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**Review Article** 

Role Of Herbal Drugs In Dadru Kustha And Other Fungal Skin Disease :

A Review

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# ABSTRACT-

Ayurveda describes skin diseases under the broad heading called 'Kustha'. Therefore, the 'Kustha' is the whole concept of Dermatology as described in modern medical science. All the skin diseases in Ayurveda have been classified in to Mahakustha (7 types) and Kshudrakustha (11types). Acharya Charak has included Dadru in Khsudra Kustha, where as Acharya Sushruta and Acharya Vagbhata have explained under Mahakustha Kustha is produced invariably by the vitiation of seven factors; Three Dosha and Four Dushya. Dadru one of the most common

but miserable variety of *Kustha* affects the population of all age group . *Dadru* is one among Kustha *rogas* .It can be correlated with *Tinea infections*. 39% of World population is suffering from it. In India also, 5 out of 1000 people are suffering from *Tinea infections*. It is a group name for a highly contagious segmented mycelial fungus. It is commonest single fungus group infections found in an unhygienic condition especially in tropical and subtropical countries, unless properly treated they become chronic. *Incompatible foods* and activities which are mentioned in *Ayurveda* is also an important cause of *Kustha*. *Various* antifungal agents have been used for the treatment of these infection. Most common systemic agents used are Terbinafine , Fluconazole , litraconazole .In Ayurveda, so many herbal drugs *Chakramard beej*, *Bakuchi dana ,Sarshapa ,Haridra ,Daru haridra ,Motha* which are experimentally proved to control and treat *Kustha* without any adverse effect.

Keywords; Dadru kustha, Herbal drug , Antifungal activity

## **INTRODUCTION:**

Skin is the mirror of the body which reflects internal health or diseased condition. It is a link between internal and external environment and is also seat of complexion which maintains beauty and personality. It provides individual identity in the society. As being the largest organ of the body and being on the surface, it is directly exposed towards microorganism. In Ayurveda all the skin diseases are described in 'Kustha Roga'. The word Kustha described from; which makes the body ugly. According to Avurveda, a disease that tears or pulls out and destroy the beauty of the body and any type of skin

disease is called *'Kustha'*.<sup>1</sup> The word *Kustha* means the whole concept of Dermatology as described in modern medical science.

Seven materials affected morbidly are the causative source of Kustha such as three dosha(Vata,Pitta,Kapha) vitiated by etilogical factors / and four dusva (Twak,mamsa,rakta and lasika) affected with affliction by dosha.<sup>2</sup> No skin disorder is caused by a single dosha.<sup>3</sup>According to ayurvedic texts, all Acharva have described eighteen types of *Kustha* and among them seven considered as *Maha Kustha* and eleven as Ksudra Kustha but nomenclature is different.4

According to ancient text ,habitually take incompatible food items and liquids, unctuous and heavy substances ,suppress the natural urges particularly of vomiting , are exposed to physical exercise and intens heat after eating,excessively use cold, hot ,lightening measures and diet against prescribed order may initiates the etiopathogenesis of *Kustha*.<sup>5</sup>*Acharya Sushruta* has mentioned that *Kustha* is a type of *communicable disease*.<sup>6</sup>

# AIMS AND O<mark>BJECTIVES:</mark>

1-To analyze about *Ayurvedic* management of *Dadru Kustha*.

2-To show the importance of *Ayurvedic* treatment in the management of *Dadru Kustha* 

## **MATERIALS AND METHODS:**

Material:-Relevant literature is referred in *Samhitas, Sangraha granthas* and contemporary literature along with personal experiences.

## Methodology:- Review study

Literature related to the title is explored from all reliable *Ayurvedic* journals and internet. Conclusion has been drawn from systemic analysis, comparison and rationale.

