ABSTRACT

In recent years, there has been a considerable increase in the incidence of skin problems in tropical and developing countries like India due to various reasons like poverty, poor sanitation and unhygienic conditions, pollution etc. Dadru is one of the commonest skin diseases found in the society. It is a fungal disease caused due to the fungus Tinea. Acharya Charaka included Dadru in Kshudra Kushtha. On the other hand, Acharya Sushruta and Acharya Vagbhata included it in Mahakushtha. Clinically, initially Dadru resembles Kshudra Kushtha, which is easily curable by local application of medicine but if neglected, it goes into deeper tissues and takes the shape of Mahakushtha. At this stage Dadru is not easily curable. Taking all these into consideration, it was decided to take this disease for study.

For present study, we had reported a 28 years old female patient, having red and white coloured circular lesions over her ventral surface of forearm since 2 months. There was no significant past history of any other chronic disorder in the patient. Patient was treated with Gandhaka Rasayana 250 mg, three times/day orally and Dadruhara lepa for local application.

Reddy A. P.*1, Chandane P. B.2, Puri D. K.3, Damle R. V.4 and Kathe M. S.5

1Associate Professor, Department of Rog Nidan Avum Vikriti Vigyan, R A Podar Medical (Ayurved) College, Worli, Mumbai, Maharashtra, India.

2P. G. Scholar, Department of Rog Nidan Avum Vikriti Vigyan, R A Podar Medical (Ayurved) College, Worli, Mumbai, Maharashtra, India.

3HOD and Professor, Department of Rog Nidan Avum Vikriti Vigyan, R A Podar Medical (Ayurved) College, Worli, Mumbai, Maharashtra, India.

4Lecturer and Assistant Professor, Department of Rog Nidan Avum Vikriti Vigyan, R A Podar Medical (Ayurved) College, Worli, Mumbai, Maharashtra, India.

5P. G. Scholar, Department of Rog Nidan Avum Vikriti Vigyan, R A Podar Medical (Ayurved) College, Worli, Mumbai, Maharashtra, India.
Patient reported significant improvement in colour of lesions as well as other associated symptoms.

**KEYWORDS:** Dadru, Tinea, Kushtha, Gandhaka Rasayana, Dadruhara Lepa.

**INTRODUCTION**
Skin is the largest organ of human body. It reflects the health of the individual. It is also a target organ of many infections. In recent years, there has been a considerable increase in the incidence of skin problems in tropical and developing countries like India. Tinea is one of the most common but miserable fungal infection affecting all the ages of population and still stands as a challenge to different medical systems.

According to Ayurveda, skin diseases have been compiled under the heading of Kushtha and Acharya Charaka included Dadru in Kshudra Kushtha. On the other hand, Acharya Sushruta and Acharya Vagbhata included it in Mahakushtha. Clinically, initially Dadru resembles Kshudra Kushtha, which is easily curable by local application of medicine but if neglected, it goes into deeper tissues and takes the shape of Mahakushtha. At this stage, Dadru is not easily curable. Dadru is Kapha Pitta Pradhan Vyadhi. Dadru can be diagnosed by symptoms like intense itching, erythema, exanthemas and discoid lesions with elevated borders.

In modern dermatology, Dadru can be referred to as Ringworm/Tinea. Tinea is a Latin word for worm. The infections were originally thought to be caused by worm like parasites. Commonly the infection types are named with respect to the affected body parts - Tinea corporis or Ring worm (general skin), Tinea Cruris or Jock itch (groin), Tinea onchomycosis (nails), Tinea capitis (ring worm of scalp).

Fungal infection of the skin and nails is a common global problem. The high prevalence of superficial mycotic infections shows that 20-25% of the world’s population has skin mycoses, making these one of the most frequent forms of infection. Local socio-economic conditions and cultural practices can also influence the prevalence of a particular infection in a given area. Treatment of tinea depends upon the severity of infection.

**MATERIALS AND METHODS**
**Place of study:** R A Podar Medical (Ayurved) College, Worli, Mumbai, Maharashtra, India.
CASE REPORT

The present case study is management of Dadru with Dadruhara lepa and Gandhaka Rasayana. A 28 years old female patient came to R A Podar Medical (Ayurved) College, Worli, Mumbai, Maharashtra, India, with chief complains of
1. Severe itching over ventral surface of left forearm (Kandu)
2. Formation of erythematous lesions on forearm (Mandala)
3. Burning sensation over the lesions (Daha) Patient had above complaints since 1 year.

