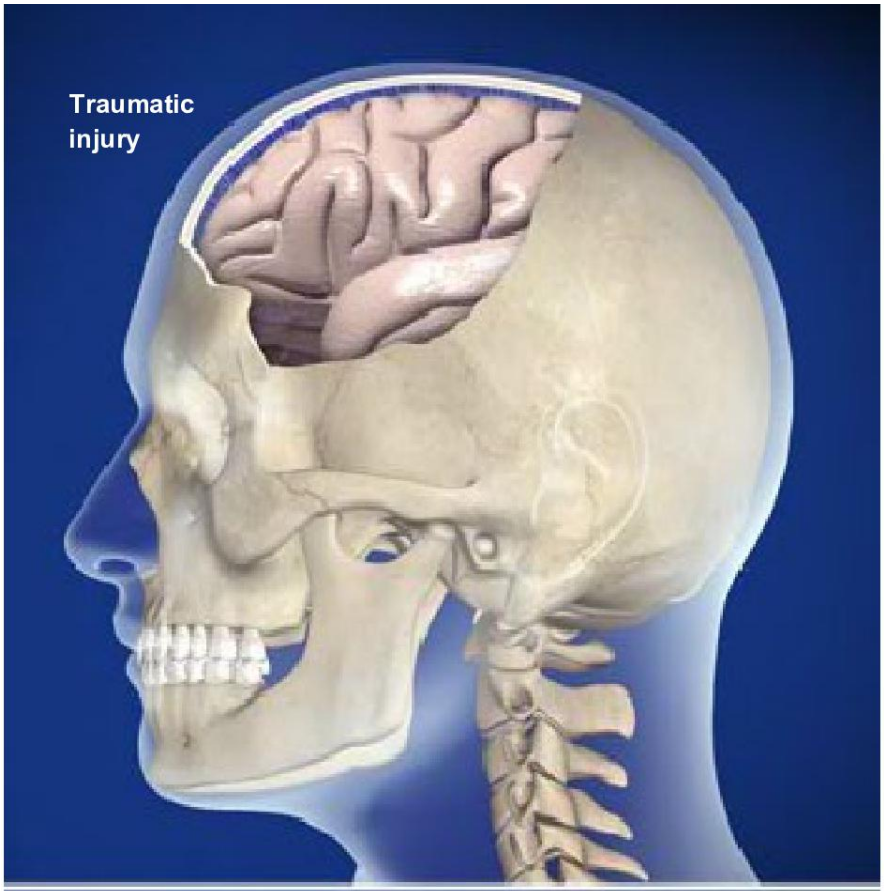
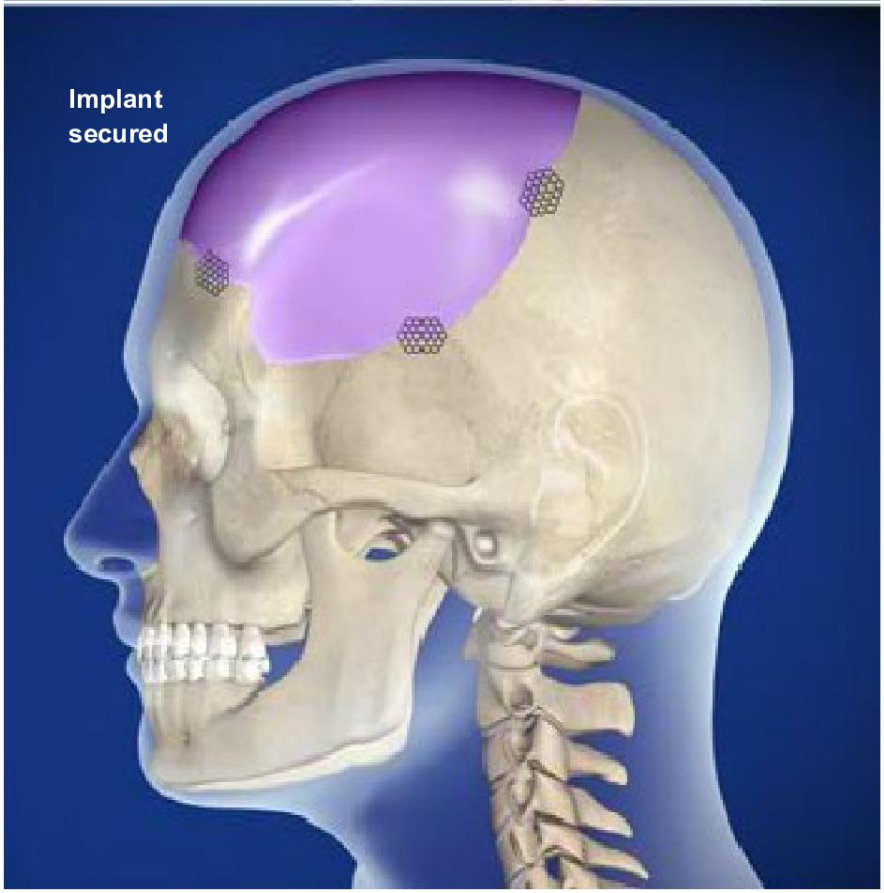
Cranioplasty





Overview

This reconstructive surgical procedure is performed to correct congenital problems of the skull, or to repair the skull after a traumatic injury or medical procedure. During the procedure, a custom plate made from porous plastic or titanium is fitted over the defect in the skull, restoring the skull to its normal shape.

Creating the Implant

Most implants for craniotomy are custom-formed for the patient using special plastic or hardened titanium. A volumetric computed tomography (CT) scan is first made of the patient's skull, and a virtual composite of the implant is created using 3d computer modeling. This computer composite is then used to craft the custom implant, which will precisely match the shape of the defect in the patient's skull.

Inserting the Implant

The custom implant is inserted through an incision in the scalp while the patient is under general anesthesia. It is positioned over the defect and secured to the surrounding bone with screws or plates. The implant restores the skull to its natural shape and protects the brain tissue from injury. The patient will be closely monitored during recovery. Length of recovery will depend on the patient's overall heath and the underlying reason for the cranioplasty.