DOI: https://doi.org/10.36094/sc.v89.2024.Management_of_Mandala_Kustha_Through_Ayurveda.Sharma 197

Sci. and Cult. 90 (5–6) : 197-202 (2024)

Recipeint of Dr. Prabhat Kumar Mukherjee Memorial Ayureshana Young Researcher Gold Medal

MANAGEMENT OF *MANDALA KUSTHA THROUGH* AYURVEDA: A CASE REPORT

PRATIK SHARMA[1], ANAND MORE[2], SHALINI RAI[3] AND SHAMIYA PARVEEN[4]

Kustha is a term that encompasses a broad spectra of skin diseases in the classical texts of Ayurveda. Almost all the Kusthas can be diagnosed clinically in the present Era on the basis of its classical presentations but needs keen expertise. Skin diseases are common these days due to improper changes in life style, consumption of Viruddha Ahara (antagonistic food), unsanitary condition and mental stress. Mandala Kustha is one of the seven Mahakusthas which occurs due to predominance of Kapha Dosha. It clinically presents as Shveta (~whitish), Rakta (~Blood Reddish), Sthira (~immobile), Styanah (~dense), Snigdha (~unctuous), Utsanna (~Elevated), Mandala (~Circular) skin lesions. A 29 years old female presented at the OPD of Government Ayurvedic Institute at New Delhi with chief complains of multiple Reddish white circular elevated skin lesions 1-2 cm in diameters on the face for last 3-4 months. It was spreading gradually to different parts of the body. Brihat Manjisthadi Kashayam, Pancha Tikta Guggulu Ghrita, Arogyavardhani Vati, Draksharishta, Avipattikar Churna, Gandhak Rasayan were administered in the patient with the proper follow of Pathya (compatible health regime). Complete remission of the skin lesion was noted within a span of 6 months with no recurrence in post treatment as visible in the images. Classical Ayurvedic formulations with Nidana Parivarjanam (avoidance of etiological factors) are a boon to treat chronic skin conditions in a very effective and cost friendly approach

Introduction

Skin is the largest organ of our body which reflects the mental, physical and physiological health of an individual. Skin serves a number of metabolic and excretory purposes in addition to covering and protecting of body. Among all the skin problems reported by patients in general practice and hospitals,*Kushta* make up one of the major groups. *Kustha* can be of innumerable types depending on presentations and *Doshic*permutations but is concisely classified into 7 *mahakusthas*and 11 *khsudrakusthas*(1).Improper Lifestyles in terms of *Viruddha Ahara* is the principle *Nidana* in precipitating all *Kusthas*(2).One such condition is Mandala *Kushta*as the name suggested this kind of skin disease typically manifests in the shape of *Mandala*, a circular raised patch. The four most typical signs of *Mandala Kushta* are *Styanam, Sthiram, Shwetam*and*Raktam*(3).*Mandala Kushta*is a disease that is *Krichha Sadhya* (~difficult to cure)(4).It is caused by the vitiation of the *Kapha Dosha*predominancy along with *Pitta* and *Vata* as well as

[1]PhD Scholar, [2]Professor & HOD, [3]Assistant Professor, [4]Post Graduate Scholar
Department of Rog Nidana Avum Vikriti Vigyana, All India Institute of Ayurveda, New Delhi
Correcponding author's e-mail: sharma.pratik21@yahoo.co.in

a b c

Fig. 1: Showing *Styanam, Sthiram, Shwetam, Raktam, Snigdha, Utsanna* and *Mandala* Figure 1: (a) Round circular lesion, immobile, reddish brown in colour, (b) showing clear margin and whitish appearance at the centre of the lesion, (c) Showingdense, unctuous, Elevated Circularskin Lesionsat First Visit 15 May 2023

*Dushyas*of *Raktha* and *Mamsa Dhatu* (5). The condition mostly manifests as skin signs and causes both physical and psychological difficulties.

Although treatment approaches are available in conventional systems, they are associated with a few limitations. Thus, many such cases are approaching traditional systems for possibilities of treatment. One such clinical case is presented here in which the diagnostic approach and treatment principles is entirely based on classical Ayurveda theories and *Sutras*(~aphorism).

