



## Ayurveda

## A REVIEW ON "A CLINICAL STUDY OF GANDHAKADI LEPA IN SIDHMA WITH SPECIAL REFERENCE TO TINEA VERSICOLOR (PITYRIASIS VERSICOLOR).

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### ABSTRACT

Acharya Charaka has included Sidhma in MahaKushta, It involves the clinical features like Kandu, Parush Rooksha Tvacha bhayata and Snigdha Tvacha antartaha, Shweta or Aaraktavarni or Krushna Mandala, on rubbing Scaling off from lesion, which exhibits involvement of Kapha and Vata Dosha. On the basis of presenting symptomatology most of the scholars have simulated Sidhma with 'Tinea Versicolor' through modern perspective. It comes under, superficial fungal infections of the skin. In this study to evaluate the role of Gandhakadi Lepa in the management of Sidhma Chikitsa with special reference to Tinea Versicolor (Pityriasis Versicolor). After the clinical trial there is sufficient evidence provided that Gandhakadi Lepa application has definite role in the management of Sidhma Chikitsa.

**KEYWORDS :** Sidhma, Kushtha, Tinea Versicolor, Katu Taila, Ketoconazole

### INTRODUCTION:-

The word Kushta has been described as "The disease which spoils the skin and makes it look ugly is called as "Kushta". Sidhma is one of the types of Mahakushta which shows clinical features like "Alabupu shpavat varna" especially on chest region, dust like powder on rubbing.

Tinea versicolor (pityriasis versicolor) is a cutaneous fungal infection caused by *Malassezia furfur* occurs most frequently in teens and young adults. Tinea versicolor is skin disorder which is characterized by hypopigmented or hyperpigmented brownish macules and patches mostly on trunk on skin which can be correlated with Sidhma it is variously colored hence called as 'Tinea Versicolor'.

#### • AIM:-

To evaluate the efficacy of Gandhakadi lepa with Katu Taila in the management of Sidhma Kushta (P.Versicolor)

#### • OBJECTIVES:-

1. Conceptual study of Sidhma Kushta in light of both Ayurvedic and modern perspectives.
2. To study the comparative effect of Gandhakadi lepa with Katu-taila and Ketoconazole 2% (externally) in the management of Sidhma Kushta w.s.r. to P.Versicolor
3. To observe the side effects of Gandhakadi lepa and Ketoconazole 2% during the trail.
4. To assess overall wellbeing effect of the drug.

#### • HYPOTHESIS:-

Gandhakadi lepa with Katu taila may be effective in the management of Sidhma Kushta.

#### • NULL HYPOTHESIS:-

Gandhakadi lepa with Katu taila may not be effective in the management of Sidhma Kushta

### REVIEW OF LITERATURE

#### SIDHMA KUSHTA:-

Sidhma has Ruksha outside and Snigdha at inner side, Rough, reddish with thin white red luster, numerous having little pain, itching, heat, pus and lymph having slight causation and little decay and organisms, it causes dust like powder on rubbing on touch which is Shlakshna & thin, white, reddish flower like bottle gourd is known as Sidhma Kushta and generally present on Urupradesh.

#### TINEA VERSICOLOR:-

Tinea Versicolor is fungal infection with *Malassezia furfur* that manifest as asymptomatic but sometimes mild itching present. Classically it causes the appearance of multiple tan, brown, salmon, pink or white scaling patches on the trunk, neck, and abdomen and occasionally on face.

### COMPARATIVE ASPECT OF SIDHMA AND TINEA VERSICOLOR (ACCORDING TO LAKSHANAS)

SIDHMA	T. VERSICOLOR
Purusha, Tanu	Thin dry lesions
Shuklaraktavbhas	White or brown pink colour
Prayen urdhva kaye,	on chest, upper arms, neck, shoulder
Alp vedana, alp kandudah	Mild itching, mild inflammation may
Alp bheda krimini	Fungus present in Hyphae phase
Antarghrishta Rajah kiret	In scrapings of the profuse scale seen

### MATERIALS AND METHODS

#### 1. Gandhakadi Lepa (Group A) Contains:-

Sr No	Name of Ingredient	Latin Name	Quantity
1	Gandhak churna	<i>Sulphurium</i>	2gm
2	Yavakshar churna	<i>Hordeum vulgare L.</i>	2gm
3	Katu Taila	<i>Brassica nigra</i>	30ml

#### 2. Ketoconazole (Group B):

Sr. No.	Name of Ingredient	Concentration	Quantity
1	Ketoconazole lotion	2%	60ml

### PREPARATION OF DRUGS:-

Shudha Gandhak churna, Shudha Yavakshar Churna and Katu Taila was prepared according to Samhitas were purchased from authenticated sources.

Ketoconazole lotion 2% (Kenz lotion 2% KLM pharmacy) was purchased from medical counter.

### METHODOLOGY

#### TYPE OF STUDY:-

Randomized comparative clinical study.

