“Role Of Tilnilotpal Gandusha In The Management Of Mukhapaka”

VD.Vikas Dubey (B.A.M.S.) , R.P.Patwardhan M.D. (Ayu),
Prof. Swasthayavrita & Dr.M.T Arora M.D
B.V.D.U., C.O.A., PUNE

Abstract : Now a day lifestyle is drastically changed. Due to increased pollution, Fast life style, junk food habit and addictions problems of oral health are arising progressively. Therefore there are increased problems regarding bad oral hygiene. Among various Mukharogas, Mukhapaka is Pittaja Nanatmaja and Rakta Pradoshaja Vikara, characterized by Vedanayukta Vrana in the Mukhaguha. The lakshanas of Mukhapaka can be co-related with aphthous ulcer (recurrent ulcerative stomatitis) explained in modern medical science. In Ayurveda, non-practice of gandusha etc. are said to be major cause for mukhapaka. Indirectly it infers the importance of gandusha because the physical, thermal and chemical causes of injury to oral cavity (due to exposure to various risk factors) can be better counteracted by practicing gandusha daily. Clinical trial on a single group of 60 patients having mukhapaka, was carried out.

Patients was given Tilnilotpaladi kwatha Gandusha for period of 7 days in every morning empty stomach.

60 patients studied, maximum number of patients (51.66%) belonged to the age group of 20-30 years, Male sex (65%), and upper middle socio economics status (41.6%), mixed diet (61.66%), addicted to smoking (38.33%), occupation (20%) IT professionals. 32% individuals have shown good response, 53% sown moderate Response, and 15% shown mild response.

KEYWORDS: Mukhapak, Tilnilotpaladi Yoga, Aphthous ulcer.

1. Introduction

Mukha Swasthya (oral hygiene) has gained importance now a day, because mukha is such anga, which is exposed to many risk factors in day-to-day life.

- Due to increased pollution, junk food habits and addictions like tobacco-guthaka chewing, smoking, soft drinks; problems are arising progressively.
- Therefore, problems regarding bad oral hygiene are progressively increased.
- In Ayurvedic text, Aphthous ulcer is denoted as ‘Sarvasar rog’ or ‘Mukhapaka’ due to its spread in the complete oral cavity (mukha) [2, 3, 4].
- Mukhapaka is Pittaja Nanatmaja & rakta Pradoshaja Vikara, characterized by Vedanayukta Vrana in the Mukha guha.
- The lakshanas of Mukhapaka can be co-related with Aphthous ulcer; explained in modern medical science

2. Aim

Management of Mukhapaka by Tilnilotpaladi Gandusha.

3. Objectives

- To study the role of Gandusha as an Upakrama of Dinacharya.
- To assess the role of Tilnilotpaladi Gandusha in the prevention of recurrent Mukhapaka.
- To study in detail about Mukhapaka. (Aphthous ulcer).

This section includes following headings.

1. Ayurvedic review
   a. Mukha Shareera
   b. Mukhapaka
   c. Gandusha

2. Modern review
   a. Anatomy of oral cavity
   b. Pathology related to Aphthous ulcer.

MUKHAPAKA

- Mukhapaka is a condition characterized by vedana & shopha yukta vrana in the mukha guha pratyangas.
- Mukhapaka can be correlated with a disease entity ulcerative stomatitis, in which aphthous ulcers are very common with recurrent episodes.

Types – Acc. to Charak, Sushrut & Madhav nidan
1. Vataja Mukhapaka
2. Pittaja Mukhapaka
3. Kaphaja Mukhapaka
Vaghbata - Raktaja and Sannipataja mukhapaka.

**GANDUSHA**
- The word Gandusha is formed by Gadi + Gandeschga which mean mukha purnam i.e. filling the mouth.
- 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)

**TYPES**
Based on doshagnata and karmukata Gandusha is classified mainly into four types. They are -
- Snaihika (lubricating) – indicated in diseases of vata
- Shamana (matigating) – indicated in diseases of pitta
- Shodhana (purificatory) - indicated in diseases of kapha
- Ropana (healing) – indicated in ulcerations of mukha

**Anatomy of Mouth**
- A mucosa lined cavity is also called the oral cavity or Buccal (bucca-cheeks) cavity.
- It is formed by cheeks laterally, soft and hard palate superiorly.
- Anterior opening is oral orifice & posteriorly it is continuous with the oropharynx.