Patient Information

A 29 year old female, single and working at private firm presented to the Outpatient Department (OPD) of All India Institute of Ayurveda, New Delhi, on May 15, 2023 with chief complains of circular white-reddish multiple round lesions on face with itching for last 2 months. She was a resident of I-6/431, Sangam Vihar, New Delhi and belonged to middle class socio-economic status. She was accompanied by her mother during her visit to the hospital OPD. She was facing a sense of physical and psychological discontent due to her skin appearance of face resulting in a lack of confidence in her job and related works.

Clinical Findings

The patient presented with*Styanam, Sthiram, Shwetam, Raktam, Snigdha, Utsanna* and *Mandala*lesions on face with itching [Figures 1a, b, and c]. She had associated complaints of unsatisfactory bowel movements, general weakness and occasional indigestion. She had no relevant family or past history of the disease. There was no genetic predisposition. *Aharaja Nidana* (~dietary etiological factors) such as excessive intake of excessive oily and spicy food, curd with non veg, milk with salt containing food items, tea, and curd was found to be prevalent along with day sleep being *Viharaja Nidana* (~lifestyle etiological factors). These dietic factors in the form of *Viruddha Ahara* (~antagonistic food) are classically defined to be the principle etiological contributors in the

Fig. 2: (a) Complete shedding off lesions (b), (c) Clear and normal appearance of skin on 14 August 2023

Table 1: Timeline of Events for Case

Date	Complaints	Events and intervention	Treatment alterations
May 15 2023	As described previously	The patient was diagnosed as a case of *Mandala Kushta*, assessment was done on the bases of sign and symptoms given in the *Samhita*.	As detailed before
May 29 2023	No fresh complaints	Improvement in symptoms like itching, general weakness and constipation.	Same treatment as advised
June 12 2023	No fresh complaints	Appearance of normal skin colour started from the centre of the lesion about 0.5 cm in diameter.	Same treatment as advised
June 26 2023	No fresh complaints	Appearance of normal skin colour started from the centre of the lesion about 2 cm in diameter and the boundary of lesion started to fall off.	Same treatment as advised
July 17 2023	Mild increase in *Kandu* for last 10 days due to improper diet during a marriage visit	Dead skin of lesion completely falls off giving a pale colour to the skin where the lesion was previously present.	*Arogyavardhinivati* was stopped and replaced with *Navayasa Lauha* 250 mg twice daily with lukewarm water. A *Lepa* of *Raktachandan, Triphala, Yashtimadhu, Dhanyaka* mixed with *Gulab Jala* was applied on face alternate day for 15-20 minutes.
August 14 2023	No fresh complaints	Normal appearance of skin colour where the lesion was previously present.	All medicines were stopped with only Kashayam was continued at 10 ml twice daily with lukewarm water
September 12 2023	No fresh complaints	No re-occurrence noted.	A *Lepa* of *Raktachandan, Triphala, Yashtimadhu, Dhanyaka* mixed with *Gulab Jala* was applied on face alternate day for 15-20 minutes.
October 10 2023	No fresh complaints	Skin glow was enhanced and no re-occurrence of lesion was noted.	Regular *Lepa* application was discontinued and only once or twice in afortnight was advocated

pathogenesis of *MandalaKustha*. The patient was advised to stop these types of food substances and was counselled regarding the *Pathya* and *Apathya* (~wholesome and unwholesome). She was counselled regarding the treatment procedure that it would require strict medications with dietary restrictions are to be followed.

Timeline and Therapeutic Intervention

The timeline of events for the patient is given in Table 1.

Diagnostic Assessment

Haematological and Biochemical investigations were carried out before and after the treatment to establish the safety on blood parameters on intervention(Table 2).The patient was diagnosed with a condition of *Mandala Kushta* depending on the clinical signs and symptoms of circular raised patch, red-white in colour, stiff, stable and with oily appearance. The patient's lesions were measured by scale in centimeters (cm) and was found about 1-2 cm in diameter.

