Sphenoid bone fracture

- Utility of Computed Tomography Angiography in Characterizing Vascular Injury From Sphenoid Fractures
- Traumatic basilar artery incarceration following longitudinal clival fracture: illustrative case
- The Evaluation of the Pterygomaxillary Separation Pattern in Le Fort I Osteotomy Using Cone Beam Computed Tomography
- Temporal Fracture
- Pediatric Facial Fractures
- Le Fort Fractures
- What are the Pterygomaxillary Fracture Patterns in Cleft Orthognathic Surgery?
- Does the anatomy around the pterygomaxillary suture contribute to the risk of bad fractures in Le Fort I osteotomy?

A sphenoid bone fracture refers to a break or damage in the sphenoid bone, which is a butterfly-shaped bone located at the base of the skull. The sphenoid bone is situated in the middle of the skull and forms part of the floor of the skull, contributing to the structure of the eye sockets, nasal cavity, and the base of the skull.

Sphenoid fractures are relatively uncommon and are often associated with significant trauma to the head or face. These fractures can involve different portions of the sphenoid bone, including the body of the sphenoid or the greater wings.

The sphenoid bone is in close proximity to important structures such as the optic nerve, internal carotid artery, and the pituitary gland. Consequently, fractures of the sphenoid bone can sometimes be associated with complications, such as damage to these adjacent structures.

The diagnosis of a sphenoid bone fracture typically involves imaging studies such as CT scans or MRI to assess the extent and location of the fracture. Treatment may depend on the severity of the fracture and associated complications. In some cases, conservative management and observation may be sufficient, while more severe fractures may require surgical intervention to stabilize the bone and prevent complications

---

Case report from HGUA

Multiple comminuted left craniofacial fractures.

Skull fractures: left parietal, temporal, and frontal bones, with herniation of brain parenchyma through them. Soft tissue hematoma in the left facial region with scalp involvement in the temporal and parietal regions. Fractures of the left zygomaticomaxillary complex: zygomatic arch, anterior and posterior walls of the maxillary sinus, frontal sinus fracture and hematosinus. Also associated with subcutaneous emphysema adjacent to the fractures.

Sphenoid bone fracture with involvement of both sinus walls, noting a fracture line in the clivus extending to the carotid canal.

Longitudinal and oblique fracture of the left petrous part, extending to the anterior wall of the external auditory canal (CAE)

The left orbital wall fracture is associated with inferior and lateral displacement of intraorbital contents, with herniation of extraconal fat into the maxillary sinus and slight displacement of the inferior rectus, without thickening of the same.

Zygomaticomaxillary complex fractures: Fractures of the left zygomaticomaxillary complex with inferolateral displacement: zygomatic arch, anterior and posterior walls of the maxillary sinus, with involvement of the frontal sinus and hematosinus.

Skull base fractures affecting the body, walls of the sinuses, and greater wing of the left sphenoid bone, noting a fracture line in the clivus extending to the carotid canal.

Longitudinal fracture line affecting the petrous part with probable incudomalleolar subluxation and hemotympanum, continuing with a fracture line of the greater wing of the sphenoid bone.