**REVIEW OF STOMATITIS :**
**Definition:** General term for diffuse inflammation of the mouth.

**Aphthous ulcer (recurrent ulcerative stomatitis) :**
- This is a commonest recurrent condition of unknown etiology characterized by painful superficial ulcers in movable mucosa of the mouth.
- Generally these ulcers are seen in buccal mucosa, lips, tongue, floor of the mouth, soft palate & oro-pharynx.

**ETIOLOGY**
- The cause is obscure.
- Some probable causative factors are emotional stress, viral infections, endocrine disorders psycho-somatic factors, habitual constipation, auto-immune reaction.

**TYPES**
There are three main clinical types
1. Minor aphthae
2. Major aphthae
3. Herpetiform aphthae

**MATERIALS AND METHODS**

**Title of study:-**
“Role of Tihiloptaladi Gandusha in Management of Mukhapaka”

**Place of study:-**
OPD and IPD of B.V.D.U. Ayurved Hospital, Pune, Maharashtra (India).

**Sample Size:-** Clinical trial on a single group of 60 persons having mukhapaka, was carried out.

**Drug & Duration of Therapy:-**
**Selection of Upakram :-**
Upakrama :- Gandusha
Time :- In Morning (After Dantadhavana)
Form :- Kashaya (Decoction)
Quantity :- 80-120 ml (As per oral liquid holding capacity of the patients)

**Drug Ingredients-**
Tihiloptaladi yoga:-
1. Tila (Sesamum Indicum)
2. Nilotpal (Nymphaea stella)
3. Ghee
4. Sugar,
5. Milk
6. Honey. (5)

**Procedure :-**
- The patient asked to sit in erect posture.
- The neck, cheeks and the forehead of the patient to be treated with Gandusha, massaged and fomented.
- Gandush has been so long held in the mouth by the patient till the aggravated dosha accumulated in regions of the cheeks or secreted through the nostrils & the eyes.

**Inclusion Criteria**
- Patient complaining of recurrent Mukhapaka.
- Patients between age group of 20-50 years.
- Patients of both sex included in the study.

**Exclusion Criteria**
- As per Bhavaprakasha Purvakhanda, patient contraindicated for Gandusha excluded –
- Gandusha is contraindicated in unconscious, poisoned, weak, krisha person, patient suffering from bleeding disorders and conjunctivitis.
- Patient having chronic or carcinogenic ulcers in oral cavity.
- Mukhapaka due to any other disorders e.g. Syphilis, AIDS, Dengue Haemorrhagic Fever etc.
- Patients suffering from any other systemic disorders.
ASSESMENT CRITERIA
Efficacy of the therapy was assessed in the signs and symptoms before and after the course of Gandusha. It was assessed on the basis of self-formulated scoring scale to signs and symptoms of Mukhapaka.

FOLLOW UP
Follow up will be done periodically for total duration of 21 days.
- 1st follow up: 3rd day
- 2nd follow up: 7th day
- 3rd follow up: 14th day (Post Treatment)
- 4th follow up: 21st day (Post Treatment)

OBSERVATION AND RESULTS
1. Age wise distribution: There were maximum no. of patients i.e. 51.67% in age group 20-30 and 38.33% in age group 30-40 also minimum no. of patients i.e. 10% in age group 40-50.
2. Sex wise distribution: There were Maximum no. of patients i.e. 65% were males and 35% were females. This indicated its more incidence rate in males.
3. Dietary Habitat wise distribution: There were Maximum no. of patients i.e. 61.67% were mixed and minimum i.e. 38.33% were vegetarian.

The ancient Ayurvedic physicians were aware of the 'Apathyakara Ahara and Vihara' (unsalutary life style and food habits) as the most important causative agent [6, 7, 8].

4. Marital status wise distribution: It was found that maximum number of patients i.e. 65% were married, While 35% Patients were unmarried.

5. Occupation wise distribution: On considering the nature of occupation, it was found that maximum i.e. 20% no. of patients were IT professionals while minimum i.e. 3.33% no of patients having government job.

6. Vyasans wise distribution: This showed that maximum i.e. 38% patients were having smoking vyasan and minimum no. of patients i.e. 5% having alcohol tobacco vyasan.
7. Vihara wise distribution: Patients with history of ratrijagrana were 60% and 16.67% had history of Diwaswapa.

8. Socio economic condition wise distribution: The classification of patients based on their economic status indicates that people of high socio economic status were more susceptible (41.67%) to mukhapaka.

