INTRODUCTION

Skin is the largest organ of human body. Its size and external location makes it susceptible to wide variety of disorders. In recent years there has been a considerable increase in the incidence of skin problems in the tropical and developing countries like India.1 The skin is also available for minute observations so that important and sometimes insignificant alterations may be brought to the attention of the physician. Normal skin maintains an interrelated integrity and it is the purpose...
of this research work to study in detail some deviations from that integrity through clinical point of view. All the skin diseases in Ayurveda have been classified under the broad heading of ‘Kushta’ which are further classified in to Mahakushta and Kshudrakushta. Dadru is one among the Kushta. Acharya Charaka has included Dadru in Kshudra Kushta, where as Acharya Vagbhata and Acharya Sushruta have explained under Mahakushta. It involves the clinical features like Kandu, Deerghapratana, Utsanna, Mandala, Raaga, Pidakas which exhibits involvement of Kapha and Pitta. Acharya Vagbhata especially mentioned Dadru as Anushangika. Ayurvedic Classics have considered each type of Kushta to be a Tri-doshaja manifestation. Nonetheless their Dosha identity can be established on the basis of dominance of Dosha in the Samprapti. Thus Dadru is purely Kaphaja phenomenon.

On the basis of presenting symptomatology most of the scholars have simulated Dadru with ‘Tinea’ through modern perspective. It comes under, superficial fungal infections of the skin. Skin diseases are mainly caused by the involvement of several micro organisms where Tinea is one among them. Tinea/Ringworm infection is caused by a distinct class of fungi. They thrive in keratin layer of the epidermis, nails and hair. However, they do not invade the living epidermis. The serum fungal inhibitory factors in the extra vascular space prevent the penetration of the fungi in the living tissue. Several factors such as poor nutrition, unhygienic conditions, hot and humid climate, vocation promoting sweating and maceration, Diabetes mellitus, debilitating diseases, administration of corticosteroids and immunosuppressive agent, atopy, close and intimate contact with infected persons, animals and fomites predispose to ringworm infection. It should be noted that 10 - 15% of the general practitioners work with skin disorders. 5 out of 1000 people are suffering from Tinea infection. In contemporary Medical science, management of Tinea is carried out with usage of topical or systemic antifungal, corticosteroids. Long lasting usage produce the adverse effect also. Possible palliative treatment is with Ayurveda. There are numerous Yogas in Ayurveda for the treatment of Dadru Kushta, in which Sarjadi lepa is safe, economical and easily available formulation. Considering these properties the Yoga’s was selected for the management of Dadru Kushta, for this present clinical study.

MATERIALS AND METHODS:
Study Design: Open clinical trial with pre and post test design
Method of sampling: Lottery method
Sample Source: Minimum of 30 patients was selected suffering from Dadru Kushta. Patients were analyzed and selected accordingly who fulfils the diagnostic and inclusion criteria.
Drug details:
Sarjadi Lepa
Preparation:
Sarja rasa, Thusha, Chakramardabija, Haritaki are made into powder form and should be applied on the lesion by mixing with Tandulodaka. The properties of drugs like rasa, guna, virya, vipaka, karma are mentioned below,

Sarjarasa: Sarjarasa has kashaya, madhura rasa, ruksha, ushna guna, sita virya, katu vipaka, vata-pitahara, krimighna, kandughna actions.
Chakramarda: It has katu rasa, laghu, ruksha guna, ushna virya, katuvipaka, kapha-vatahara, medohara actions.
Hariteeta: It has lavana varjitha pancharasa, laghu, ruksha guna, ushna virya, madhura vipaka, tridoshahara, lekhana karma.

Diagnostic criteria:
Patients presenting with Mandala, Raga, Kandu and positive for Dermatophytosis by 10% of KOH (Potassium hydroxide) microscopic examination with or without following symptoms:
- Mandala (round)
- Raga (Erythema)
- Kandu (itching)
- Pidaka (Eruption)

Microscopic examination: Scraping collected from the skin lesion is placed on a slide and drop of KOH (Potassium hydroxide) 10% solution will be added and observed for hyphae and conidia under microscope within 03 hours of preparation.
Inclusion Criteria
- Patients who are fulfilling the diagnostic criteria.
- Patients irrespective of sex and having age group between 16 to 60 years randomly included for the study.
- Patients having history of less than one year of origin.

Exclusion Criteria:
- Patients associated with other types of Kushta.
- Onchomycosis, Tiniacapitis, Tiniapedis.
- Patients taking immune suppressive medications.
- Patients presenting with Dadru Kushta suffering with any other systemic disorders which may interfere in the course of study.
- Lesions with secondary infection.

Laboratory investigations:
Blood routine
KOH microscopic examination

ASSESSMENT CRITERIA:
Assessment was done based on the following parameters,
I. SUBJECTIVE PARAMETERS:
- Kandu
II. OBJECTIVE PARAMETERS:
Raga, Mandala, Pidaka
Assessment was done before intervention, and on 7th day based on grading’s given for signs and symptoms of Dadru.

