipaka* (Final transformation) and *Prabhava* (Specific potency) altogether and follow the *Samprapti Vighatana Chikitsa Siddhanta* (Breaking of etiopathogenesis as a principle of treatment). This was a single case study which proves effect of *Ayurveda* treatment on *Kapala Kushtha* (Scleroderma).

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