9. Family History wise distribution: Here, it was found that maximum numbers of patients i.e. 58.33% were having family history while 41.67% were not having family history.

10. Prakriti Family History: It was found that maximum no. of patients i.e. 46.67% were belonged to pitta-kapha Prakriti, and minimum no. of patients i.e. 1.67% kapha-vata Prakriti.

RESULTS
1. Effect of Tilnilotpaladi Yoga on Ruja in the management of Mukhapaka

Ruja (Pain):-

<table>
<thead>
<tr>
<th>Grade</th>
<th>BT No. of patients</th>
<th>BT %</th>
<th>AT No. of patients</th>
<th>AT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Pain</td>
<td>4</td>
<td>6.66%</td>
<td>32</td>
<td>53.33%</td>
</tr>
<tr>
<td>Mild Pain</td>
<td>36</td>
<td>60%</td>
<td>21</td>
<td>35%</td>
</tr>
<tr>
<td>Moderate pain</td>
<td>20</td>
<td>33.33%</td>
<td>7</td>
<td>11.66%</td>
</tr>
<tr>
<td>Sever pain</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100%</td>
<td>60</td>
<td>100%</td>
</tr>
</tbody>
</table>

Here P value was >0.05 hence accept H0 i.e. S

<table>
<thead>
<tr>
<th>Parameter</th>
<th>N</th>
<th>Mean BT</th>
<th>Std Deviation BT</th>
<th>Mean AT</th>
<th>Std Deviation AT</th>
<th>Positive rank</th>
<th>Negative rank</th>
<th>Tie</th>
<th>Z value</th>
<th>P value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ruja</td>
<td>60</td>
<td>0.766</td>
<td>0.253</td>
<td>0.721</td>
<td>0.536</td>
<td>10</td>
<td>17</td>
<td>24</td>
<td>~ 0.652</td>
<td>0</td>
<td>S</td>
</tr>
</tbody>
</table>

Here P value was >0.05 hence accept H0 i.e.
2. Effect of Tilnilotpaladi Yoga on Daha in the management of Mukhapaka

<table>
<thead>
<tr>
<th>Grade</th>
<th>BT No. of patients</th>
<th>AT No. of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Daha</td>
<td>0 0%</td>
<td>32 53.33%</td>
</tr>
<tr>
<td>Mild Daha</td>
<td>34 56.66%</td>
<td>28 46.66%</td>
</tr>
<tr>
<td>Moderate Daha</td>
<td>26 43.33%</td>
<td>0 0%</td>
</tr>
<tr>
<td>Sever Daha</td>
<td>00 0%</td>
<td>0 0%</td>
</tr>
<tr>
<td>Total</td>
<td>60 100%</td>
<td>60 100%</td>
</tr>
</tbody>
</table>

Here P value was <0.05 hence reject H0 i.e.

On associated symptoms of Mukhapaka, the improvement observed (82%) on Daha was statistically significant.

3. Effect of Tilnilotpaladi Yoga on Rakta Varnata of vrana in the management of Mukhapaka

<table>
<thead>
<tr>
<th>Grade</th>
<th>BT No. of patients</th>
<th>AT No. of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Redness</td>
<td>0 0%</td>
<td>14 23%</td>
</tr>
<tr>
<td>Dull Red (or) pink red</td>
<td>33 55%</td>
<td>44 73%</td>
</tr>
<tr>
<td>Color of Magenta</td>
<td>22 37%</td>
<td>2 3%</td>
</tr>
<tr>
<td>Bright Red</td>
<td>5 8%</td>
<td>0 0%</td>
</tr>
<tr>
<td>Total</td>
<td>60 100%</td>
<td>60 100%</td>
</tr>
</tbody>
</table>

Here P value was <0.05 hence reject H0 i.e.

On associated symptoms of Mukhapaka, the improvement observed (91%) on Rakta Varnata of vrana was statistically significant.

4. Effect of Tilnilotpaladi Yoga on No. Of Vrana in the management of Mukhapaka

<table>
<thead>
<tr>
<th>Parameter</th>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Positive rank</th>
<th>Negative rank</th>
<th>Tie</th>
<th>Z value</th>
<th>P value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>AT</td>
<td>BT</td>
<td>AT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daha</td>
<td>60</td>
<td>1.533</td>
<td>0.8</td>
<td>0.466</td>
<td>0.503</td>
<td>0</td>
<td>59</td>
<td>1</td>
<td>0.679</td>
</tr>
</tbody>
</table>

Here P value was <0.05 hence reject H0 i.e.