INTERVENTION:
Clinical intervention to evaluate Upashaya: Sarjadi Lepa, local external application on the site of Dadru (Tenia) lesion (quantity sufficient) with Tandulodaka, two times a day, in morning and evening for 7 days.

OBSERVATIONS:
Total 30 patients were registered in this study, and 30 patients have completed their course of treatment. The clinical study of this study deals with all aspects of the diseases, diagnosis and treatment. In this study all the patients were categorized into 3 age groups. The observations made in this aspect lead to the conclusions that maximum no. of patients (46.66%) were from the age group of 16-31 years, while 26.66% patients were from the age group of 31-46 and 46-60 years. This is the age group when the individual is more prone to follow Nidanas of Kushtha. Male predominance 46.66% was evident from the table. There is no relationship of sex with the diseases. Maximum no. of patients i.e. 90% were Hindu. This may be due to the area where the study was performed. 26.66% were student & 23.33% were professionals. The prevalence indicates the communicable nature of Dadru among teenagers & the susceptibility of labour class to the infections is due to carelessness about hygienic norms, food habits & other Nidanas. 50% were from middle class, 13.33% were from poor class, 36.66% were rich patients. Superficial fungal infections of the skin do not have any relationship with socio-economic status because in this study 36.66% rich patients were also encountered so this could not lead to any concrete decision in this regard. 63.33% had acute onset. Dadru started with slight itching or mild irritation & the negligence led to further aggravation of the diseases. 53.33% reported the aggravation of the diseases with regard to improper diet. 30% patient reported due to exposure to dust while 16.66% patients reported summer as an aggravating factor. Modern science also supports the seasonal variation of superficial fungal infections of the skin with respect to summer season 56.66% had moderate appetite, while 36.66% patients had good appetite and 6.66% patients had poor appetite. 73.33% were of mixed diet. 36.66% people were Pitta Kaphaprakriti, 33.33% people were Vata Kaphaprakriti and 30% people were Vata Pitta prakriti. Aharaja Nidana:

Among the Aharaja Nidanas, Navanna (76.66%), excess intake of gramaanupaaudakamamsa (56.66%), Dhadhi (53.33%), Guru Ahara (50%) were observed. In this series, 66.66% patients were taking foods and drinks together and 46.66% patients were sharing personal items. Day sleep was reported by 26.66% patients. Vegadharana was common among 43.33% patients & 20% patients were drinking cold water after coming from sunlight. The lesions of Dadru were found 50% on the unexposed area where there are chances of friction, while 50% lesions were spread over exposed area.
RESULTS:
EFFECT OF TREATMENT IN SIGNS AND SYMPTOMS ON 7TH DAY
There is statistically significant change in all the signs and symptoms. All the signs and symptoms have $P < 0.001$ shown in Table No 2

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<tr>
<th>Signs and Symptoms</th>
<th>Mean</th>
<th>%</th>
<th>SD</th>
<th>SE</th>
<th>Pvalue</th>
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<td>AT</td>
<td></td>
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<td>Udgata Mandala</td>
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<td>1.3</td>
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<td>2.1</td>
<td>1.06</td>
<td>1.06</td>
<td>49.5</td>
</tr>
<tr>
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<td>2.26</td>
<td>1.06</td>
<td>1.06</td>
<td>53</td>
</tr>
<tr>
<td>Pidaka</td>
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<td>2.23</td>
<td>1.20</td>
<td>1.20</td>
<td>46</td>
</tr>
</tbody>
</table>

Graph 1: Showing Effect of treatment in Signs and Symptoms

DISCUSSION
The effect of therapy on the individual signs & symptoms is being discussed here as follows.

Kandu: Kandu was relieved by 53% and the test showed significant changes in the symptom with $p$ value $<0.001$. Raga: The Raga was relieved by 49.5%. Statistically also, the result is highly significant with $p$ value $<0.001$. Udgata Mandala: There was 44.2% relief in Udgata mandala and test showed statistically significant change with $p$ value $<0.001$.

Pidaka: There was 46% relief in Pidaka and test showed statistically significant change with $p$ value $<0.001$

