

## COMPARISON OF THE CLOSED AND OPEN APPROACHES IN THE MANAGEMENT OF MANDIBULAR CONDYLE FRACTURE

<sup>I</sup>  
\*A. Kazemi, MD      <sup>II</sup>  
A. Tavassoli Ashrafi, MD

### ABSTRACT

Mandibular condyle fractures are relatively common. Because of longterm morbidity of temporomandibular joint dysfunction and ankylosis, correct management of these fractures are very important. The controversy between closed and open approaches, has not yet been solved in the management of these fractures. In this article, we reviewed 302 cases of mandibular fractures since 1993 to 2000. These 69 cases had 81 condylar fractures alone or in combination with other mandibular fractures. Of these, 57 cases (83%) had unilateral and 12 cases (17%) had Bilateral fractures. Most cases (64%) were injured either by car or motorcycle accident. Fifty four cases (78%) were managed by closed reduction and intermaxillary fixation (IMF) and 12 cases (17%) were treated by open reduction and rigid fixation with short courses of IMF. The indication of open reduction in our study were severe lateral or medial displacement of condyle. Two cases were treated conservatively. One neglected bilateral case came back with open bite as complication. The patients were followed between 6 month and 5 years. In all cases, we found the ability to open the mouth more than 4cm. The results of closed and open approaches in our study were comparable without any significant difference. As conclusion, in most cases of mandibular condyle fractures, closed approach is recommended and open approach are preserved for cases with severe displacement, which can not be reduced properly with open technique.

**Key Words:** 1) Condylar process fracture    2) Lower Jaw    3) Temporo-mandibular joint

*Presented in the cranio-maxillo-facial congress (sweden, 2001), Plastic surgery congress (Italy, 2001) and Iranian society of surgery.*

**I)** Assistant professor of plastic and Reconstructive surgery, Hazrat Fatemeh hospital, Asad Abadi st, Iran University of Medical Sciences and Health Services, Tehran, Iran. (\*Corresponding author)

**II)** Resident of plastic and Reconstructive surgery, Hazrat Fatemeh hospital, Asad Abadi st, Iran University of Medical Sciences and Health Services, Tehran, Iran.