History of present illness

The patient was normal 1 year ago. Since then patient has been suffering from itching over left forearm, foramation of a single big red and black coloured circular lesion with indurated margin over the forearm along with burning sensation without secretions from the papules. She had use various local and oral allopathic medicines but there was no significant relief. Hence she came to OPD No 15 of R A Podar Medical (Ayurved) College, for management.

Past History

Not significant.

Personal History

Table. 1: Personal History.

<table>
<thead>
<tr>
<th>Name –XYZ</th>
<th>Bala:Madhyama(Average)</th>
<th>Prakriti: Kapha Pitta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age-28 years old</td>
<td>Sleep: Inadequate due to severe kandu(itching)</td>
<td>BP: 110/70 mmHg</td>
</tr>
<tr>
<td>Sex-Female</td>
<td>Addiction: None</td>
<td>Weight:50 kg</td>
</tr>
<tr>
<td>Mariatal Status-Married</td>
<td>Bowel habit: Regular</td>
<td>Height 159</td>
</tr>
<tr>
<td>Occupation-House Wife</td>
<td>Appetite:Good</td>
<td></td>
</tr>
</tbody>
</table>

Table. 2: Ashtavidh Pariksha.

<table>
<thead>
<tr>
<th>Nadi-80/min</th>
<th>Shabda(Speech)-Clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mala- Constipation</td>
<td>Sparsh- Normal</td>
</tr>
<tr>
<td>Mutra-Normal</td>
<td>Druka-Normal</td>
</tr>
<tr>
<td>Jivha-Saam(coated)</td>
<td>Akruti-Madhyama</td>
</tr>
</tbody>
</table>

Skin examination

Patient had erythematous papular circular lesions with indurated border over ventral surface of left forearm and ventral surface of elbow joint of left hand without discharge.

Plan of treatment-Patient was treated on OPD basis.
A) Selected external Ayurvedic drugs: Dadruhara Lepa-made by mixing the fine powders (Sukshmachurna of 1 to 8) taken in equal quantity and 9) Buttermilk

Composition
1) Laksha (Laccifer lacca)
2) Trikatu-Sunthi (Zinziber officinale)
+ Maricha (Piper nigrum)
+ Pippali (Piper longum)
3) Chakramarda seeds-(Cassia tora)
4) Guggulu-(Commiphora wighti)
5) Kushtha-(Sassurea leppa)
6) Pita Sarshapa-(Brassica campestis)
7) Haridra-(Curcuma longa)
8) Mulaka seeds-(Ramphanus sativus) and
9) Takra(Butter milk)

Dose—Application on affected area twice a day. The lepa was advised to apply on lesions daily, left for 20 minutes and rinsed off using cold water.
Duration—Treatment was carried out daily for 1 month.

Follow up—After 15 days: Criteria for selection of external medicine—Medicines for external application were selected due to their properties beneficial for treating Dadru.

1) LAKSHA
Latine Name-Laccifer lacca
Ayurvedic properties
Rasa-Kashaya(Astringent)
Guna-Laghu, Snigdha
Virya-Shita
Vipaka-Katu
Dosha Karma- Pacifies Kapha and Pitta
Dhatu-Rasa, Rakta and Asthi
Prabhav-Rejuvenation and Supplement
Gamitva-Rasa-Raktavaha, Annavaha, Asthi Majjavaha
Rogaghnata-Vrana, Tvachavikar (Eczema, Scabies, Herpes)
2) TRIKATU

a) Shunthi (Zinziber Officinale)
Rasa-Katu
Guna-guru, Snigdha, Tiksna
Virya-Ushna
Vipaka-Madhura
Dosha Karma- Pacifies Kapha and Vata

b) Maricha (Piper nigrum)
Rasa- Tikta, Katu
Guna-Laghu, Sukhma, Tiksna
Virya- Na Ati Ushna
Vipaka- Katu
Dosha Karma- Pacifies Kapha and Vata

Karma-Pramathi, Avarshiya, Chakshyushya, Chedana, Kruminut, Jantu Santana Nashanam, Vishama Jwaraghna

c) Pippali(Piper longum)
Rasa-Katu
Guna-Laghu, Tiksna
Virya- Ushna
Vipaka- Madhura

Dosha Karma- Pacifies Kapha and Vata
Dhatu-Rasa, Rakta and Asthi

3) CHAKRAMARDA

Latine Name-Cassia tora.

