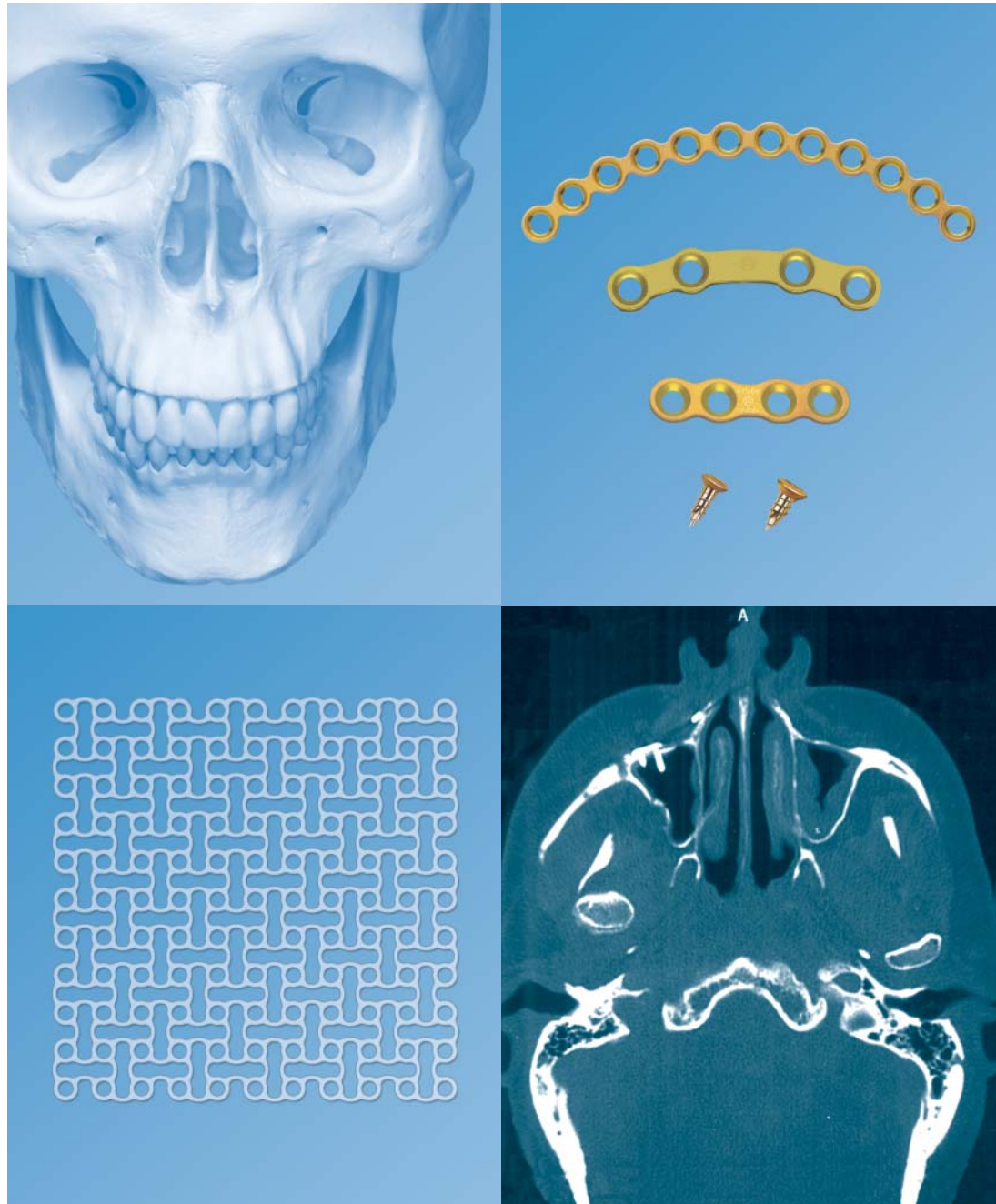


Craniofacial Trauma. Resorbable and titanium plating application.

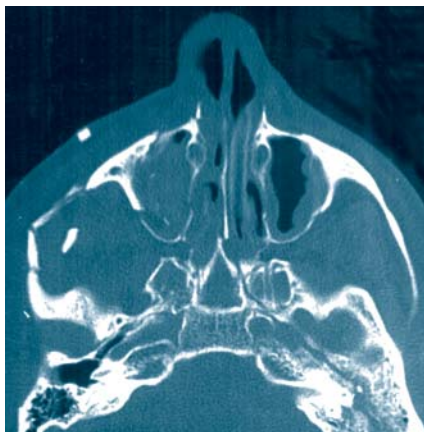
Case Study



Craniofacial Trauma

Patient Profile

A 36-year-old male was involved in a motorcycle accident. Patient suffered basilar skull fracture, multiple facial fractures, head injuries and soft tissue injuries of the cervical spine. Patient was not wearing a helmet at the time of the accident.



