

Role of *Darvee Guduchyadi Gandusha* in Mukhapaka w.s.r. to Stomatitis

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Abstract *Mukha Swasthya* (oral hygiene) has gained importance now days, because *mukha* (oral cavity) is such *anga*, which is exposed to many risk factors in day-to-day life. *Mukhapāka* is one such disease which causes a lot of discomfort to the sufferer and seen in all classes of the society. It is also called *Sarvasara Mukharoga*. The aggravated *doshas* move through the oral cavity and produces the *pāka*. The *lakshanas* of *mukhapāka* can be correlated to a clinical entity "Apthous ulcer" (recurrent ulcerative stomatitis) explained in the contemporary medical science, which is also characterized by painful superficial ulcers in the movable mucosa of the mouth with recurrent episodes. Currently, the treatment for the Apthous ulcer being very limited, the present clinical study was designed to evaluate the efficacy of *Darvee Guduchyadi Gandusha* in the same. 30 patients were registered for the trial and were randomly divided into 2 groups. Group A treated with the treatment with *Patola katuka bhiru panta*, *Kaishor guggulu* and *Darvee Guduchyadi Gandoosha*. Group B treated the treatment with only the *Patola katuka bhiru panta*, *Kaishor guggulu* internally. The results were statistically significant in Group A. Group A was found to be more efficacious in hastening the healing of *Mukhapāka* compared to Group B.

Keywords *Mukhapāka*; *Gandusha*; *Apthous ulcer*

Introduction

Acharya Susruta has described sixty five types of different mouth diseases affecting seven different localities i.e. lips, the gums of the teeth, the teeth proper, the tongue, the palate, the throat and entire cavity. There by, diseases which are occurred in the mucus membrane of the mouth is called as *Mukhapāka* / *Sarvasara mukharoga*. It can be compare with Ulcerative Stomatitis or apthous ulcers according to the modern medicine. According to Sustruta, there are four *Sarvsara mukha roga* as *Vāthaja*, *Piththaja*, *Kaphaja* and *Rakthaja*. Vagbhata and Sharngadhara have mentioned eight different types of *Mukhapāka*. According to Ayurveda and modern view poor oral hygiene, nutritional anemia, excessive smoking and alcoholism, excessive consumption of food which are hot in potency and spicy, Diabetes mellitus. Males are more tend to have apthous ulcers or ulcerative stomatitis.

Topical corticosteroids like 0.1% triamcinolone acetonide etc, mouth washes containing the enzymes to provide symptomatic relief. One week tapering course of prednisolone (40-60mg/d) has also been used successfully. According to Sharangadhara samhitha *Kavala, Gandusha, Prathisarana* are suitable local treatments for *mukharogas*. Therefore *Gandusha* is the most effective mode of local treatment for *mukhapāka*. *Gandusha* is the procedure of holding any liquid in the mouth to its full capacity without any movement inside. It is usually done with *drava* (liquid). An attempt is made to study a safe, cost effective and easily available drug in the present study.

Methodology

Sample source: 30 patients diagnosed with *mukhapāka* were taken for the study from the Sālākya clinic, Gampaha Wickramarachchi Ayurveda Hospital. Patients were randomly divided into two groups as Group A and Group B irrespective of their sex, religion and socio-economic status. Each patient was selected for the trial after voluntary consent.

Inclusion criteria

Patients showing signs and symptoms of *Mukhapāka*.
 Patients between age group of 20-50 years.
 Patients of both the sexes

Exclusion Criteria

Mukhapāka due to other disorders eg: syphilis, AIDS, Dengue hemorrhagic fever, Diabetic
 Patients with oral pre malignant lesions
 Patients who are under allopathic treatments for *mukhapāka*
 Patients with chronic debilitating disorders

Criteria for assessment

The effect of treatment results was assessed in regards to the clinical sign and symptoms to the basis of scoring system and overall improvement.

Scoring system

- Number of Pidaka(Oral mucosal Blister)

No boil	0
Number of boil 1-2	1
Number of boil 3-4	2
Number of boil more than 4	3
- Number of kshata(Oral Mucosal Ulcer)

No kshata	0
Number of kshata 1-2	1
Number of kshatha 3-4	2
Number of kshatha more than 4	3
- Shotha(Oral mucosal swelling)

Nil	0
Mild	1
Moderate	2
Severe	3

- Daha(Burning sensation)

Nil	0
Mild	1
Moderate	2
Severe	3

Laboratory investigations: Fasting Blood Sugar, WBC/DC

Statistical analysis

Paired 't' test has been used for analyzing the data obtained during the study between the groups. 'p' value >0.05 is considered statistically non-significant, <0.05 is considered as statistically significant, 'p' value <0.001, <0.01 is considered as highly significant.

