# Intracranial fusiform aneurysm treatment

- Protective Effect of Resveratrol Against Intracranial Aneurysm Rupture in Mice
- Statin versus no statin after treatment with pipeline embolization device for intracranial aneurysms: a meta-analysis
- Early experience with Target Tetra coils for treatment of small and very small ruptured intracranial aneurysms
- Flow diversion for treatment of acutely ruptured intracranial aneurysms: Comparison of complications and clinical outcomes with coil embolization
- Flow diverter with or without adjunctive coils in the treatment of large and giant intracranial aneurysms: a meta-analysis
- Endovascular treatment of posterior circulation aneurysms with flow diverters with hydrophilic polymer coating in patients receiving prasugrel single antiplatelet therapy: a multicenter case series presenting complication and occlusion rates
- Association between triglyceride-glucose index and intracranial aneurysm rupture: findings from a retrospective study
- Complications of induced hypertension for delayed cerebral ischaemia secondary to aneurysmal subarachnoid haemorrhage

The treatment of **intracranial fusiform aneurysms** depends on several factors, including the aneurysm's size, location, symptoms, and the risk of rupture. Fusiform aneurysms, due to their diffuse shape and involvement of the entire circumference of an artery, can be more challenging to treat compared to saccular aneurysms. Here's an overview of the main treatment options:

## ### 1. Conservative Management

- 1. **Observation**: For small, asymptomatic fusiform aneurysms that do not show signs of rupture or rapid growth, conservative management with regular follow-up imaging may be recommended. This approach is typically used for aneurysms that pose a low risk of rupture or neurological symptoms.
- 2. **Risk Factor Management**: Managing underlying risk factors like hypertension, atherosclerosis, and other vascular conditions is crucial to prevent further progression of the aneurysm.

## **Endovascular Treatment**

Endovascular techniques are minimally invasive and often used to treat fusiform aneurysms, especially when surgery is not feasible.

- **Stent-Assisted Coiling**: This technique involves placing a stent inside the artery to provide support to the vessel wall, followed by coiling to occlude the aneurysm. It is particularly useful when the aneurysm is located in areas that are difficult to access surgically, such as the basilar or vertebral arteries.

- **Flow Diverters**: Flow diverters are specialized stents designed to divert blood flow away from the aneurysm, thereby promoting the healing of the vessel and reducing the risk of rupture. These are particularly useful for large, fusiform aneurysms.

- **Endovascular Reconstruction**: In some cases, the artery may be reconstructed using stents to reestablish normal flow and reduce the risk of rupture. Last update: 2024/11/12 intracranial\_fusiform\_aneurysm\_treatment https://neurosurgerywiki.com/wiki/doku.php?id=intracranial\_fusiform\_aneurysm\_treatment 16:22

#### ### 3. Surgical Treatment

Surgical intervention may be necessary in cases where the aneurysm is large, symptomatic, or at high risk of rupture. However, fusiform aneurysms are more difficult to treat surgically due to their shape and involvement of a larger segment of the artery.

- \*\*Bypass Surgery\*\*: In some cases, a surgical bypass procedure may be necessary to bypass the aneurysm and restore blood flow to the affected brain area.

- \*\*Aneurysm Clipping\*\*: Traditional surgical clipping is generally more challenging for fusiform aneurysms, as it is difficult to isolate and clip the entire aneurysmal segment. It may still be used in select cases, especially if the aneurysm is located in a more accessible part of the brain.

#### ### 4. Hybrid Approaches

1. In some cases, a combination of surgical and endovascular techniques may be necessary to manage a fusiform aneurysm, particularly for larger or more complex aneurysms that cannot be addressed by a single approach.

#### ### 5. Monitoring and Follow-up

- 1. Regular imaging, such as **MRI** or **CT angiography**, is essential to monitor the size and progress of the aneurysm over time. If the aneurysm remains stable or shows slow growth, continued observation may be appropriate.
- 2. Post-treatment monitoring is also necessary to assess for potential complications, such as rebleeding or thrombosis.

### ### 6. Treatment Considerations

- 1. **Risk of Rupture**: The decision to treat a fusiform aneurysm depends largely on the risk of rupture, which is influenced by factors such as aneurysm size, location, and presence of symptoms.
- Vascular Access: The location of the aneurysm within the brain's vascular system (e.g., basilar artery, vertebrobasilar junction) plays a significant role in determining the most appropriate treatment approach. Certain regions are more challenging to treat due to their proximity to critical brain structures or the difficulty in accessing the artery.
- 3. **Patient Factors**: The patient's age, overall health, comorbidities, and life expectancy will influence treatment decisions. For instance, older patients with significant comorbidities may be managed conservatively if the aneurysm is not causing symptoms or posing a high risk of rupture.

### Conclusion The treatment of intracranial fusiform aneurysms requires a personalized approach based on the aneurysm's characteristics and the patient's condition. Endovascular treatments like stent-assisted coiling and flow diversion have become more common, while surgery is reserved for more challenging cases. Regular follow-up is critical for monitoring any changes in the aneurysm's size or condition. From: https://neurosurgerywiki.com/wiki/ - **Neurosurgery Wiki** 

Permanent link: https://neurosurgerywiki.com/wiki/doku.php?id=intracranial\_fusiform\_aneurysm\_treatment

Last update: 2024/11/12 16:22

