

Craniotomy for Removal of Intracranial Blood Clots (Hematomas)

University Neurosurgery Information Sheet

General indications for the procedure:

When blood clots form inside the skull, they can occur between the skull and the membrane that covers the brain (dura), between the dura and the brain, and inside the brain itself. These are respectively called epidural, subdural and intracerebral hematomas. Surgery for their removal may be indicated depending on the size, location, accessibility, and the symptoms associated with these clots.

Description of the procedure:

After the patient is put to sleep with the help of the anesthesiologist, an area overlying the clot is shaved and marked on the scalp. Then the scalp is opened and the skull exposed. Using special drills designed for this purpose, either holes (called burr holes) and/or a craniotomy (opening a bone window into the inside of the skull) is made to access the clot. The clot is then evacuated to relieve the pressure on the brain.

Risks of the procedure:

Risks include, but are not limited to: Re accumulation of blood clot with need for re-operations to re-evacuate, seizures, persistent neurological problems of presentation, incomplete evacuation with potential need to return to O.R. to re-evacuate, new neurological problems like paralysis and problems with speech, infection, leak of brain fluid, pain, seizures, coma, and death.

Procedure alternatives, if any:

Not all clots need to be operated on. Often times, it is better to not operate on clots and instead watch them with follow up studies.

Probable consequences of refusing procedure:

If the clot is large and/or if it is affecting neurological function, to not evacuate it may bring about worsening of the condition to the point that there may be irreversible brain damage.

Person(s) performing the procedure:

The surgical team for this procedure is large. This involves, but is not limited to, the attending surgeons, resident surgeons, surgical nurses, physician assistants, surgical technologists and anesthesiologists. Everyone involved will be performing important tasks related to the surgery in accordance with the hospital policies, and based on their skill set and under the supervision of the responsible practitioners.