#### SAMPLE SIZE:-

Total 10 patients were selected

#### SITE OF STUDY-

Bharati Vidyapeeth Deemed to be University College of Ayurveda and Hospital, Kayachikitsa OPD and IPD. Pune

#### PRIMARY STUDY END POINTS:-

Improvement in Sign & Symptoms of Sidhma Kushta (P. versicolor)

#### SECONDARY STUDY END POINTS:-

Comparison between Gandhakadi lepa with Katu taila and Ketoconazole 2% lotion

**STUDY TREATMENT DESIGN: -DRUG ADMINISTRATION**

Treatment given	Group A Trail Group Gandhakadi lepa	Group B Control Group Ketoconazole 2%
Dosage	twice in day	twice in day
Kala	Morning & night	Morning & night
Root of Administrations	Local	Local
Treatment Period	4 Weeks	4 Weeks
Follow up Period	0, 1nd week, 2th week and 4th week after treatment.	0, 1nd week, 2th week and 4th week after treatment.

**DIAGNOSTIC CRITERIA**

- 1) Urapradeshi Alabupushpa varnata (Hypo pigmented or hyper pigmented brownish macules & patches).
- 2) Tanu twacha (Patches covered with barely powdery thin scales).  
3)Scaling
- 4) Shweta and tamra varnata (Color of lesion may be reddish brown, dark brown or black)
- 5) Lesions on central chest, upper central back, neck, axilla other parts trunk & proximal extremities.
- 6) Dust like powder on rubbing

**SUBJECT SELECTION AND WITHDRAWAL: -**

**INCLUSION CRITERIA: -**

- 1) Patients having sign & symptoms of Sidhma Kustha with special reference to P. versicolor.
- 2) Selection of patients were irrespective of sex, work, & socio-economic status and patient age more than 18 year up to 80 years.

**EXCLUSION CRITERIA: -**

- 1) Pregnancy & Lactation.
- 2) Patient having extensive P. versicolor with lacerated wounds and associated with secondary bacterial infection s and major skin problems

**ASSESSMENT CRITERIA -**

for clinical features, signs and symptoms, Dosha Dushya were as follows

No	Sign and symptoms	0	1	2	3
1.	Kandu	No Itching	Mild Itching	Moderate Itching	Severe Itching
2.	Skin colour	Normal skin colour	Faint normal pinkish	Red, brown colour	Blackish, colour
3.	Scaling	No scaling	Mild scaling off	Moderate scaling off	Sever scaling off
4.	Visarpana (Spreading)	No Spreading	Slow Spreading	Medium Spreading	Fast Spreading
5.	Rukshata	No rukshata	Mild rusksh	Moderate Ruksh	Severe Ruksh
6.	Number of Mandala	No Mandala	1 to 10	10 to 20	More than 20

**OBSERVATION & RESULT:**

**According to age**

Age group	No. Of Patient	Percentage (%)
12- 30	06	60.00%
31 - 50	03	30.00%
51 - 80	01	10.00%

**According to gender**

Gender	No. of Patients	Percentage (%)
Male	06	60.00%
Female	04	40.00%

**Overall effect on signs & symptoms in Group – A**

**Overall effect on signs & symptoms in Group – B**

Symptoms	Mean score		X	%	S.D. +	S.E.+	't'	'p'
	B.T.	A.T.						
Kandu	3.7	1.0	2.6	97.27	0.5164	0.1633	15.92	<0.001
Mandala	2.8	0.5	2.3	82.14	0.6749	0.2134	10.78	<0.001

Vaivarnya	2	0.8	1.2	63.78	0.4216	0.1333	9	<0.001
Rukshata	3.3	0.5	2.8	84.85	0.7888	0.2494	11.22	<0.001
Daha	2.33	0.17	2.17	92.86	0.7528	0.3073	7.05	<0.001
Scaling	1.5	0	1.5	100	0.7071	0.5	3	>0.10

**DISCUSSION ON OBSERVATIONS: -**

In the study, 60% were male and 40% were females. Though Tinea Versicolor on the whole is not known to have any gender wise predominance, still the 6:4 ratio observed in the study.

Symptoms	Mean score		X	%	S.D. +	S.E. +	't'	'p'
	B.T.	A.T.						
Kandu	3.7	1.1	2.6	93.71	0.5164	0.1633	15.92	<0.001
Mandala	2.9	0.5	2.4	96.75	0.5163	0.1633	14.70	<0.001
Vaivarnya	2	0.9	1.1	55.00	0.5676	0.1795	6.13	<0.001
Rukshata	3.5	0.7	2.8	58.93	0.4216	0.1333	21	<0.001
Daha	2.44	0.11	2.33	95.45	0.8660	0.2887	8.08	<0.001

**DISCUSSION ON RESULT: -**

**KANDU:**

Gandhakadi lepa has Tikta, Kashaya rasa, ushna virya, Tikshna Sookshma Guna therefore having Kaphashaman property, which helps in normalizing local Kapha Dushti, thus helpful in reducing Kandu.

**MANDALOTPATTI;**

As Ganghakadi lepa is Ushna, Sookshma guna and lepa is applying with Katu Taila which obviously helpful to Vatashaman. So, Mandal size and no is reduced.

