

## Central dislocation of mandibular condyle into middle cranial fossa: a case report

*Yadegari A<sup>1</sup>, Asadollahifar R<sup>2</sup>, Shaygan M<sup>2</sup>*

*<sup>1</sup>Associate Professor, Oral and Maxillofacial Surgery Dept, Faculty of Dentistry, Islamic Azad University, Khorasgan Branch, Isfahan, Iran.*

*<sup>2</sup>Post Graduate student, Oral and Maxillofacial Surgery Dept, Faculty of Dentistry, Islamic Azad University, Khorasgan Branch, Isfahan, Iran.*

### **Abstract**

**Background and Aim:** Traumatic mandibular condylar injuries occur commonly and generally present as condylar neck fractures or dislocations of the temporomandibular joint. On the other hand, intrusion of the mandibular condyle into the middle cranial fossa, with or without a simultaneous fracture of the mandible, is extremely rare. This article presents the case of a young female with central dislocation of the right mandibular condyle after facial trauma.

**Case Report:** A 10 year-old healthy girl was involved in a car rolling accident and transported to emergency room of the hospital. The girl presented no loss of consciousness. Extra-orally a small laceration of the chin was noted. Facial asymmetry was found. And intra-orally and anterior open bite and mandibular dental midline shift was evident. Under IV sedation, a closed reduction was performed. After 24 hours, she returned with right condylar re-dislocation. Facial CT scans were requested and central dislocation of the right mandibular condyle was found. Conservative treatment was considered and she was followed-up for 30 days.

**Conclusion:** Early diagnosis with accurate clinical and radiographic examinations is essential to detect and treat this kind of injury successfully, thereby avoiding delayed treatment, as well as related complications like ankylosis of the temporomandibular joint. Various methods of treatment for intracranial dislocation of mandibular condyle have been suggested, ranging from closed reduction techniques with manual manipulation to open reduction combined with intracranial bone grafting. Closed reduction is a useful technique in young children who have sustained injuries within a 4-week time frame

**Keywords:** Condyle; Central dislocation; Middle cranial fossa; Glenoid Fossa distraction; Condyle intrusion.