### DISCUSSION

*Dadru kustha* is a type of *Kustha* that comes under Kshudra Kustha but Acharya Vagbhata and Acharya Sushruta explained under Mahakustha<sup>7-8</sup>. Acharva Dalhana classified Dadru into Sitha &Asitha.<sup>9</sup>Acharvas not explained separate Nidana for *Dadru* Kustha. According to Acharya Charak among the six layer of skin the fourth one is the seed of origin of *Dadru* 10 Dadru is Kapha Pitta pradhan skin disease<sup>11</sup> and identified by symptoms such as Kandu, Deerghapratana, Utsanna, Mandala, *Raga*, *Pidika*. *Dadru* can be correlated with the clinical features of *Tinea*. The related fungi are dermatophytes capable of causing skin changes of the type Tinea or ringworm or dermatophytes or mycosis.<sup>12</sup> It is a fungal skin disorder. Because of increase numbers immunocompromised children of .the number of invasive fungal infections has dramatically increased in both developed and developing countries. An antifungal drug is used to treat fungal infection, but use of such type of drug in large way makes the unusable due to resistance and its toxicity so people move towards herbal drugs which is more safe. In the present scenario, an emergence of multiple drug resistance in human pathogenic fungi and the small number of antifungal classes available stimulated research directed towards the discovery of novel antifungal agents from other sources, such as medicinal plants.<sup>13</sup> There is some herbal medicinal plants which play important role in antifungal activity.

### Chakramard

A study was conducted on 80 patients of Dadru (a type of Kustha) for evaluation of Lepa of a paste of leaves as external use and seeds powder as internal use. The maximum relief was observed in symptoms in itching lesion and redness<sup>14</sup> Leaves and seeds are used in the treatment of skin disorders(Ringworm and itch).<sup>15</sup> The leaf extract has shown the significant antifungal activity to inhibit the growth of Candida albicans, Aspergillus niger, Saccharomyces and cerevisiae Trichophyton *mentagrophyte*.<sup>16</sup> It shows antifungal activity due to chrysophenol and crysophanic acid-9 enthrone and other anthraquinones such as emodine, physcion and rhein.<sup>17</sup> In *Avurveda* ,the plant is used in 'Dadrughani vati' and 'Pamari Taila'<sup>19</sup>.

### Bakuchi dana

Bakuchi is conventionally used in ayurvedic system of medicine for the treatment of various kind of human disorders but especially for treatment of skin disorders such as Psoriasis, Leucoderma and leprosy in the form of internal medication.<sup>20</sup> as well as external application<sup>21</sup>. The methanol seed extract of *P.corylifolia* comprise of a promising antifungal activity against *M.furfur*, *Candida albicans* and *A. niger* as compare to seed oil. The use of *P.corylifolia* oil can help cure several skin diseases like Tinea versicular, scabies ,ringworm and psoriasis.<sup>23</sup>

#### Sarshapa

Brassica species contain contrasting profiles of glucosinolates which have biocidal activity on different pathogens including bacteria and fungi. Mustard oil is an effective antifungal ,ant parasitic, antibacterial, disinfecting and antimicrobial oil that protects the skin fro infections, wounds from getting septic and heals minor skin problems like cuts , athlete's foot, ringworm, insect bite, small lacerations, abrasions etc.

#### Haridra

The international literature reports on fungi control properties of turmeric pertaining to the plants extracts ,the essential oil and certain bioactive constituents of the plants which may prove it as an effective fungicidal in fumigation.<sup>24</sup> Arturmerone constituted 87% of the fungotoxic component of the oil.The purified ar-turmerone showed antifungal activity similar to the crude oil.<sup>25</sup>

### Daru haridra

Its active principle is *berebrine* which is shown to be active against variety of microorganism like bacteria ,viruses, fungi, protozoa etc.<sup>26</sup> Ethanolic root extract of *B.aristata* shows antifungal activity.<sup>27</sup> Three extracts of *B.aristata* (Aqueous , alcoholic and powdered root in digital led water )were tested for anti fungal activity .All the three extracts shows antifungal activity against *Candida* and *Aspergillus* species tested ,except *C,krusei* out of three type of extracts ,the bets results were obtained by using alcoholic extract. Significant antifungal activity was found against Candida species and *Aspergillus* species.<sup>28</sup>

### Motha

Essential oil and alcoholic extract of *C.rotundus* have anti fungus activity.Chemical analysis showed the presence of compounds with Best-Known antimicrobial activity ;as well as anti fungal activity like –one, 8-cineole,geranial , germacrene-D, Limonene, Linalool, and application.<sup>29</sup>

### CONCLUSION

Dadru Kustha is a skin disease which is correlated with the fungal skin disorder in Modern medical sciences . All the herbal medicine described above have different types of extract which shows antifungal properity. The use of modern medicine for the treatment of fungal skin disease in large amount or for prolonged duration; shows toxicity and develops resistance .So for present and future perspective ;some herbal drugs which are safe and effective are described in so many researches. The review / summarizes the presented information concerning the new profile of antifungal drugs obtaining from herbal medicinal plants.

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