Osteomyelitis of maxilla – A case report

Dr. Vijay Ebenezer[1], Dr. Balakrishnan Ramalingam[2]

Professor and Head of department, Oral and Maxillofacial surgery, Sree Balaji dental college, Chennai, Tamil Nadu.

Professor, Oral and Maxillofacial surgery, Sree Balaji Dental College, Chennai, Tamil Nadu.

Abstract: Osteomyelitis[1] of maxilla is a rare entity. It is more common in the mandible than maxilla. It is a rare entity in maxillofacial region and difficult to treat. Treatment of this condition involves sequestrectomy and debridement[2] of the necrosed bone and extraction of the involved teeth, most commonly bicuspids and molars. This article presents about a case of maxillary osteomyelitis and its treatment.

1. Introduction:
Osteomyelitis is defined as the inflammation of bone, followed by infection of medullary portion, which rapidly spreads to haversian system and into the periosteum. It has predilection in mandible than maxilla because, maxilla has collateral blood supply and thin cortical bones, making it as less prone to infection. Maxillary osteomyelitis can be classified into three main groups as [1] i)odontogenic , ii) rhinogenic , iii) traumatic.
It is also associated with systemic diseases like diabetes mellitus , HIV, malnutrition, chemotherapeutic agents which makes the patient immunocompromised , contributing to osteomyelitis.

Case report:
A 76 year old male reported to department of oral and maxillofacial surgery, Sree Balaji dental college and hospital, Chennai with a chief complaint of pain and swelling in right maxilla with pus discharge. He had a past medical history of asthma, tremors. On examination, there was a swelling in right maxillary region. There was no signs of diplopia, nasal symptoms, epistaxis and lymphadenopathy. An orthopantomogram was taken and it revealed resorption of bone in right maxilla at the region 14,15,16&17 respectively. Following orthopantomogram, a biopsy was taken in the gingiva of right maxilla region, where it showed inflammation, diagnosed as osteomyelitis of right maxillary region.
The surgical procedure was done starting with induction of general anaesthesia, administration of local anaesthesia in the region of 13-18. The mucoperiosteal flap elevation was performed. The area was exposed and removed with no.702 surgical bur, followed by curettage in the area. Curettage was done till active bleeding is appreciated, then followed by the removal of necrosed segment of bone. The area was copiously irrigated using saline and closed by placing sutures. Antibiotics and analgesics were given postoperatively.

2. Discussion:
Osteomyelitis of maxillofacial region is a rare condition, though occurrence in maxilla being very rare. If signs of osteomyelitis are detected at an earlier stage , treatment should be instituted as soon as possible. If left untreated, it might spread to other areas, making it complicated. Diminished immunity and host defense mechanisms, makes the disease spread rapid. Most common etiology of osteomyelitis being pre-existing pathology of periapical tissues , less common being maxillary sinusitis and trauma respectively. It is a polymicrobial
condition, caused by variety of organisms. So, culture test should be performed and suitable anti-microbial drugs should be administered.

3. Conclusion:
Maxillary osteomyelitis is difficult to treat, which is a challenge to treat for both clinician and patient, despite, there are many advances in the treatment and diagnosis. Aggressive medical management with adequate surgical intervention is key to successful treatment.

4. References:
1. Maxillary osteomyelitis: A rare entity