

Frontal sinus fracture surgery

- [Management of Traumatic Anterior Skull Base Fractures and Cerebrospinal Fluid Fistulas](#)
- [Indications and Complications in Conservative Versus Surgical Management of Frontal Sinus Fractures](#)
- [Contemporary Management of Frontal Sinus Fractures](#)
- [New Surgical Devices for Closed Reduction of Frontal Sinus Bone Fracture](#)
- [Augmented Reality Navigation in Craniomaxillofacial/Head and Neck Surgery](#)
- [Biomechanical evaluation of zygomatic-orbital-maxillary complex fractures following internal fixation](#)
- [Frontal Sinocutaneous Fistula with Frontal Osteomyelitis as a Delayed Complication of Bone Wax Obliteration of Frontal Sinus Fracture](#)
- [Possible complications of frontal sinus fractures after conservative or surgical treatment: retrospective study](#)

Dealing with [frontal sinus](#)

✖ Simple packing of the [sinus](#) (with [bone wax](#), [Gelfoam®](#), [muscle](#), or [fat](#)) increases the possibility of [infection](#) or [mucocele](#) formation.

The rear wall of the sinus is removed (so-called [cranialization](#) of the [frontal sinus](#)). The sinus is then exenterated ([mucosa](#) is stripped from the sinus wall down to the [nasofrontal duct](#), the mucosa is inverted over itself in the region of the [duct](#) and is packed down into the duct, and [temporalis muscle](#) plugs are then packed into the [frontonasal ducts](#))¹⁾, and the bony wall of the sinus is drilled with a diamond burr to remove tiny remnants of mucosa found on the surface of bone that may proliferate and form a [mucocele](#)²⁾

If there is any remnant of the sinus, it may then be packed with abdominal fat that fills all corners of the cavity. Post-op risks related to frontal sinus injury include infection, mucocele formation, and CSF leak.

If the posterior wall is fractured and there is [cerebrospinal fluid leakage](#), treatment seeks to restore the integrity of the [dura](#) and isolate the [intracranial](#) contents through the obliteration of the [nasofrontal duct](#) and [frontal sinus cranialization](#).

Frontal sinus cranialization

see [Frontal sinus cranialization](#)

Conservative

Another group supports nonoperative management if no [cerebrospinal fluid leakage](#) is produced. The purpose is to avoid complications of [meningitis](#), fistula, and late sequelae. The difficulty lies in predicting which patients will develop complications³⁾.

Management has become much more conservative due to the better understanding of [frontal sinus fracture](#) management and the advent and expertise developed in endoscopic sinus surgery ^{4) 5) 6) 7) 8)}.

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