Parts used-External application
Seed paste is applied externally in eczema, leprosy, tinea, dermatitis, psoriasis etc. Fresh leaves are pounded with alcohol or vinegar. It is applied externally to treat eczema.

Ayurvedic properties
Rasa-Katu
Guna-Laghu
Virya- Ushna
Vipaka-Katu
Dosha Karma- Pacifies Kapha and Pitta
Dhatu-Rasa, Rakta and Asthi
Prabhav- **Dadrughnata**
Gamitva-Rasa-Raktavaha, Asthivaha
Rogaghanata-Dadru, Kushta, Jwara, shwasa, Kasa, Meha, Aruchi, Pama, Vrana

4) **GUDDULU**

**Latine Name**- Commiphora wightii

**Parts used**- Niryasa(Resin)

**Ayurvedic properties**
Rasa- Tikta, Katu
Guna-Laghu, Ruksha, Vishada, Sukshma, Sara
Virya- Ushna
Vipaka-Katu
Dhatu-Rasa, Rakta and Asthi
It was traditionally combined with other herbs for the treatment of arthritis, skin diseases, obesity, digestive problems.

5) **KUSHTHA**

**Latine Name**- Sassurea lappa

**Parts used**- Root

**Ayurvedic properties**-
Rasa- Tikta, Katu, Madhura
Guna-Laghu, Ruksha, Tikshna
Virya- Ushna
Vipaka-Katu
Dhatu-Rasa, Rakta, Asthi and Shukrala
Prabhav-Kushthagna
Rogaghanata-Vatasra, Visarpa, Kasa, Kushta, Kitibha, Kandu, Pama, Vicharachika.
6) **PEETA SARSHAPA**

**Latin Name**- Brassica campestris  
**Parts used**- Niryasa(Resin)  
**Ayurvedic properties**
Rasa- Tikta, Katu  
Guna- Laghu, Snigdha, Tikshna  
Virya- Ushna  
Vipaka-Katu  
Dhatu-Rasa, Rakta and Asthi  
Dosha Karma- Pacifies Kapha and Vata  
Gamitva-Rasa-Raktavaha, Annavaha Mutravaha.

7) **HARIDRA**

**Latin Name**- Kurkuma longa.  

**Ayurvedic properties**
Rasa- Tikta, Katu  
Guna- Laghu, Ruksha  
Virya- Ushna  
Vipaka-Katu  
Dhatu-Rasa, Rakta and Mutra  
Dosha Karma- Pacifies Kapha, Vata and Pitta  
Prabhav- Pramehghna, Twachya  
Rogaghnata- Prameha, Visha, Kandu, Kushtha, Vrana, Krimi, Twakadosha.

8) **MULAKA**

**Latin Name**- Raphanus raphanistrum  

**Ayurvedic properties**
Rasa- Tikta, Katu  
Guna- Laghu  
Virya- Ushna  
Vipaka-Katu
9) TAKRA

Ayurvedic properties
Rasa- Madhura, Amla, Kashaya
Guna-Laghu, Deepana
Virya- Ushna
Vipaka- Madhura
Dhatu- Shukrala
Dosha Karma- Pacifies Kapha and Vata
Prabhav-Snehavyapada Prashamana
Rogaghanata-shopha, Arsha, Grahani, Mutragraha, Aruchi, Udara, Pleeha, Gulma

Preperation of Lepa-Patient was asked to take 1 to 8 medicines in dry Sukshma churna form. And asked to mix it properly. Adequate Takra was added to mix them. Lepa was prepared fresh every day.

B) Selected internal Ayurvedic drug
Tab. Gandhak Raayana-250mg three times/day.
Route of administration- Oral
Kaala-Adhobhakta(after meal)
Anupan-luke warm water
Duration-1 month

Criteria for selection of internal medicine
Oral medicine was selected on the basis of their properties useful in pacifying vitiated Dosha in Dadru and ability to relieve signs and symptoms of Dadru.

Ahar Vihar advised during treatment-
Pathya
Cow milk and ghee, munga, padval, rice, spinach, methi and easilydigestive diets.

