Overview
In this procedure, performed under general anesthesia, the surgeon opens the skull to remove an abnormal tangle of enlarged blood vessels called a cerebral arteriovenous malformation (or AVM). This procedure is generally used for small AVMs that are located on or near the surface of the brain.

Preparation
In preparation for the procedure, the patient is anesthetized and all or a portion of the scalp may be shaved. The patient's head is secured to prevent movement.

Accessing the AVM
The surgeon then creates a long, arched incision in the scalp overlying the AVM. The soft tissue is folded back to expose the skull. The surgeon drills one or more small holes into the skull and then saws between the holes to free a section of bone. This creates a craniotomy, also called a skull flap, which is removed and stored. The surgeon carefully opens the dura, the membrane that surrounds the brain, allowing direct access to the AVM.

Removing the AVM
The surgeon carefully separates the AVM from the surrounding brain tissue, and then clamps off the blood vessels on both sides of the malformation to cut off the blood supply to the abnormal vessels. The surgeon then frees the AVM and removes it.

End of Procedure
Once the AVM has been removed, the skull flap may be put back into place and anchored with plates and screws. In some cases, a temporary drain may be placed at the surgical site to prevent fluid buildup. The skin flap is folded back and sealed with sutures or surgical staples.

Aftercare
Patients are observed in the intensive care unit (ICU) after surgery. If the AVM had ruptured prior to the surgery and surgery was performed on an emergency basis, the patient usually will remain in the ICU for several days after the procedure.