Intracranial aneurysm coiling

- Early experience with Target Tetra coils for treatment of small and very small ruptured intracranial aneurysms
- Neurointerventional procedures using sheathless 8 Fr Optimo balloon guide catheter via transradial access: A single-center experience with 100 cases
- Flow diverter with or without adjunctive coils in the treatment of large and giant intracranial aneurysms: a meta-analysis
- Transient Cortical Blindness: A Rare Sequelae Following Endovascular Embolization of a Basilar Tip Aneurysm
- Subarachnoid hemorrhage, part 2 : Treatment, complications and long-term sequelae
- A Case of Coil Embolization for an Angiographically Occult Ruptured Anterior Communicating Artery Aneurysm
- The Lattice flow diverter for the treatment of intracranial aneurysms: a single center experience in 117 consecutive aneurysms
- Endovascular treatment of intracranial aneurysms with the Woven EndoBridge- safety and efficacy

Endovascular coil embolization is a percutaneous approach to treat an intracranial aneurysm from within the blood vessel without the need of a craniotomy. In this procedure, a microcatheter is inserted into the femoral artery near the groin and navigated to the site of the aneurysm. Small helical platinum coils are deployed through the microcatheter to fill the aneurysm and prevent it from further expansion and rupture. Health Canada has approved numerous types of coils and coil delivery systems to treat intracranial aneurysms. The most favored are controlled detachable coils. Coil embolization may be used with other adjunct endovascular devices such as stents and balloons.

The advantage of an endovascular approach is that the coils promote the formation of thrombi in the aneurysm.

Types

Anterior communicating artery aneurysm coiling

Stent-assisted coiling

Balloon-assisted coiling

Trends

Coil embolization for intracranial aneurysms has been widely used since the introduction of Guglielmi detachable coils.

However, coil embolization is associated with a higher risk of recurrence than clip ligation.

With the increasing number of aneurysm recurrences after failed coiling procedures, the best

retreatment strategy remains unknown.

Results

see Volume embolization ratio.

see Obliteration

Complications

Intracranial aneurysm coiling complications.

Basilar artery aneurysm coiling.

Intraprocedural aneurysm rupture.