Overall effect of therapy

Complete remission: 100% reliefs in the signs and symptoms
 Marked improvement: 76-99% reliefs in the signs and symptoms
 Moderate improvement: 51-75% reliefs in the signs and symptoms
 Unchanged: up to 25% reliefs in the signs and symptoms

Grouping and Posology

Group A: *Patola katuka bhiru phanta*, *Kaishor guggulu* and *Darvee Guduchyadi Gandoosha*
 Group B: Only the *Patola katuka bhiru panta*, *Kaishor guggulu*

Mode of administration

- *Patola katuka bhiru Phanta* - One tea spoonful of *phanta* (5g) twice daily for duration of 14 days-two weeks.
- *Seetharama Vati* - 2 *vati* at a time twice daily for duration of 14 days-two weeks.
- *Darvi guduchyadi gandusha* -10ml of prepared *gandusha* added with 40ml of luke warm water hold in the mouth to its full capacity twice daily for duration of 14 days-two weeks.

Preparation of the research drug

The trial drug was prepared according to the process mentioned in Sharangadara Samhitha Uttara Khanda10 (13/01).

Materials

Darvi (*Coscinium fenestratum* Colebor)
Guduchi (*Tinospora cordifolia* miers)
Sumanpravala (*Jasminum grandiflorum* Linn)
Draksha (*Vitis vinifera* Linn)
Yawani (*Tragia involucrate* Linn)
Tripala (*Terminalia chebula*, *Terminalia belerica* Roxb, *Emblica officinale* Gaerth)

Procedure

The ingredients were crushed roughly and added 720 ml of water and cooked into 120ml. Then it was filtered and distilled. Finally stored in an air tight glass bottle.
Follow up period: 14 days

Results

a) General observation

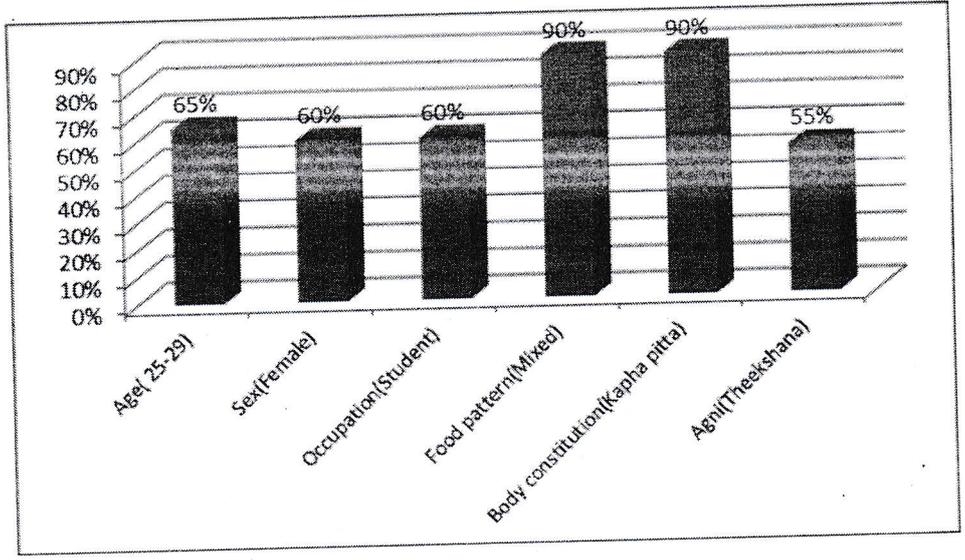


Figure 1: Demographic data presentation

Out of 30 patients studied, maximum number of patients (65%) belonged to the age group of 25-29 years, Female sex (60%), students (60%), mixed diet (90%), Kapha Pitta Body constitution (90%) and Theekshana agni (20%).

b.) Effect of the therapy of clinical features

Effect on Oral mucosal blister

Table 1: Effect on Oral mucosal blister - Group A

Mean		BT-AT	%	t-value	p-value
BT	AT	1.00	90.90	3.000	0.015 (<0.05)
1.10	0.10				

Table 2: Effect on Oral mucosal blister - Group B

Mean		BT-AT	%	t-value	p-value
BT	AT	0.30	70	2.689	0.025 (<0.05)
1.10	0.80				

Table 3: Effect on Oral mucosal ulcer - Group A

Mean		BT-AT	%	t-value	p-value
BT	AT				
1.80	0.10	1.70	94.44	7.965	0.000 (<0.001)

