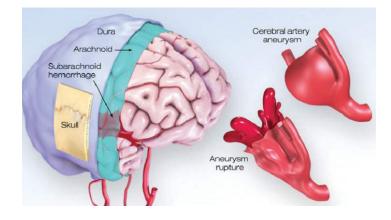
Brain Aneurysm and Coiling



WHAT IS A BRAIN ANEURYSM?

A brain aneurysm is a balloon-like outpuching that results from a weakness in the wall of one of the blood vessels supplying blood to the brain.

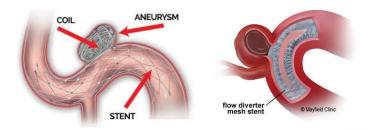
TREATMENTS FOR UNRUPTURED AND RUPTURED CEREBRAL ANEURYSMS

Surgery, endovascular treatments, or other therapies are often recommended to manage symptoms and prevent damage from unruptured and ruptured aneurysms.

Endovascular Treatment

- Platinum coil embolization. This procedure is a less invasive procedure than microvascular surgical clipping. A doctor will insert a hollow plastic tube (a catheter) into an artery, usually in the groin, and thread it through the body to the brain aneurysm. Using a wire, the doctor will pass detachable coils (tiny spirals of platinum wire) through the catheter and release them into the aneurysm. The coils block the aneurysm and reduce the flow of blood into the aneurysm. The procedure may need to be performed more than once during the person's lifetime because aneurysms treated with coiling can sometimes recur.
- Flow diversion devices. Other endovascular treatment options include placing a small stent (flexible mesh tube) similar to those placed for heart blockages, in the artery to reduce blood flow into the aneurysm. A doctor will insert a hollow plastic tube (a catheter) into an artery, usually in the groin, and thread it through the body to the artery on which the aneurysm is located. This procedure is used to treat very large aneurysms and those that cannot be treated with surgery or platinum coil embolization.





Surgery

There are a few surgical options available for treating cerebral aneurysms. These procedures carry some risk such as possible damage to other blood vessels, the potential for aneurysm recurrence and rebleeding, and a risk of stroke.

• Microvascular clipping. This procedure involves cutting off the flow of blood to the aneurysm and requires open brain surgery. A doctor will locate the blood vessels that feed the aneurysm and place a tiny, metal, clothespin-like clip on the aneurysm's neck to stop its blood supply. Clipping has been shown to be highly effective, depending on the location, size, and shape of the aneurysm. In general, aneurysms that are completely clipped do not recur.

WHAT HAPPENS AFTER THE PROCEDURE:

- You will be transferred to a critical care unit where your heart rate, blood pressure, oxygen levels, and brain function will be monitored carefully.
- You will have follow-up imaging done such as a CT scan or an MRI.
- You will be required to lie flat for 2-6 hours to protect the artery in your groin.

WHAT ARE THE RISKS:

Although this procedure is generally safe, it does have some risks.

- Infection
- Bleeding
- Allergic reactions to dye or other medicines
- Damage to other structures or vessels
- Rupture of the aneurysm
- Stroke

WHAT ARE SIGNS OF A RUPTURED BRAIN ANEURYSM?

- Severe headache
- Stiff neck
- Drowsiness
- Nausea
- Vomiting
- Mental confusion
- Dizziness
- A ruptured brain aneurysm is a life-threatening event requiring emergency medical treatment.