Role of Yashtimadhu Siddha Til Tail Kawalgriha in the Management of Oral submucous fibrosis (OSMF).

Govind V. Shinde

Professor & H.O.D., Dept. of Shalakya Tantra,
C. S. M. S. S., Ayurved College, Kanchanwadi, Aurangabad, M. S.
Author Correspondance: drshindegv@gmail.com

ABSTRACT:

Oral submucous fibrosis (Osmf) is a chronic inflammatory condition of buccal mucosa with fibrosis,& restricted mouth opening (trismus) characterized by discoloration of buccal mucosa, intolerance to spicy foods& recurrent episodes of stomatitis.it is common in young population having the chewing habits of gutkha, pan masala, tobacco etc. It makes patients life miserable. As it is a precancerous condition it seeks attention towards this disease. Medical treatments with minor surgical options are available with unsatisfactory results. This study was aimed at finding the safe, effective & cheap alternative remedy of osmf. This study conducted on 60 diagnosed cases of osmf fulfilling eligibility criteria randomly divided in two groups trial group 30 treated with yashtimadhu siddha til tail& control group 30 treated with til tail+saindhav kavalgriha for one month with weekly follow-ups .Results in both the groups were encouraging with minimal differences, mouth opening capacity & increased tolerance to spicy foods were the more appreciable results found in trial group. To get more results intervention can be extended for more periods. Before & after mouth opening capacity inter Dental distance between central maxillary & mandibular incisor teeth’s by venire caliper, along with color of buccal mucosa, pliability of mucosa, cheek retraction& tolerance to spices were assessed for the outcome of treatments in both the Groups.

Keywords-
OSMF, Fibrosis, Kawal Griha, Siddha tail

Introduction:

Oral sub mucous fibrosis - definition-osmf can be defined as an insidious chronic disease affecting buccal mucosa ,associated with juxtaepithelial inflammatory reaction
followed by fibroelastic changes in the lamina propria with epithelial atrophy leading to stiffness of oral mucosa causing trismus or inability to open mouth completely (restricted mouth opening)

Prevalence- 1. In India prevalence of osmf increased over the past four decades from 0.03% to 6.42% data published earlier reported an estimate of 5 million osmf patients in India & seen commonly in between 20 to 40 yrs. age group.( by N k Nigam 2014 cited by 16-20 Nov 2013 www.ncbi.nlm.nih.gov.)

2. Epidemiology of osmf – international journal of oral health www.ijoahr.com-recent data suggests that prevalence of osmf in India has increased from 0.03% to 6.42%. Out of all these patients 3 to 5% patients of osmf are likely to suffer from oral malignancies. osmf makes patients life miserable. to avoid it prevention is the best way .convincing the patients to give up chewing habits of betel nut, tobacco, lime or betel nut quid, gutkha, mava will help more. Early diagnosis & treatment will help to avoid the complications.

Etiological factors-

Chewing habits of betel nut, gutkha, mawa, pan, Tobacco, smoking Vidi, cigarettes’ etc. Alkaloids arecoline, present in betel nut along with tannins & lime causes potential damage to buccal mucosa [11].arecoline is the main culprit in pathogenesis of osmf [10].arecoline nicotine, & lime work hand in hand to worsen the condition. The end result is oral malignancy, so something must be done before it.

Need of the study-

Osmf is a chronic disease with diverse etiology & disgusting symptoms along with its precancerous nature seeks the attention of clinicians. Available treatments include Local steroids, local injections of placental extracts [2], local hyluronidase supplemented by oral vitamins & iron. Some surgical techniques like cutting fibrous bands, excision of fibrous tissues & repairing by human amnion graft. Application of pedicled buccal fat pad [1] are having encouraging results still it needs a safe ,effective, & cheap remedy of this disease .in allied sciences Ayurved is having ray of hope in this regard. So this study was conducted with complete Ayurvedic remedy & modern assessment tools.

Sign symptoms of OSMF-

1. Burning sensation in oral cavity with intolerance to spicy foods,
2. Recurrent episodes of stomatitis.
3. Change in color of buccal mucosa-discoloration of mucosa
4. Difficulty in opening mouth completely-Restricted mouth opening.

OSMF-in Ayurved [7]

In Ayurved total 65 [7] mukh rog are explained by Sushruta & 65 by Wagbhat according to various sthans-sites like oshtagat, dantgat, dantmoolgat, kanthgat, talugat etc. osmf resembles with Sarvasar
vyadhi. Which means disease occupying entire oral cavity.

Treatment of mukhrogas explained are Kawal, Gandush, pratisaran, Raktamokshan, dhoompan etc.

In this study kawal griha was given to both the groups with different medicines.

MATERIALS & METHODS:

Inclusion criteria.
1. Patients of age group between 15 to 65 yrs of both the sexes.
2. Patients willing to complete the treatment for full term as prescribed.
3. Patients willing for necessary investigations.
4. Patients willing to give up chewing habits.

Exclusion criteria.
1. Patients who developed oral malignancies.
2. Patients of oral fungal infections.
3. Mouth opening less than one finger.

Patients- in this study 60 diagnosed patients of OSMF were enrolled with prior written consent.

Patients were randomly divided in two groups of 30 each as study group & control group

Study group treated with Yashtimadhu siddha til tail Kawalgriha. & Control group treated with til tail + saindhav Kawalgriha.

Both the groups were treated for one month with weekly follow-ups.
1. Yashtimadhu siddha til tail was prepared as per tail siddhi vidhi as per Ayurvedic texts.

