ORIGINAL RESEARCH PAPER

Volume-7 | Issue-2 | February-2018 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

LAG SCREW USE IN CONDYLAR FRACTURE- A CASE REPORT

Dental Science

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ABSTRACT

Condylar fracture comprise of 25-30% of population, treatment of which may be invasive as well as non-invasive.The problem with such fixation is use of optimal fixation devices. We present a case report of a 58 year old male edentulous patient where lateral extracapsular displacement of condylar fracture was seen along with parasymphysis fracture and fracture stabilization was done with lag screw fixation.

KEYWORDS

condylar fracture, lag screw, lateral extracapsular displacement.

1.INTRODUCTION

Condylar fracture is one of the most common fracture site of the mandible. Generally, immobilization of mandible without reduction of fractured condylar segment has been the protocol.

Zide and Kent suggested a protocol of absolute indications for open reduction of condylar fractures that is still useful today. Their indications included 1) displacement of the condyle into the middle cranial fossa, 2) the inability to obtain adequate occlusion by MMF, 3) lateral extracapsular displacement of the condyle with concomitant esthetic deformity, and 4) the presence of a foreign body.

Apart from these again such things depend upon individual surgeon's dexterity and choice.

We present a case report of a 58 year old male patient of lateral extracapsular displacement of condylar fracture which was fixed using lag screw.

2. CASE REPORT

A 58 year old male patient reported to our department with complaint of pain and difficulty in having food,past two days,patient was referred from Silchar Medical College. Patient had all necessary investigations. Extraoral examination showed facial asymmetry, subconjuctival ecchymosis on left eye, tenderness present on left side. Intraorally patient was edentulous,except one avulsed lower molar. Radiograph revealed right parasymphysis fracture and lateral extracapsular displacement of condyle. Patient was subjected for General Anesthesia where preauricular incision was given and after carefully separating the branches of facial nerve the fracture fragment was exposed and reduced. Miniplate and reconstruction plate was used in parasymphysis region and lag screw placed in condylar area. Post op radio graph showed good stability. Follow up period was uneventful.

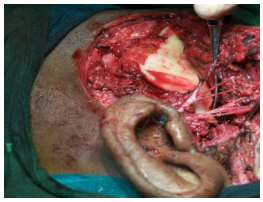

Fig 1 – Carefully separating the branches of facial nerve.

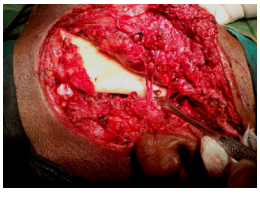

Fig 2 – Lag screw placed

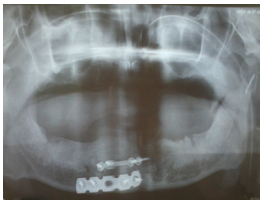

Fig 3 – Post operative radiograph.

3. DISCUSSION-

Lindhal, 1977 demonstrated that the Mandibular condyle represents 18-57 % of all mandibular fractures. The clinical features of the mandibular condylar fracture includes malocclusion, open bite, swelling, tenderness over the joint,loss of mandibular function, deviation of chin, crepitus and laceration of the skin. Treatment options for mandibular condylar fractures vary from open reduction to closed reduction. Complication resulting from a condylar fracture treatment includes, intraoperative haemorrhage, or postoperatively infection auriculotemporal nerve paresthesia, malocclusion, loss of ramus height, related facial and mandibular asymmetry, Frey syndrome, unsightly scar unsightly scar (Dunaway and Trott, 1996), ankylosis occurring in 0.2- 0.4% of the condylar fractures, anterior open bite, chronic pain,joint pain, reduced mandibular function, crepitation, hypomobility occurring in 0.8-0.10%, deviation on mouth opening, facial nerve injury (Lindhal, 1977).

The choice of surgical versus nonsurgical treatment for fractures of the condylar process remains a controversial issue. Zide and Kent,1983 in their classic report regarding the indications for open reduction of mandibular condyle fractures has been the "gold standard" for the past decade and a half.

The results of studies have shown that no significant clinical difference exists between patients undergoing closed treatment and open method in terms of functional movements, and temporomandibular joint pain. However, a radiographically better anatomic reduction of the condylar processwas seen in the patients treated with open reduction and internal fixation.

4.CONFLICTS OF INTREST

The authors have none to declare.

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