On associated symptoms of Mukhapaka, the improvement observed (66.97%) was statistically significant.

2. Effect of Tilnilotpaladi Yoga on Ruja (66.97%) was statistically significant.
Before treatment the mean score of No. Of Vrana was 1.116 which was reduced to 0.433 after treatment with 61.20% relief also p value is <0.05 hence it is statistically significant.

5. Effect of Tilnilotpaladi Yoga on Size of Vrana in the management of Mukhapaka

<table>
<thead>
<tr>
<th>Parameter</th>
<th>N</th>
<th>Mean</th>
<th>X</th>
<th>% of relief</th>
<th>SD</th>
<th>Std error</th>
<th>Z value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Vrana</td>
<td>60</td>
<td>BT</td>
<td>0.726</td>
<td>0.266</td>
<td>0.134</td>
<td>63.36%</td>
<td>0.616</td>
<td>0.445</td>
</tr>
</tbody>
</table>

Before treatment the mean score of Size of Vrana was 0.726 which was reduced to 0.266 after treatment with 63.36% relief but p value is <0.05 hence it is statistically significant.

6. Effect of Tilnilotpaladi Yoga on frequency of attack in the management of Mukhapaka:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>N</th>
<th>Mean</th>
<th>X</th>
<th>% of relief</th>
<th>SD</th>
<th>Std error</th>
<th>Z value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freq attack</td>
<td>60</td>
<td>BT</td>
<td>0.867</td>
<td>0.3</td>
<td>0.5667</td>
<td>65.39%</td>
<td>0.5956</td>
<td>0.462</td>
</tr>
</tbody>
</table>

Before treatment the mean score of Freq attack was 0.867 which was reduced to 0.3 after treatment with 65.39% relief also p value is <0.05 hence it is statistically significant.

7. Overall Improvement

<table>
<thead>
<tr>
<th>improvement</th>
<th>No. of patients</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marked improvement</td>
<td>19</td>
<td>32%</td>
</tr>
<tr>
<td>Moderate improvement</td>
<td>32</td>
<td>53%</td>
</tr>
<tr>
<td>Mild improvement</td>
<td>9</td>
<td>15%</td>
</tr>
<tr>
<td>No improvement</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100%</td>
</tr>
</tbody>
</table>

The above graph showed that there were 32% patients have shown good response, 53% shown moderate while only 15% patients have shown mild response.

8. Study of Recurrence:

<table>
<thead>
<tr>
<th>Grade</th>
<th>No. of Patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurrence</td>
<td>53</td>
<td>88.33</td>
</tr>
<tr>
<td>Mild Recurrence</td>
<td>04</td>
<td>6.66</td>
</tr>
<tr>
<td>Moderate Recurrence</td>
<td>03</td>
<td>5</td>
</tr>
<tr>
<td>Sever Recurrence</td>
<td>00</td>
<td>0</td>
</tr>
</tbody>
</table>

-88.33% Patient had no recurrence after 21 days follow up study.
-6.66% patients had recurrence of mild intensity.
-5% patients had moderate degree of recurrence.

CONCLUSION

The conclusions drawn on the basis of this study are as follows.
1. The lakshanas of mukhapaka can be correlated to a clinical entity “Aphthous ulcer” (recurrent ulcerative stomatities) explained in the contemporary medical science, which is also characterized by painful Superficial ulcers in the movable mucosa of the mouth with recurrent...
episodes.

2. Gandusha upakrama of dinacharya on of the important methods Mentioned in Ayurveda for maintenance of oral hygiene.

3. Out of 60 patients studied, maximum number of patients (51.666%) belonged to the age group of 20-30 years, Male sex (65%), and upper middle socio economic status (41.66%), mixed diet (61.66%), addicted to smoking (38.33%), occupation (20%) IT professionals.

4. Most of the patients were of pitta kaphaprakriti (46.33%), with positive history of ratrijagarana (60%).

5. 32% individuals have shown good response, 53% shown moderate Response, and 15% shown mild response.

6. As Tilnilotpaladi Gandusha having madhur, kashyara, shetavirya and kaphahe-pittaghnaproperties, It removes aggravated kaph and pitta Guna from oral cavity.

7. Hence from the study it is concluded that, Tilnilotpaladi Gandusha is an important upakrama of Dincharya mentioned in Samhitas which should befolled regularly, in order to prevent Mukharogas and maintain oral hygine.

References:-