**SCALING:-**

Sidhma, is because of both Vata Kapha dushti. As the Tail formulation applied with Sookshma tikshna properties of Gandhakadi lepa, Both Doshas shaman occurs successfully.

But in the study, Rest other symptoms showed good improvement

Ketoconazole is work significantly on Scaling off as well as significantly improved the Mandal. As replacing Normal skin by multi-colour Mandals. Other symptoms also seen better improvement.

**PROBABLE MODE OF ACTION OF GANDHAKADI CHURNA LEPA ON SIDHMA:-**

1) Gandhak having Rasa- Kashaya, Madhura, Katu Tikta, Guna are Ushna Snigdha Sara, Virya- Ushna and Vipaka Katu. Action was Rasayana, Vatahara, Kaphahara, Krimihara, Shothajit, Kushtha-hara, Ama-shotahara. Gandhak is a stimulant to the secreting organs such as the skin and the bronchial mucous membranes. Because of the above Guna Gandhak eliminated Kapha Vata and Aam Shodhana, Kanduharan, alos Krimiharana in Sidhma Kushtha.

2) Sharshapa having Guna Snigdha Laghu, Veerya -Ushna, Rasa- Katu, Tikta, Vipaka – Katu, Doshagnata – VataKaphashamaka and Karma like Raktashodhaka, Kandu & Kothaghna, Krimighna, Kushtaghna. Thus cured the Sidhma disease, therapeutically the drug should be Theekshana, Ushna, so aabhyantaratha present Kapha gets dissolved and this Gun are against the “Ama” Guna. These characters should be present to neutralize the endogenous factors as well as exogenous process. Therefore, the drug had Krimihara properties also. Tail base formulation of Sarshapa helps to cure the bhayha rookshata. Overall properties of drug are having kaph shamaka and Kushta, Kandu and shothahara etc. properties which was helped to relief the Lakshana of Sidhma Kushtha.

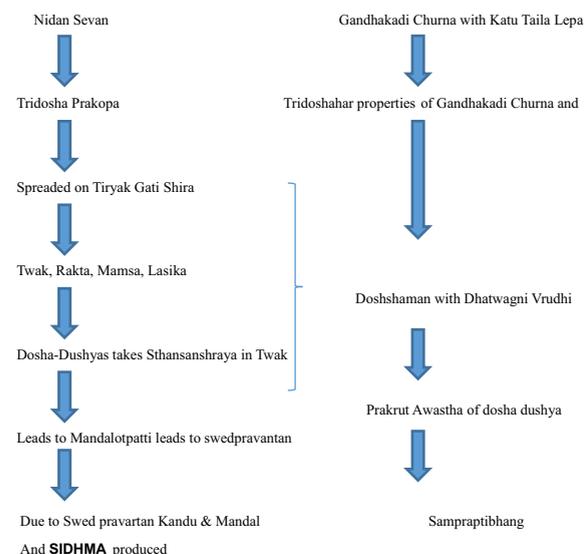
3) Yavakshar having Rasa- Katu, Vipak- Katu, Virya- Ushna, Guna: Ushna, Tikshan, Rooksha, Laghu, Sookshma and having Karma like Vishghna, Vishaghna' Krimighna, Shoolaghna . Yakavshara having sookshma guna which acts on innermost layer of Tvacha. It means Avabhasini by Sushruta or Tiritiya by Charaka and Ushna Teekshna properties of Kshara reduced vitilated Kaphaghna and Vataharan done and results into reduces Lakshana of Sidhma Kushtha.

So this yoga is best in Sidhma which is Kapha Pitta pradhana Kushta Vyadhi.

3) Ketoconazole 2% Topical Ketoconazole is usually prescribed for fungal infection of skin and mucous membranes is proven by various researches. It is as drug of Azsole group which are best antifungal group worldwide. Ketoconazole inhibit erosterol synthesis pathway

and also binds directly to non-sterol lipid in fungus cell wall leading to increased permeability, membrane rigidity, and inhibition of growth and ultimately death of Mycelium.

### SAMPRAPTIBHANG



### CONCLUSION:-

- 1) Sidhma was Kapha Vata predominance was seen in Lakshanas .Rasavaha , Raktavaha ,Mamsavaha and Swedavaha Srotasa are involved in the disease.
- 2) The cardinal symptoms of siddhma are Kandu, Mandala, Vaivarnya Daha, and Scaling.
- 3) Treatment was given in two group as Gandhakadhi Lepa and Katu Taila in Group A and Ketokanazol Lotion in Group B. Group A shows better result in Kandu, scaling, itching, rukshata, and while Group B shows better result in Mandal, daha but on the basis of obtained result it can be concluded that overall efficacy of both groups i.e. Gandhakadhi Lepa and Katu Taila and Ketoconazole Lotion effective in the management of Sidhma .But Gandhkadhi Lepa with Katu taila show better improvement than Ketoconazole
- 4) Both of the groups are result oriented.
- 5) No side or after effect was observed in both the groups regarding Present study.

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