Microsurgical Clip-Assisted Endovascular Coiling for a Large Ruptured Fusiform Supraclinoid Internal Carotid Artery Aneurysm

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Disclosures

• None
Introduction

- Fusiform intracranial aneurysms are uncommon and circumferentially involve the parent vessel.

- Fusiform aneurysms pose unique and considerable challenges to modern cerebrovascular surgeons.

- Management options are particularly limited for fusiform aneurysms presenting with SAH, large lesions, and those in patients without sufficient collateral supply to the vulnerable brain region.
Methods

• We describe our technique for the treatment of a large, ruptured fusiform aneurysm of the supraclinoid ICA using a staged, multimodality approach
Results

- 71 y/o patient presented with a large, ruptured supraclinoid ICA fusiform aneurysm with a fetal PCOM originating from the inferomedial aspect of the aneurysm.
- Stage 1: partial microsurgical clip reconstruction to secure the rupture site; this left two residual saccular components.
- Stage 2: The residual compartments of the aneurysm were targeted with endovascular coiling during the same hospitalization after the patient had recovered from the initial sequelae of the SAH and was beyond the vasospasm window.
- The relevant images can be found at: https://www.ncbi.nlm.nih.gov/pubmed/29204037
Discussion

• In many cases, partial clip reconstruction of a ruptured, fusiform aneurysm is less technically demanding than a bypass, and it does not expose the distal cortical territory to temporary ischemia.

• Endovascular coiling alone does not necessitate the administration of dual antiplatelet therapy, which is required after endoluminal stent placement.
Summary Points

- Clip-assisted coiling may be a reasonable alternative to microsurgical bypass and endovascular flow diversion for appropriately selected, large fusiform aneurysms presenting with SAH.