
SUMMARY
&
CONCLUSIONS

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The present study was based over observations on 104 cases of oral submucous fibrosis, attending out patient department of ENT, M. L. B. Medical College, Jhansi, Bundelkhand region (U.P.) Detailed history of the patients were recorded with special consideration of the food habit and personal history to detect the causative factors of the disease. The cases were thoroughly examined and investigated clinically. The patients were divided into two groups (Control & Study) for the purpose of evaluation of the management and improvement. The conclusions drawn from this study are :

1. *The prevalence of oral submucous fibrosis in this region is 1.81%.*
2. *The incidence of disease was more in 2nd, 3rd and 4th decades of age. Average age was 26.2 years. Sex distribution showed male predominance (4 males : 1 female) in the observed sample. Casts and religious distribution did not indicate any definite trend. The disease affected the patients of all social status and evenly shared by all economic groups, rural and urban societies.*
3. *The important aetiological factors lies in the personal habits of the patients. 90% (94) cases were habitual of tobacco chewing. In present observation, Pan Masala, a new irritant was emerging as a factor in the aetiology of the disease. Especially, in young and urban population, it is an important aetiological factor.*
4. *The disease presented with intolerance to hot and spicy foods in 81.7% (85) cases, difficulty to open mouth in 85.5% (89) cases, inability to protrude tongue in 38.46% (40) cases and pain and swelling around jaw and neck in 2.8% (3) cases. Among other associated symptoms, earache was presented in 2.8% (3) cases. Loss/Decrease in taste sensation was complained by 25% (26) cases.*

The cases of the present study, unable to whistle were 11.5% (12) while 14.42% (15) cases showed nasal voice and 2.8% (3) cases, nasal regurgitation. Inability to open mouth and intolerance to chilies and hot spicy foods were the complaints equally presented in all age groups whereas ankyloglossia and swelling and pain around lower jaw was presented in the advance aged patients and in severe stage of the disease. Nasal Voice and nasal regurgitation was presented in severe cases of palatal fibrosis.

5. Palatal fibrosis was observed in 91% (95) cases and fibrosis of cheek each was observed in 93% (97) cases and involvement of tongue in 68% (71) cases. Severity of these observations was related to the severity of the disease. Retromolartrigone were the third commonest site where fibrosis occurred (88%, 92 cases). The fibrosis of cheek, palate tongue and retromolartrigone resulted trismus, the fibrosis of tongue produced ankyloglossia while the fibrosis of palate and uvula resulted in nasal voice and nasal regurgitation. Pharyngeal fibrosis produced earache and hard of hearing, even deafness. Patients of old age and of nutritionally poor built, usually presented these symptoms. Taste papillae were lost due to fibrosis and the tongue became smooth which resulted impairment in taste sensation 25% (26) cases.
6. On the scale of clinical staging 31.7% (33) cases were in stage I, 43.2% (45) cases in stage II and 25% (26) cases in stage III.
7. Investigative procedure revealed haemoglobin less than 8gm% in 5.76% (6) cases. Haemoglobin in the range of 8-10mg% 28.8% (30), haemoglobin in the range of 10-12gm% 53.8% (56) cases. Only 11.5% (12) cases had haemoglobin more than 12gm%.
Serum calcium was found less than 8mg% in 47.1% (49) cases and in the range of 8-9mg% in 37.5% (39) cases. Only 15.38% (16) cases had serum calcium in the range of 9-10.2mg%.

Serum Iron was found less than 0.5mg/L in 5.7% (6) cases and in the range of 0.6-1.0mg/L in 58.6% (61) cases while only 35.5% (37) cases had serum iron in the range of 1.1-1.6mg/L.

8. *Co-existence of oral cancer and oral submucous fibrosis was found in 2.8% (3) cases.*
9. *Malignant transformation rate in the present sample was 1.92%. the malignant transformation in oral submucous fibrosis indicate the precancerous nature of the disease.*
10. *It seems that the decreased level of Serum Iron & Serum Calcium may be because of their utilization in collagen synthesis and reduction of the thickness of maturation compartment of buccal epithelium in Oral Submucous Fibrosis.*
11. *The decreased Serum Calcium level was related to severity of disease and extent of Fibrosis.*
12. *The decreased level of Serum Iron & Serum Calcium can be regarded as alternate indicator of the precancerous nature of Oral Submucous Fibrosis.*
13. *Oral calcium and iron supplementation showed fast and better improvement in symptoms as compared to the conventional treatment*