Kawalgriha also was given after local snehan swedan with til tail in both the groups.

Assessment criteria
2. Mouth opening capacity: inter incisoral distance-measured in terms of swanguli Praman. Like one finger, two fingers, three fingers etc. or in mm by vernier scale.
3. Fibrosis of buccal mucosa was assessed by change in color of mucosa, pliability of Buccal Mucosa was assessed by digital palpation& by cheek retraction.
4. Burning sensation in oral cavity-burning at rest or at having any normal food, or on Having Spicy foods was assessed before & after study in both the groups.

All the cases were screened for HB%, to rule out other possibilities, & Scrape cytology was done in cases of special interest.

TENTATIVE GRADATION OF OSMF

Grade’0’ – Normal mucosa- Pink, smooth mucosa, no irritation on spicy foods, Full four fingers mouth Opening, full cheek retraction.

Grade-1’- Fibrosis with change in color of mucosa, irritation by spicy foods, mouth Opening restricted up to three fingers.

Grade-2’- Same as above with mouth opening 2 fingers or less, involvement of palate Cheek retraction reduced, pt unable to keep oral hygiene proper.

Grade-3’- Gross fibrosis with involvement of cheeks, soft palate, retro molar area, facial Pillars, & mouth opening
Observations-

Table no.1
Sex wise distribution of patients

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Sex</th>
<th>No. Of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>40</td>
<td>66.66</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>20</td>
<td>33.33</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no. 2
Age wise distribution of Patients observed

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Age Group</th>
<th>No. Of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11-20</td>
<td>06</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>21-30</td>
<td>28</td>
<td>46.6</td>
</tr>
<tr>
<td>3</td>
<td>31-40</td>
<td>14</td>
<td>23.33</td>
</tr>
<tr>
<td>4</td>
<td>41-50</td>
<td>07</td>
<td>11.66</td>
</tr>
<tr>
<td>5</td>
<td>51-60</td>
<td>05</td>
<td>8.33</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no. 3
Site wise distribution of Patients observed

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Site involved</th>
<th>No. of patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Buccal (cheek) mucosa</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Fauclial pillars-Retro molar area</td>
<td>45</td>
<td>75</td>
</tr>
<tr>
<td>3</td>
<td>Soft palate</td>
<td>29</td>
<td>48</td>
</tr>
<tr>
<td>4</td>
<td>Floor of the mouth with tongue</td>
<td>08</td>
<td>13.33</td>
</tr>
</tbody>
</table>

Table no.4
Habit wise distribution of Patients observed

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Habits</th>
<th>No. Of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chewing habits</td>
<td>32</td>
<td>53.30</td>
</tr>
<tr>
<td></td>
<td>Gutkha (Betel nut kwid)</td>
<td>21</td>
<td>35.00</td>
</tr>
<tr>
<td></td>
<td>Tobacco Pan</td>
<td>06</td>
<td>10.00</td>
</tr>
<tr>
<td>2</td>
<td>Smoking</td>
<td>15</td>
<td>25.00</td>
</tr>
<tr>
<td>3</td>
<td>Alcohol</td>
<td>07</td>
<td>11.60</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

RESULTS-
Average Increase in mouth opening capacity in mm by venire caliper. Along with improvement in other clinical signs & symptoms.

| Study group | 4.1 mm |
| Control group | 3.2 mm |

Summary & conclusions
1. OSMF is a troublesome problem for clinicians since a longer period, *Gutkha* & *Tobacco* chewing habits in Indians yields high incidence of this disease.
2. Multifocal etiology, slow gradual progression of the disease & ignorance of patients about it with non-availability of effective treatment are the main hurdles in the management of osmf.
3. Disgusting symptoms & precancerous nature of the disease are the key aspects seeking attention towards this disease.
4. Both the treatments i.e. *Yashtrimadhu siddha til tail & til tail*+ *saindhav*
Kavalgriha found effective in osmf with minimal differences.

5. Speed & extent of recovery in burning sensation & mouth opening capacity was faster with Yashtimadhu siddha til tail than til tail saindhav.

6. Treatment with Yashtimadhu siddha til tail proved to be very effective in recurrent stomatitis & good compliance of patients achieved.

7. In experimental group rate of improvement in mouth opening observed faster in 1st & 2nd grade osmf it was not good experience in grade 3 or advanced cases of osmf.

8. As fibrosis & inflammation both contribute to trismus, improvement in fibrosis & relief of spasm due to anti-inflammatory activities of yashtimadhu result up to average 4.1 mm increase in mouth opening in study group .average 3.2mm increase observed in control group.

CONCLUSION:

Yashtimadhu siddha til tail acts better on osmf, give best relief from symptoms like burning sensation, recurrent stomatitis & dryness of mouth, also yields good increase in mouth opening capacity. More results can be achieved on continuing the therapy for a longer time as fibrosis was not completely disappeared in this study. Further research with new ideas can be done to relieve fibrosis completely.

REFERENCES:

4. Til tail+saindhav –efficacy –charak su 27-28
5. Til tail siddhi reference –sharangdhar samhita madhyam khand 9/1
6. Kawal griha vidhi Wagbhat uttarsthan 22/12& charak chi-40/82.
8. osmf in modern science Lal D 1953’
9. Idiopathic palatal fibrosis Rao 1962,

Conflict of Interest: Non
Source of funding: Nil

Cite this article:

Role of Yashtimadhu Siddha Til Tail Kawalgriha in the Management of Oral submucous fibrosis(OSMF).
Govind V. Shinde