

Mandibular Condyle Dislocation into the Middle Cranial Fossa

Kwei-Jing Chen , Yi-Fan Wu, Michael YuanChien Chen, Chiaming Chang



Department of Oral and Maxillofacial Surgery,
Taichung China Medical University Hospital, Taichung City, Taiwan

Introduction

This is a case report describing a rare event of fracture of the glenoid fossa with a mandibular condyle dislocation into the middle cranial fossa causing malocclusion and mouth opening limitation.

Case Report



Fig 1.

This is a case of 20-year-old man suffered from road traffic accident , resulting in multiple fractures to his bilateral femoral and left distal radius. Clinical examination revealed that the mandible was retropositioned and was shift to the right side. Anterior open bite and limitation of mouth opening were observed. Lateral mandibular motion was restricted bilaterally.

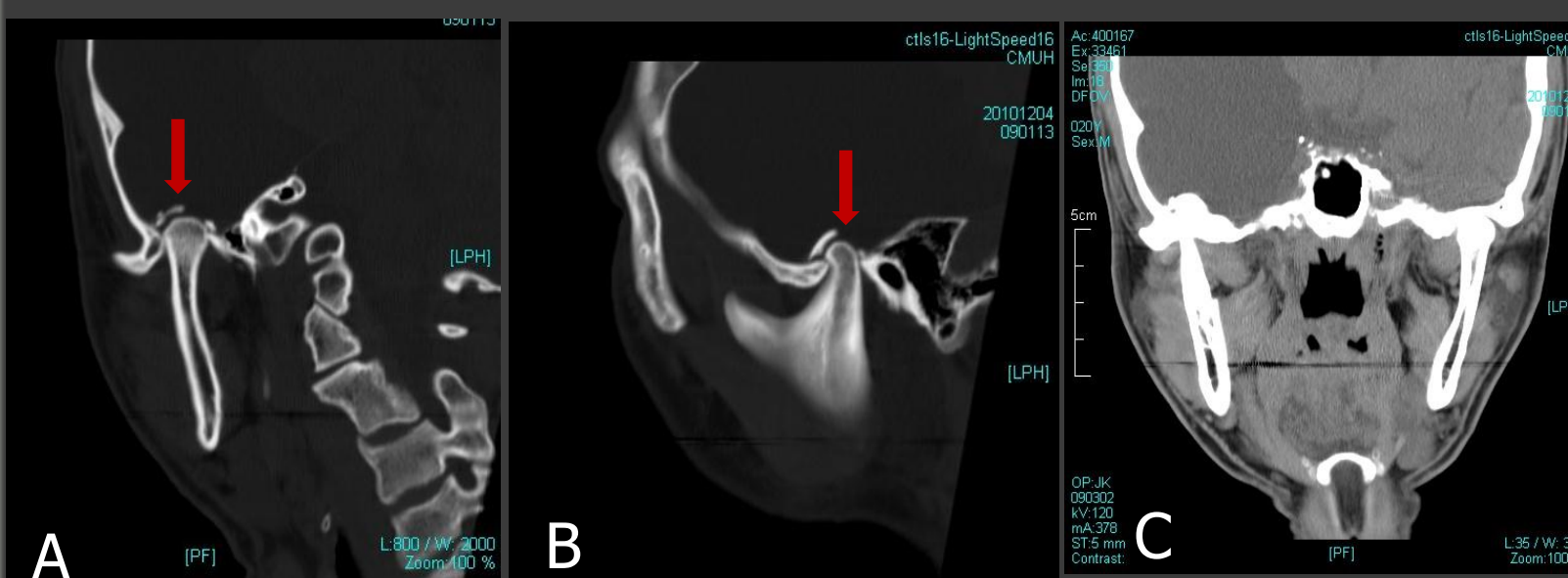


Fig 2 .

CT coronal(A) and sagittal(B) section showed the the right condylar superior dislocation into the middle cranial fossa. Enhanced coronal section (C) showed an arachnoid cyst at R't temporal lobe. No neurologic symptom was noticed.

