# A Review

## Pericoronitis- A Risk Factor in OSMF Cases

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#### **Abstract**

In recent days, pericoronitis its diagnosis and treatment became a difficult task in oral submucous fibrosis (OSMF) cases. Pericoronitis reported in majority of the osmf patients since the mouth opening is limited and maintaining oral hygiene its diagnosis and management of dental problems in these osmf patient has become a difficult task.

Keywords- Pericoronitis, OSMF, Trismus, Fibrous bands, Premalignant condition

## **INTRODUCTION**

SMF is a premalignant condition caused by chewing of Areca nut, Gutka and Khaini. It results in trismus & gradually decreases elasticity of oral mucosa. It affects mostly buccal mucosa, lips, retromolar area, soft palate and characterized by mucosal fibroelastic transformation which leads to trismus. Later on when tongue is involved, it's movement is impared.

OSMF causes limited mouth opening that leads to improper cleaning of molars area and causes food lodgement and ultimately pericoronitis.

Pericoronitis is swelling and infection of gum tissue around the impacted or partially erupted wisdom tooth. It can leave a flap of gum tissue that collects food particle and other debris and provide an ideal breeding ground for bacteria and causes infection. Since pericoronitis problem increases in osmf patient we dental surgeon should instruct patient to improve their oral hygiene. Third molar areas are not accessible properly in osmf patient, maintaining oral hygiene and surgical removal of third molar are adviced.

Dentist should give strict advise to patient to prevent oral infection and oral cancer.

## **DISCUSSION**

Patient suffering from osmf generally provide a history of tobacco chewing and burning sensation in buccal mucous on having spicy food with limited mouth opening. Clinically sunken uvula is seen and fibrous band are felt unilaterally or may be bilaterally on palpation in some patients. Patient develops unilaterally or may be bilaterally pericoronitis in later stage of osmf. Infact no treatment protocol strictly guides the dental and oral surgeons to extract the third molars in grade III and IV osmf cases. Here we emphesise that third molar extracrtions must include in main treatment protocol of grade II, III and IV osmf cases because third molar regions are the most common sites for carcinomas.

Mandibular third molar extractions in case of osmf cases has to be performed with special care. Trismus does not allow a classic inferior alveolar nerve block. So in that case Vazirani Akinosi closed mouth mandibular block is choosen.<sup>2</sup>

Few more studies can be supported to confirm our openion by taking of further clinical studies. However, post treatment third molar extractions oral hygiene becomes the easier process for osmf patients.

## **Clinical Feature**

Patient presented with pain, swelling, redness and sometimes pus discharge, tender on palpation and throbbing in nature that radiates to ear, temporomandibular joint, and posterior submandibular region

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making patient unable to sleep. Patient also complains of dysphagia, halitosis, putrescent odor and inability to close jaw. Trismus is seen along swelling of cheek in angle of jaw. Sign of trauma in operculum such as indentations of cusps of upper teeth leading to ulceration which leads to systematic condition like pyrexia, leucocytosis, regional lymphadeno-pathy with diffused spread to tissue spaces.<sup>3</sup>

Ulceration can occur in association with chronic pericoronitis resembling acute necrotising ulcerative gingivitis. Patient complains of bad taste. Pregnancy and fatigue are associated with increased occurance of pericoronitis. Radiographically, radiopacity is seen chronic periodontitis.<sup>3</sup>

Most common route of pericoronitis is entrapment of food debris and plaque between crown overlying operculum.

Chronic conditions leads to varying degrees of ulceration and may have systemic involvement like upper respiratory tract infection example tonsilitis, influenza and stress leading to immune-compromised state.<sup>3</sup>

#### Microflora

Predominantly anaerobic bacteria that involve mandibular third molar are streptococcus, Actinomycetes, Propioni bacterium. Some bacteria causing pericoronitis are seen in tonsillitis and periodontitis also. Pericoronitis is a painful condition leading to severe entity and if left untreated progresses to pericoronal abscess. Depending upon severity, infection spreads to lymphnodes.

If left untreated it can be a life threatening condition as it leads to peritonsilar abscess, quincy, cellulitis and ludwig angina.<sup>3</sup>

### **Treatment**

We came across a number of cases of pericoronitis and pericoronal abscess as a risk factor in OSMF cases and infact difficult to treat. As periodontist and oral surgeon more difficult factor for treatment of patient falls under grade II, III and IV of osmf cases. Better to identify these risk factors at an early stage and surgical intervention or surgical removal of wisdom tooth is primary line of treatment in osmf cases.

In case dental surgeons don't take proper care then trauma from third molar in osmf cases further complicate by traumatic keratosis and progress to dysplasia and malignancy. So we suggest early treatment to prevent the further complications i.e.; surgical extraction of all the four third molars indicated in osmf cases. We expect this can be the mandatory protocol in such cases.

### **CONCLUSION**

Patient presented with pericoronitis, antibiotic coverage is given and later on patient undergo for surgical extraction of all third molars. We should make patient aware regarding extraction of third molars in osmf cases with pericoronitis. Otherwise it will be difficult for osmf patient to treat Pericoronitis oral hygiene maintainance and prevent future complication.

## "PREVENTION IS BETTER THAN CURE".

Osmf patient present with pericoronitis and priorly antibiotic coverage is given. Incidence of pericoronitis may be evaluated and further complications in osmf cases has to be further studied to plan proper treatment in osmf cases to prevent infection and risk of malignancy and ease maintenance of oral hygiene.

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