Maximum patients, (56.66%) had moderate appetite, while 36.66% patients had good appetite and 6.66% patients had poor appetite. As the main nidana Dadru is viharaja and aupasargika where here agni has minimum role to play. Most of the patients i.e. 73.33% were of mixed diet. Non vegetarian diet helps in easy accumulation of and aggravation of kapha dosha. 36.66% people were Pitta kaphaprakriti, 33.33% people were Vata kaphaprakriti and 30% people were Vata Pitta prakriti. As Dadru is Pitta kaphaja kushta, the same was found in pitta kaphaprakriti persons. Among the Aharaja Nidanas, Navanna (76.66%), excess intake of gramyaanupauadakamamsa (56.66%), Dhadhi (53.33%), Guru Ahara (50%) were observed. The nidanas explained are not specific nidana of Dadru. But it leads to the aggravation of Pitta and Kapha. The combined use of Dhadhi,
Matsya, ksheera, mamsa etc for long duration can be considered as a viprakrishta nidana of Dadru. The upasarganidanana like parasanga, gatrasamsparsha, nishwasa, sahabhojana, sahashayya, vastramalyanulepana etc causes upasargarogas. In this kushta is one among them. The gatrasamsparsha and vastramalyanulepana is applicable to Dadru since dadru gets infected from one individual to another by close contact or by exchanging ones cloths. This can be considered as sannikrikshta nidana for Dadru specifically. The excessive exposure to sunlight and ativayamya lead to excess production of sweat. This in turn produces the krimi and later on the development of Dadru.

All these nidanas will lead to,
1) Agni Dushhti
2) Dosha Prakopaka
3) Dhatudushhti
4) Srotodushti
5) Decrease of Vyadhi Kshamatva

The synchronization of all above actions, due to the Nidana sevana of Kushtha creates Dhatu Shaithilya (tvak, mamsa, ambu) which forms the most important part in Kushthopatti. For the Doshas to settle, they need Shithiladhatus which is produced only by the Nidanas of Kushtha. They cause Kandu, raga, pidaka, udgata mandala etc. It leads to the manifestation of dadru. The pitta and Kapha intum causes aggravation of vata. Thus the vitiated thridoshas enters the tiryakgatasaras and reaches the bahyarogamarga. Hence the mandalas are produced at the site where the doshas get lodged.

In this series, 66.66% patients were taking foods and drinks together and 46.66% patients were sharing personal items. Day sleep was reported by 26.66% patients. Vegadharana was common among 43.33% patients & 20% patients were drinking cold water after coming from sunlight. All these Nidanas play a key role to start off the pathogenesis of Kushtha. The lesions of Dadru were found 50% on the unexposed area where there are chances of friction, while 50% lesions were spread over exposed area. Dadru can occur in anywhere in the body and can be spread to any area.

PROBABLE MODE OF ACTION OF SARJADI LEPA

The contents of Sarjadilepa are the Chakramardabeeja, hareetaki, sarja rasa, Thusha. All these have properties like Katu, Kashaya, Madhura rasa Laghu, Ruksha, Ushna Guna, Ushna, Sheethavirya& Katu, madhuara Vipaka, it acts as Kapha pitta hara as Dadru is Kapha Pitta pradhanaroga. This Lepa is also having Sheeta property as it is applied with than dulodaka, upon topical application, the active principle of the Lepa reach to the deeper tissues through siramukha& swedavahisrotas & stains it with its Laghu& Ushna property. Due to its Ushna, laghu, rooksha properties it deblocks the obstruction in swedavahisrotas & allows the local toxins to flow out through the Sweda, thus clearing out the micro channels. The UshnaViryya of SarjadiLepa & SheetaGuna of its vehicle i.e. tandulodaka causes pacification of Kapha& Pitta which forms the samprapti thus alleviating the symptoms. Kandu: In most of the patients Kandu was relieved significantly was due to the Kandughna, krimighna and kaphahara property of Chakramarda& Sarja rasa. Raga: Raga was relieved because of the pittahara and seetavirya property of sarja rasa, than dulodaka and tridoshahara property of Hareetaki. Pidaka: Pidaka was relieved by Vranaropana, Sothaghna, and Lekhaneya property of drugs. Udgata Mandala: Udgata Mandala was relieved by Laghu, ushna, kaphahara, Dadrughna property of drugs which expels the aggravated Kapha.

CONCLUSION

Dadru is one of the most common and tenacious skin diseases with repeated relapse and remissions. It is Kapha pitta pradhanaya Vyadhi. The symptoms like Kandu, Raga, Pidaka, Udgata mandala are the cardinal features of Dadru and they are similar to lesions of Dermatophytosis. Dadru is managed by Sodhana, Samana, and Bahirparimarjana Chikitsa. Local application works faster due to Physiological effect of heat on the skin. Bahirparimarjana in the form of Lepa was selected which is easy done and acts as Sthanika chikitsa for fast relief.
Observations showed teenagers and youth were the main victim of the disease. From observation, it was found that *aharaja nidana* like *navanna*, *dhadhi*, *gramya anupa audaka mamsa*, *guru ahara* and *viharaja nidana* like *sahabhojana*, sharing personal items, *vegadharana* were found to be most common causative factor for manifestation of *dadru*. It is inferred that observation of hygienic norms is important to elicit the early and better results. *Upashaya* is one of the effective tools mentioned in Ayurveda for diagnosis and treatment of diseases. Present study aimed to analyse utility of *sarjadi lepa*. The result of the study showed that *Sarjadilepa* is effective in reducing the symptoms of *dadru* with “p” value <0.001.

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