Clivus fracture

Fractures in the clivus region are usually associated with blunt trauma. They may cause many cranial nerve deficits and vascular complications. The mortality rate is high because of brainstem trauma or vertebrobasilar occlusion. The diagnosis of clivus fracture (CF) is difficult with routine cranial radiography due to the presence of dense petrous temporal bones. Because of this, few cases have been described in the past. In this study, we report nine cases of CF observed and treated in our department during the last 5 years. Computed tomographic (CT) scanning revealed CF in nine of 2500 patients with head trauma (0.36%). The patients ranged in age from 17 to 68 years (mean 38.3). Five patients had had motor vehicle accidents, three were injured in falls, and one was a pedestrian injured by a motor vehicle. Five patients had longitudinal fractures and four had transverse fractures. Cranial nerve deficits were recorded in all patients. Deficits of cranial nerves VI and VII were the most frequently observed (six patients, 66.6%). We review the literature to highlight the differences in clinical presentation and the course in cranial nerve deficits. The diagnosis of CF is made by high-resolution, fine-cut CT using standard and bone window settings. Its presence should alert clinicians to the potential complications. [1].

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