"An insidious chronic disease affecting any part of the oral cavity and sometimes the pharynx. Although occasionally preceded by and/or associated with vesicle formation, it is always associated with a juxtra epithelial inflammatory reaction followed by a fibro elastic changes of the lamina propria, with epithelial atrophy leading to stiffness of the oral mucosa and causing trismus and inability to eat." - Pindborg 1966

## **ETIOLOGY**

Betel quid (pan)

Genetic susceptibility Auto immunity

Areca nut

Slaked lime

Nutritional deficiency

**OSMF** 

## **PATHOGENESIS**

The pathogenesis of OSMF is not well established.

Excessive collagen deposition results from the effects of areca nut, which increases collagen production (e.g., stimulated by arecoline, arecaidine) and decreases collagen degradation. Tannins from areca nuts increase collagen fiber resistance to collagenase.

Copper plays an important role in the pathogenesis of OSMF

Stage I: Stomatitis includes erythematous mucosa, vesicles, mucosal ulcers, melanotic mucosal pigmentation & mucosal petechiae.

**Stage II:** Early lesions show blanching of the oral mucosa. Palpable fibrous bands in the buccal mucosa & around the mouth opening or lips. This results in a mottled marble like appearance. Reduction of mouth opening, stiff & small tongue, blanched & leathery floor of the mouth, fibrotic & depigmented gingiva, rubbery soft palate with decreased mobility, blanched & atrophic tonsils, shrunken bud-like uvula & sunken cheeks. Stage III: Leukoplakia is found in more than 25% of individuals with OSMF. Speech & hearing deficit may occur because of involvement of tongue & eustachian tube.

- History Of betel quid chewing.
- Palpable fibrous bands Mucosal texture feels tough & leathery, Blanching of mucosa together with histopathologic features.
- Decreased Hb, iron, protein and vitamin b complex- levels. Increased ESR rate.

## Management: 1. Habit counseling

2. Supportive care: Vitamins, iron and mineral rich diet should be advised to patients with OSMF

3. Medical management: 1. Corticosteroids 2. Placental extracts 3. Enzymes 4. interferon gamma 5. Immune milk ( Intralesional injection: Dexamethasone 4mg + Hyaluronidase 1500 IU+ Ligocaine 2%)

4. Physiotherapy: Muscle stretching exercises, Diathermy, Ultrasound, Hyperbaric oxygen therapy, Stem cell therapy

5. Surgical management : Split thickness skin graft, Nasolabial flaps, fresh human placental grafts