Table 4: Effect on Oral mucosal ulcer - Group B

Mean		BT-AT	%	t-value	p-value
BT	AT				
1.70	1.00	0.70	41.17	2.244	0.056 (>0.01)

Table 5: Effect on Oral mucosal swelling - Group A

Mean		BT-AT	%	t-value	p-value
BT	AT				
1.40	0.10	1.30	92.85	3.881	0.004 (<0.01)

Table 6: Effect on Oral mucosal swelling - Group B

Mean		BT-AT	%	t-value	p-value
BT	AT				
1.10	0.40	0.70	63.63	1.989	0.036 (>0.01)

Table 7: Effect on Burning sensation - Group A

Mean		BT-AT	%	t-value	p-value
BT	AT				
1.70	0.40	1.30	76.47	8.143	0.000 (<0.001)

Table 8: Effect on Burning sensation - Group B

Mean		BT-AT	%	t-value	p-value
BT	AT				
1.90	0.90	1.00	52.63	2.055	0.056 (<0.01)

In case of all symptoms $p < 0.05$ hence the test is significant that means the gandusha is more effective in treatment of Mukhapaka than treating only internal medicine.

Overall effect of therapy

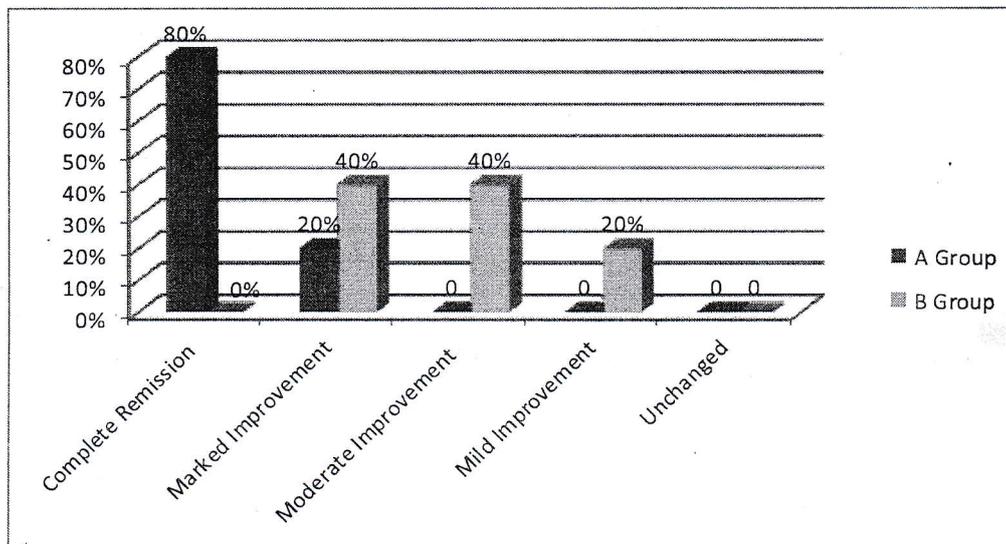


Figure 2: Overall effect of therapy

The above graph showed that there were 80 % patients have shown complete remission, 20% shown marked improvement in Group A while only 40% patients have shown Moderate and marked improvement.

Discussion

Observations showed there was 90.90% relief in oral mucosal blisters in patients of group.A whereas 70% were relieved in group B within the 14 days of the treatment. The drug is significant in treating oral mucosal blisters. 94.44% patients were relieved of oral mucosal ulcers in group A and 41.17% were in group B within the 14days of the treatment. The drug is significant in treating oral mucosal ulcers in Group A and non-significant in treating Group B. There was 92.85% relief in oral mucosal swelling in group A and 63.63% in Group B within the 14 days of treatment. The drug is highly significant in treating oral mucosal swelling. There was 76.47% reduction in burning sensation in group A within the 14 days; the drug is highly significant in treating the burning sensation whereas only 52.63% reduction was seen in group B, within the 14 days. The overall results showed in Group A 80% of the samples had complete remission rate and 20% had marked remission rate whereas in Group B 40% of the samples had marked remission rate and moderate remission rate. Also 20% of patients had mild remission rate in Group B.

Conclusion

Therefore, from the above observations it can be concluded that *Darvi guduchyadi gandusha* is efficacious in treating *Mukhapāka* as a local treatment, than treating only internally. Combination of *gandusha* and *Patolakatukabhiru phanta* with *Kaishor guggulu* has shown promising results.

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