Efficacy of intralesional injection of Hyaluronidase and Triamcinolone in treatment of OSMF

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ABSTRACT:
Background: Oral Submucous Fibrosis is a chronic progressive debilitating disease of the oral mucosa involving the oropharynx. The present study was conducted to assess efficacy of intralesional injection of Hyaluronidase and Triamcinolone in treatment of OSMF.

Materials & Methods: The present study was conducted on 68 patients of OSMF of both genders. Patients were given intralesional injection of 1500 IU hyaluronidase (1 ml) and triamcinolone 40 mg (1 ml) mixed with 2% lignocaine with adrenaline (1:200,000) at the interval of ten days. Patients were recalled regularly intervals of 2 weeks, 1, 3 and 6 months. Mouth opening was recorded.

Results: Out of 68 patients, males were 56 and females were 12. Mouth opening before treatment in males was 20.6 mm and in females was 24.2 mm, after 1 month was 22.1 mm in males and 25.6 mm in females, after 2 months was 26.8 mm in males and 30.4 mm in females, after 3 months was 35.4 mm in males and 38.1 mm in females and after 6 months, it was 38.6 mm in males and 41.2 mm in females. The difference was significant (P< 0.05).

Conclusion: Authors found that combination of intralesional injection of Hyaluronidase and Triamcinolone in treatment of OSMF found to be effective.

Key words: Hyaluronidase, OSMF, Triamcinolone

INTRODUCTION
Oral Submucous Fibrosis (OSMF) is a chronic progressive debilitating disease of the oral mucosa involving the oropharynx. The classical features of this disease are blanching and stiffness of the oral mucosa, trismus, burning sensation in the mouth and hypomobility of the soft palate and tongue with loss of gustatory sensation.¹

The initial presentation of OSMF is inflammation. Inflammation is followed by hypovascularity and fibrosis visible as blanching of the oral mucosa with a marble-like appearance. Blanching may be localized, diffuse, or reticular. In some cases, small vesicles may develop that rupture and form erosions.² ³

In the later advanced stage of OSMF, a fibrous band that restricts mouth opening (trismus) is characteristic. It causes further problems in oral hygiene, speech, mastication, and possibly swallowing.⁴ Development of fibrous bands in the lip leads to thickening and rubbery appearance. It becomes difficult to retract or evert the lips, which transform into an elliptical shape.⁵ The aim of the treatment of OSMF is to improve the mouth opening and relieve the symptoms by medicinal or surgical means.⁶ The conservative treatment consists of local application of steroids and hyaluronidase either topically or as intralesional injection. This is supported with various oral nutritional supplements. The role of hygiene or its absence has seldom been highlighted in context of progression of the disease.⁷ The present study was conducted to assess efficacy of intralesional injection of Hyaluronidase and Triamcinolone in treatment of OSMF.

MATERIALS & METHODS
The present study comprised of 68 patients of OSMF of both genders. The study was approved from the...
institutional ethical committee. All were informed regarding the study and written consent was obtained. Data such as name, age, gender etc. was recorded. Patients were given intralesional injection of 1500 IU hyaluronidase (1 ml) and triamcinolone 40 mg (1 ml) mixed with 2% lignocaine with adrenaline (1:200,000) at the interval of ten days. Patients were recalled regularly intervals of 2 weeks, 1, 3 and 6 months. Mouth opening was recorded. Results were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>56</td>
<td>12</td>
</tr>
</tbody>
</table>

Table I shows that out of 68 patients, males were 56 and females were 12.

Table II Mouth opening at different intervals

<table>
<thead>
<tr>
<th>Interval</th>
<th>Male</th>
<th>Female</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>20.6</td>
<td>24.2</td>
<td>0.01</td>
</tr>
<tr>
<td>1 month</td>
<td>22.1</td>
<td>25.6</td>
<td></td>
</tr>
<tr>
<td>2 month</td>
<td>26.8</td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>3 month</td>
<td>35.4</td>
<td>38.1</td>
<td></td>
</tr>
<tr>
<td>6 month</td>
<td>38.6</td>
<td>41.2</td>
<td></td>
</tr>
</tbody>
</table>

Table II, graph I shows that mouth opening before treatment in males was 20.6 mm and in females was 24.2 mm, after 1 month was 22.1 mm in males and 25.6 mm in females, after 2 months was 26.8 mm in males and 30.4 mm in females, after 3 months was 35.4 mm in males and 38.1 mm in females and after 6 months, it was 38.6 mm in males and 41.2 mm in females. The difference was significant (P< 0.05).

Graph I Mouth opening at different intervals
DISCUSSION

Oral submucous fibrosis (OSMF) is a potentially malignant disease of the oral cavity. It is defined as insidious, chronic disease that affects any part of the oral cavity and sometimes the pharynx. Although occasionally preceded by, or associated with, formation of vesicles, it is always associated with a juxtaepithelial inflammatory reaction followed by fibroelastic change of the lamina propria and epithelial atrophy that leads to stiffness of the oral mucosa and causes trismus and an inability to eat. OSMF is one of the potentially malignant disorders. The use of arecanut leads to the formation of vertical fibrotic bands in various parts of oral cavity such as buccal mucosa, lips, soft palate. The characteristic feature is hockey stick bands in various parts of oral cavity such as buccal mucosa, lips, soft palate. The characteristic feature is hockey stick bands. Mouth opening and improvement in the clinical picture, and caused an increase in mouth opening along with regression of recurrent stomatitis, ulceration, and burning sensation.

CONCLUSION

Authors found that combination of intraleisional injection of Hyaluronidase and Triamcinolone in treatment of OSMF found to be effective.

REFERENCES