Therapeutic Interventions

The treatment protocol was selected based on the Ayurveda principles and *Sutras* confined to the pharmacological actions of the drug. The detailed drug

intervention protocol is elaborated in Table 3. The treatment was started with *Hetu Parivarjana*, the patient was asked to stop all the predominant *Aharaja, Viharaja*and*Manasika Hetus*along with all previous allopathic medications. A wash out period of 7 days was implemented and only *Avipattikarchurna* was given at a dose of 3 gm twice daily. *Shaman Chikitsa* was planned on the basis of *Kapha Pradhana Dusti* in *Mandala Kustha.* Local application of *Panchtikta Guggulu Ghrita (PTG).*

PTG was also prescribed on the lesions twice daily. The patient was advised to melt the *Ghrita*by double boiling methodto avoid any chemical transformation in properties of *Ghrita*. After 2 months of treatment patientcomplainedof mild increase in *Kandu* for last 10 days due to improper diet during a marriage visit, *Arogyavardhinivati*was stopped and replaced with *Navayasa Lauha* 250 mg twice daily with lukewarm water. A *Lepa* of *Raktachandan, Yashtimadhu*,(6)*Dhanyaka*and *Triphala*(7) mixed with *Gulab Jala*(~rose water) was applied on face alternate day for 15-20 minutes. After the treatment of 3 months all the lesions completely falls off with the appearance of normal skin colour and texture.

Follow-Up and Outcome

The patient was followed up at regular interval of 15 days for 3 months and followingwhich every 30 days. The results were highly satisfactory. The reappearance of normal skin colour started from the centre in all the lesions about 0.5 cm in diameter nearly after around 30 days of intervention. After 45 days, appearance of normal skin colour began from the centre of the lesion about 2 cm in diameter and the boundary of lesion started to fall off. After 60 days dead skin of lesion completely falls off giving a pale colour to the skin where the lesion was previously present and after 75 days the skin appears normal in colour and texture (Figure 2a, b and c). During the follow up for next two months there were no re-occurrence noted and there was enhancement in the glow of skin.

Discussion

In order totreat *Mandala Kushta*or any other skin disorders, *Nidana Parivarjana* (removal of etiological elements) of incompatible dietary items, such as milk with fish or meat preparations, day sleep is crucial. *Mandala Kushta* causes red spots, patches, burning sensations, itching, and other symptoms. The primary physiological processes implicated in the pathophysiology of the illness are due to vitiation of *Tri-dosha, Rakta* and *Twaka*. Samhita based diagnosis and treatment was the prime motive in treating a condition of *Mandala Kustha*. *Koshtha Shodhana* (~bowelpurification), *Pitta* pacification, *Rakta Shodhana* (~blood purification), proper diet plan and *Nidana Parivarjana*were planned in the patient where significant outcomes were observed.

Table 2: Haematological and Biochemical investigations at Commencement of Treatment, Dated- 20 March 2023 and after the treatmentDated-12th September 2023

Parameters	Before Treatment	After Treatment
Hematological parameters		
Hemoglobin	13.8g/dl	13.7g/dl
RBC Count	4.40 million/cumm	4.37million/cumm
ESR	10 mm 1stHr	18 mm 1stHr
Total Leucocyte Count	4830/cumm	6200/cumm
DC Neutrophils	69	65
Lymphocytes	24	27
Monocytes	06	07
Eosinophils	01	01
Basophils	00	00
Biochemical Parameters		
Glucose (fasting)	90 mg/dl	94.7mg/dl
Glucose (PP)	116 mg/dl	112mg/dl
Blood Urea	15 mg/dl	16.9 mg/dl
Serum Creatinine	0.62 mg/dl	0.77 mg/dl
Serum bilirubin	1.0 mg/dl	0.9 mg/dl
SGOT	23	27.1 U/L
SGPT	23	31.4 U/L
Alk Phosphatase	85	90 U/L
Total Cholesterol	178 mg/dl	178 mg/dl

gm/dl- Gram per decilitre, mm hr- milli meter hourSGPT- Serum Glutamic Pyruvic Transaminase, SGOT- Serum Glutamic Oxaloacetic Transaminase, mg/dl- milligrams per decilitre, U/L- Units per Litre, g/dl- Grams per decilitre. PP- Post Prandial

