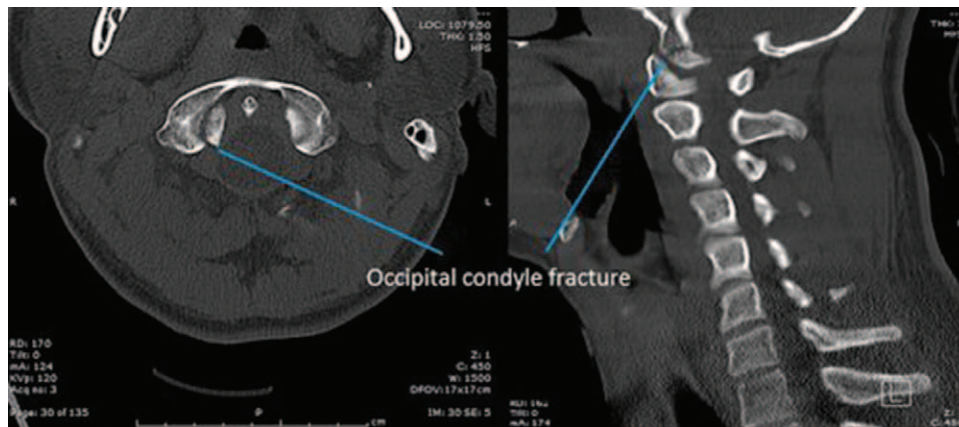


Occipital Condyle Fracture

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A 19-YR-OLD man was brought to the hospital after a motor vehicle accident. Computed tomography scan of the cervical spine revealed a minimally displaced fracture of the right occipital condyle, as seen in the figure. The patient was brought to the operating room for bilateral mandible fracture surgery with a Miami J Collar (Ossur Americas, Inc., USA) in

place. The patient was conscious, and no deficits were noticed on complete neurologic examination.

Occipital condyles, situated on either side of the foramen magnum, are occasionally fractured with cervical spine fracture. Injury is caused by blunt trauma with significant craniocervical torque or axial loading.¹ An isolated occipital condyle fracture is very rare. The condyles are perforated by the hypoglossal nerves, and the jugular foramen lies laterally. The foramen contains the jugular vein and the cranial nerves IX, X, and XI, which can be injured in 33 to 63% of the cases.¹⁻³

Patients are often unconscious on presentation, and if awake, they may complain of neck pain.³ Physicians should maintain a high level of suspicion because lower cranial nerve deficits, and rarely hemiparesis, may be the only presenting signs.¹⁻³ The fracture is often missed on a plain radiograph, so computed tomography is required for diagnosis. These fractures may be managed conservatively, and, if required, by immobilization using a stiff neck collar or a halo jacket.^{1,3} Unstable fractures require surgical removal of the fragments.²

Excessive manipulation of the neck can damage the surrounding structures, resulting in neurologic deficits. Thus, intubation should be performed in a manner that minimizes the laryngoscopic force; this may include video laryngoscopy, manual in-line stabilization, or flexible fiberoptic bronchoscopy. In our patient, nasal intubation was done using a GlideScope (Verathon, Inc., USA) while maintaining manual in-line stabilization. Intubation was uneventful with no postprocedural neurologic deficits.

Competing Interests

The authors declare no competing interests.

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References

1. Utheim NC, Josefsen R, Nakstad PH, Solgaard T, Roise O: Occipital condyle fracture and lower cranial nerve palsy after blunt head trauma—A literature review and case report. *J Trauma Manag Outcomes* 2015; 9:2
2. Alcelik I, Manik KS, Sian PS, Khoshneviszadeh SE: Occipital condylar fractures. Review of the literature and case report. *J Bone Joint Surg Br* 2006; 88:665-9
3. Kelly A, Parrish R: Fracture of the occipital condyle: The forgotten part of the neck. *J Accid Emerg Med* 2000; 17:220-1

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