Preoperative radiograph

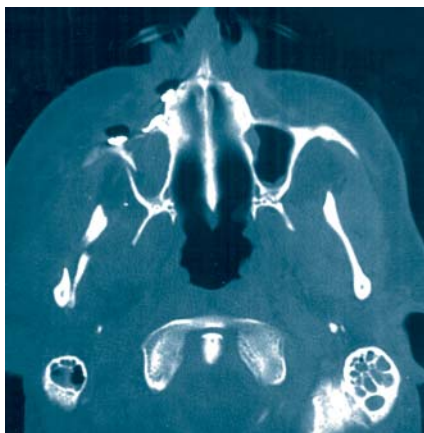
Treatment

Patient was treated with closed reduction of a right condyle fracture and nasal bone fractures. Arch bars were adapted to the maxillary and mandibular arches and secured with stainless steel wire. The mandible was then brought into occlusion and wired. The nasal bones were then molded into midline alignment, and a stent was placed over the top.

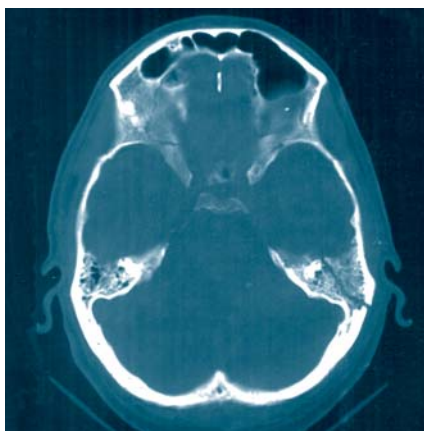
One week later an open reduction and internal fixation of the right orbital floor blowout and right zygoma/malar fracture was performed. A 2.1 mm taper Fisher burr was used to make a hole in the thickest portion of the malar buttress. The zygoma was manipulated until the fracture was anatomically reduced. A 1.5 mm Synthes orbital rim plate was placed across the zygomatico-frontal suture. A 2.0 mm plate was placed across the zygomatic buttress. A 2.0 mm 4-hole plate was placed on the piriform rim. With the zygoma secured, attention was given to the orbital floor.

A 1.5 mm Resorbable Contourable Mesh Plate (50 mm x 50 mm, 0.5 mm thick) was heated in the hot water bath, contoured over the thin comminuted orbital floor, and secured with one 1.5 mm screw. The resorbable mesh provided contourability and adequate support for the globe.

Prior to closing, a forced duction test was performed on the inferior rectus muscle. It was noted that the patient had full range of motion of the right globe.



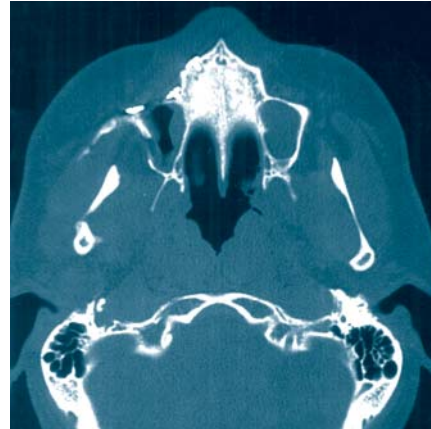
Immediate postoperative radiograph



Immediate postoperative radiograph

Postoperative Management

Patient was kept in IMF for two weeks due to the mandible fracture, then progressed to elastics and physical therapy. Approximately 3 months postoperative the patient experienced conductive hearing loss. A CT of the temporal bones was performed. A fracture of the left temporal bone appears to extend through the middle ear. The fracture line is considerably less distinct than seen on the immediate postoperative scan. No obvious consequence is noted to explain the patient's conductive hearing loss.



3-month postoperative radiograph



3-month postoperative radiograph

Results from case studies are not predictive of results in other cases.
Results in other cases may vary.

Craniofacial Trauma

Materials Used

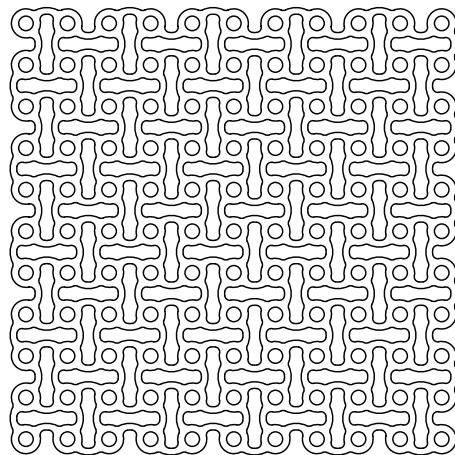
Metal

- 1.5 mm Orbital Rim Plate
- 2.0 mm Tension Band Plate
- 2.0 mm Curved Broad Plate
- 1.5 mm and 2.0 mm Titanium Screws



Biomaterials

- 1.5 mm Resorbable Contourable Mesh
- 1.5 mm Resorbable Cortex Screw



Amnis

Surgeon profile

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