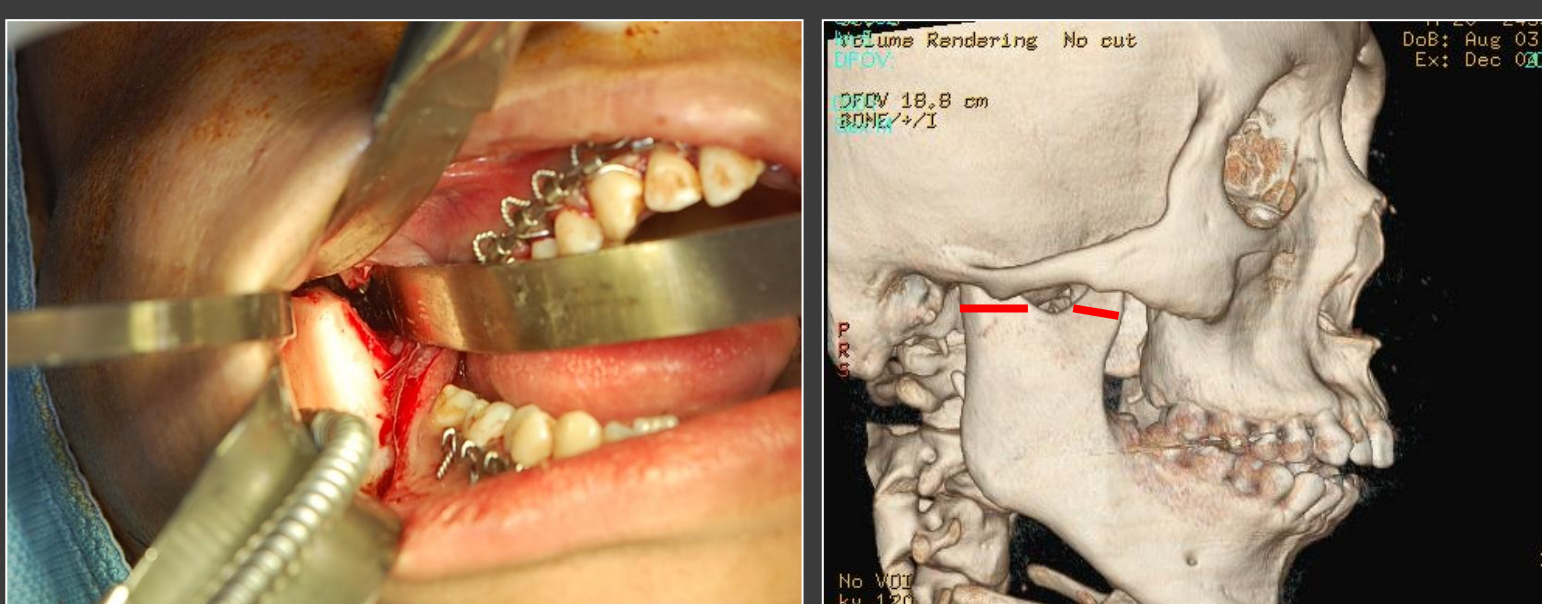


Fig 3 . Attempts to reduce the fracture with closed reduction under general anesthesia by use of maxillomandibular fixation failed. It was then decided to open reduction. Condylotomy was performed by intra-oral approach then acceptable occlusion was achieved.



Fig4. Elastic inter-maxillary traction was performed and maintained for 2 weeks. No neurological complications was observed postoperatively.



Fig 5 . After 8 months, osteotomy site at R't condyle neck was still noticed on panoramic film.



Fig 6 . Post-OP 8 months follow-up, Occlusion was stable(A~C) .



Fig 7 . The interincisal distance was 50 mm, with a deviation in the maximum mouth opening to the right side.

Conclusion A variety of successful treatment have been reported in the literature. In early diagnosis, closed reduction with initial inter- maxillary fixation and secondary functional therapy with elastics seems warranted. For considerable vertical instability, an immediate open reduction with glenoid fossa reconstruction is advocated. Our method is condylotomy via intra-oral approach result in satisfied treatment outcome.