Mode of Action of Different Formulations

Patient had*Sukumara Gatra* (~ delicate body), *Madhya kostha* and was unable to get admitted in hospital due her regular office work. Thus, *Avipattikara Churna* was given for *Mridu Koshtha Shuddhi* (~mild laxative). The formulation *Navayasa Lauha* is indicated in*Kustha* and has *Deepana-pachana, Srotoshodhaka* (cleaning of structural or functional channels of body), *Tridoshaghna, Rasa-Raktavardhana*(quantitative increase in *Rasa* and *Rasakta dhatu*), and *Rasayana* (rejuvenation) properties

Table 3: Drug Intervention Protocol

Duration	*Aushadha* (drug)	*Matra* (dose), *Kala* (time of administration), *Anupana* (vehicle)
May 15, 2023 to October 10, 2023	*Br. Manjisthadi Kwath, Arogyavardhani Vati, Gandhak Rasayana*	15 ml with equal amount of water, 250 mg, 250 mg daily before breakfast and dinner with lukewarm water
	Navayas Lauha	125 mg twice a day before breakfast and dinner with lukewarm water
	Avipattikar Churna	3 g daily before breakfast and dinner with lukewarm water
	Draksharishta	10 ml with equal amount of water day before breakfast and dinner with lukewarm water
	Panchtiktaguggulughrita	5 ml twice a day before breakfast and dinner with lukewarm water

ml- milli litres, mg- milli grams, g- gram,

(8). *Arogyavardhini vati* is one of the finest drugs used for the treatments for skin ailments. As a primary constituent, *Katuki* possesses antioxidant and antipruritic qualities. The contents like *Tamra Bhasma* (~incinerated copper), *Guggulu, Katuki,Triphala*are having *Lekhana* (~weight reducing), *Dipana* (improving digestion and metabolism), *Medohara* (correcting lipid metabolism and trasportation) properties hence pacifying Kapha Dosha due to its *Ushna Tikshna guna*. It also functions as a *Dhatuposhaka,* nourishing bodily tissues and so treating sickness at the *Dhatu* level. It is*Tridoshashamaka, Pachana, Hridya* (good for the heart),and *Deepana,* and it is recommended for treating *Kushta* (9). Shilajatu is having *Tikta*, *Katu* and *Kashaya Rasa, Katu Vipaka*, *Ushna Virya, Rechaka, Shoshana,* and *Chedana* properties. It also maintains the excellent status of *Agni* and *Srotas* (removes the blockage of microchannels leading to better perfusion of tissue) by *Katu Vipaka* and *Ushna Virya* simultaneously reduces *Kapha dosha* (10). *Manjistha* is the primary constituent of *ManjishthaadiKwatha* and has *Varnya* properties.*Manjistha* is beneficial inKustha and treats the discoloration of skin (11). *Sariva, Raktachandan, Manjistha* were selected from *Varnya Maha Kashaya* of Charak Samhita to promote and re-establishment of optimum facial skin color.

Gandhaka Rasayana is aherbo-mineral formulation that contains *Gandhaka* (~sulphur) that has been fortified with various liquid media. Its qualities include *Kledaghna* (~removing toxins), *Kandughna* (~anti-itching), *Rasayana* (~rejuvenating), *Amapachana, Kushtaghna* and is beneficial in treating *Jirnajwarahara* (~chronic antipyretic)(12). Sulphur is a significant antioxidant and anti-inflammatory properties and is crucial in the treatment of long-term inflammatory diseases(13).