Apathya
Guda, bread, curd, prickles, chillies, fish, brinjal, jackfruit, heavy diets, alcohol etc.
Grading- criteria for assessment of result

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Criteria</th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>G4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kandu</td>
<td>No Kandu</td>
<td>Ishit Kandu</td>
<td>Bahu Kandu</td>
<td>Ugra Kandu</td>
</tr>
<tr>
<td>2</td>
<td>Raga</td>
<td>Normal skin colour</td>
<td>Faint and near to normal</td>
<td>Blanching and red colour</td>
<td>Red colour</td>
</tr>
<tr>
<td>3</td>
<td>Pidika</td>
<td>No Pidika</td>
<td>1-3 Pidika</td>
<td>4-6 Pidika</td>
<td>Greater than 7 Pidika</td>
</tr>
<tr>
<td>4</td>
<td>Size of Mandalas (diameter)</td>
<td>Zero cm</td>
<td>Less than 5 cm</td>
<td>5-10 cm</td>
<td>Greater than 10 cm</td>
</tr>
</tbody>
</table>

OBERAVATION AND RESULT
Assessment of signs and symptoms of the patient regarding Dadru was done during follow up and result were as follow.

Assessment of signs and symptoms of Dadru before and after treatment are as follows

Changes in signs and symptoms were as follows

<table>
<thead>
<tr>
<th>Sign and symptoms</th>
<th>Before treatment</th>
<th>1st follow up</th>
<th>2nd follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kandu</td>
<td>G4</td>
<td>G2</td>
<td>G1</td>
</tr>
<tr>
<td>Raga (Erythema)</td>
<td>G4</td>
<td>G3</td>
<td>G1</td>
</tr>
<tr>
<td>Pidika (Exathemas)</td>
<td>G4</td>
<td>G2</td>
<td>G1</td>
</tr>
<tr>
<td>Size of Mandala</td>
<td>G4</td>
<td>G4</td>
<td>G3</td>
</tr>
</tbody>
</table>

Table shows that there is significant relief in all signs and symptoms of Dadru. It means selected management of Dadru is effective.

Before Treatment- After Treatment

DISSCUSION
The present study was aimed at finding a safe and effective method for managing Dadru Kushtha. Dadru is manifested by appearance of discolored lesions within tractable itching. Dadru is chronic in nature, relapses and hence difficult to cure. It mostly affects in those who
don’t follow the hygienic norms or those who are immune-compromised. Dadru is Kapha dominant disease besides its Rasagata manifestations. The disease mainly involves only Rasavaha and Raktavaha Srotas without further involvement of successive Srotas. Acharya Sushruta describes the colour of the lesions in Dadru more specifically like that of copper or the flower of Atasi and mentions that its Pidika are in the form of Parimandala having spreading nature (Visarpashila) but slow in progress or chronic In nature (Chirrotham) with Kandu.

Dermatophytosis is a clinical entity caused by the members of the imperfect genera. Trichophyton, Microsporone and Epidermophyte infection.

The contents of Dadruhara lepa Viz Laksha, seeds of Chakramrda, Trikatu, Sarhapa, Guggulu, Haridra, Mulak, Kushtha are mixed with Buttermilk which possess Ushna, Tikshna, Laghu, Ruksha, Vishada Guna, Ushna Virya and Katu Vipaka properties. Due to specific Krumighna and Dadrughna contents in the Lepa it acts directly against the causative factors. The Lepa is said to be Suksma in nature as it is macerated with Buttermilk. It is an ideal vehicle for various Lepas. Acts as probiotic inhibiting the proliferation of pathogens. It also maintains the PH of the skin. With the shodhana properties Lepa also helps to continuous removal of pathogen along with dead skin debris stimulating the basal layer to proliferate well replacing them with new healthy skin cells. And due to direct Krumighna, Doshaghna, shodhna properties of Lepa there may be break in the pathogenesis and further progress of the lesions. Tropical preparation applied might have acted by its Rusha and Lekhana property for pacifying Kapha Dosha locally and maintained the equilibrium of other Doshas. The suhshma property of drugs used might have penetrate into deeper Srotas and dissolved the Sanga.

Gandhaka Rasayana is used in skin diseases and as a blood purifier hence selected for the study. It is Rakshodhak, Vranaropaka, Twachya.

Highlight of the study was Ayurvedic treatment was used as main treatment not as an adjuent treatment. No any other alloathic medicine like antihitamine was useds.

Patient had relief in her signs and symptom in 1 month and hence did not come for further management.
CONCLUSION
Hence it is concluded that Dadruhara lepa and oral administration of Gandhaka Raayana Is highly effective in the management of Dadru.

REFERENCES
3. Tropical Dermatology, edited by Roberto Arenas and Roberto Estrada.