Consuming *Panchatikta Guggulu Ghrita* has *Agni Deepana* and *Pitta Prashaman* action and it is widely used in the treatment of *Kustha.Ghrita* by default has *Varna Prasadana* (~ better complexion or beauty) action which is beneficial for the skin (14). *Draksha* being the principle ingredient in *Draksharishta* its action on *Mandala kustha* can be understood in terms of presence of resveratrolwhich is a powerful Antioxidant reducing oxidative stress at dermo-cellular level (15). Hence this multi formulation modality was chosen to treat a very difficult to treat *Kapha* predominant skin condition like Mandala.

Further, the investigations carried out also establish the safety of the prescribed classical Ayurveda medicines, despite the fact that some of the drugs were herbo-mineral preparations. This care report supports the safety and efficacy of the Ayurveda formulation in skin disorders.

Conclusion

Samhita based treatment modalities in patients of *Mandala Kustha*are highly effective.*Nidana Parivarjan*should be the first step in treating any skin condition. We are able to establish a cost effective and easy to administer treatment in a disease of high cosmetic importance.The said protocol can be replicated in higher sample size to generate strong evidence in the efficacy of ayurveda.

Declaration of Patient Consent

Authors certify that they have obtained a patient consent form, where the patient has given her consent for reporting the case along with the images and other clinical information in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity but anonymity cannot be guaranteed.

Financial Support

Nil

Conflicts of Interest

There are no conflicts of interest. ❒

References

1. Trikamji Y. Charak Samhita, Ni:5/4. 2020th ed. Vol. 1. varanasi: Chaukambha Surbharati Prakashan; 2020. 216 p.
2. Trikamji Y. Charak samhita, Ni:5/3. 2020th ed. Vol. 1. varanasi: Chaukambha Surbharati Prakashan; 216 p.
3. Trikamji Y. Charak Samhita, Chi:7/16. 2020th ed. Vol. 1. varanasi: Chaukambha Surbharati Prakashan; 2020. 450 p.
4. Trikamji Y. Charak Samhita, Ni:7/9. 2020th ed. Vol. 1. varanasi: Chaukambha Surbharati Prakashan; 2020. 218 p.
5. Trikamji Y. Charak Samhita, Ni:5/5. In: 2020th ed. varanasi: Chaukambha Surbharati Prakashan; 2020. p. 217.
6. Trikamji Y. Charak Samhita, Su:4/10. 2020th ed. Vol. 1. varanasi: Chaukambha Surbharati Prakashan; 2020.
7. Peterson C, Denniston K, Chopra D. Therapeutic Uses of Triphala in Ayurvedic Medicine. J Altern Complement Med. 2017 Jul 11;23.
8. Sharma P, Chattopadhyay A, Sengupta A. Ayurvedic management of Shvitra (~vitiligo): A case report. J Ayurveda Case Rep. 2023 Jun;6(2):80.
9. Raut A, Dhami-Shah H, Phadke A, Shindikar A, Udipi S, Joshi J, et al. Picrorhiza kurroa, Royle ex Benth:Traditional uses, phytopharmacology, and translational potential in therapy of fatty liver disease. J Ayurveda Integr Med. 2023 Jan 1;14(1):100558.
10. Shastri AK. Sushruta Samhita of Sushruta, Chikitsa Sthana. 13th ed. Che. 13, ver 8-9. 13th ed. Vol. 1. varanasi: Chaukhamba Sanskrit Sansthana; 2002. 65 p.
11. YT A. Charaka SaChita of Agnivesha, Sutra Sthana. Ch. 4, ver.8. Vol. 1. varanasi: Chaukambha Surbharati Prakashan; 2016. 78 p.
12. Shastri L. Yogaratnakar, Uttarardh; Rasayanadhikar: Verse 1-8. 2010th ed. varanasi: Chaukambha Surbharati Prakashan; 501–2 p.
13. Parcell S. Sulfur in human nutrition and applications in medicine. Altern Med Rev J Clin Ther. 2002 Feb;7(1):22–44.
14. Walkikar S. Pharmacological Importance of Ghrita in Ayurveda. Int J Res AYUSH Pharm Sci. 2023 May 31;1–5.
15. Deepashri.T & Suchetha Kumari: Literature Review of Draksha (Vitis Vinifera). 2017.