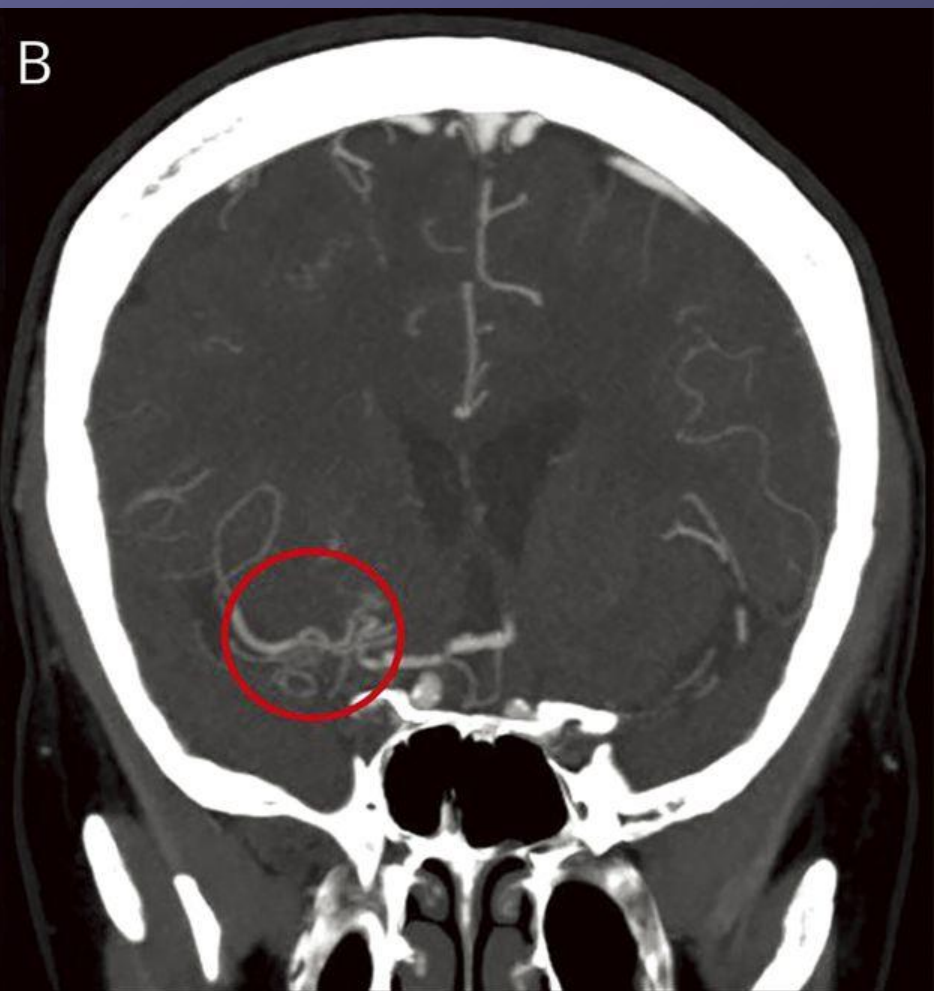
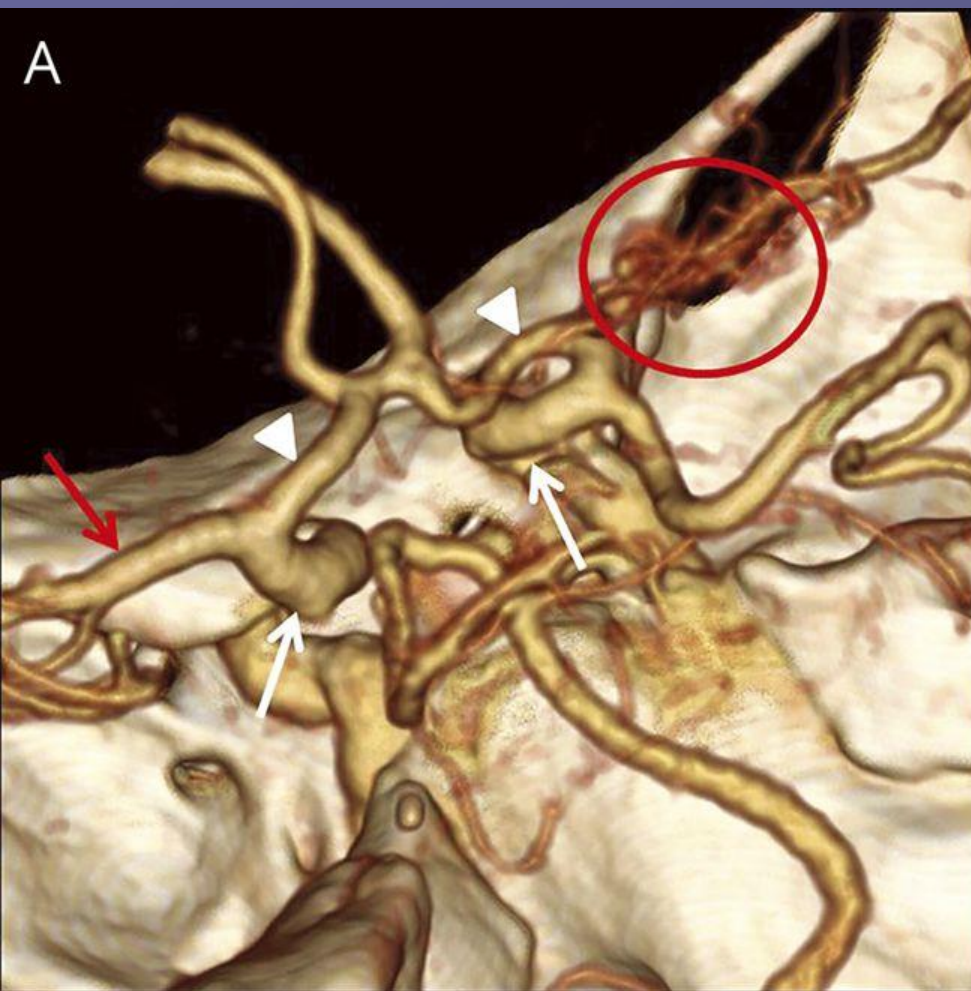


Rete middle cerebral artery

- **Twig-like middle cerebral artery** or rete mirabile anomaly describes
- Discontinuity of a single trunk of the middle cerebral artery with several small vessels reconstituting the artery and giving it a twig-like appearance.
- Distally, normal vascular anatomy of the MCA branches need to be present and no signs of underlying stenooclusive disease or moyamoya pathology of the distal internal carotid artery.

Rete middle cerebral artery

- There is some case-based evidence that twig-like MCA is associated with an increased risk of hemorrhage. When reviewing an angiogram with this condition, therefore, the presence of associated microaneurysms should be examined.



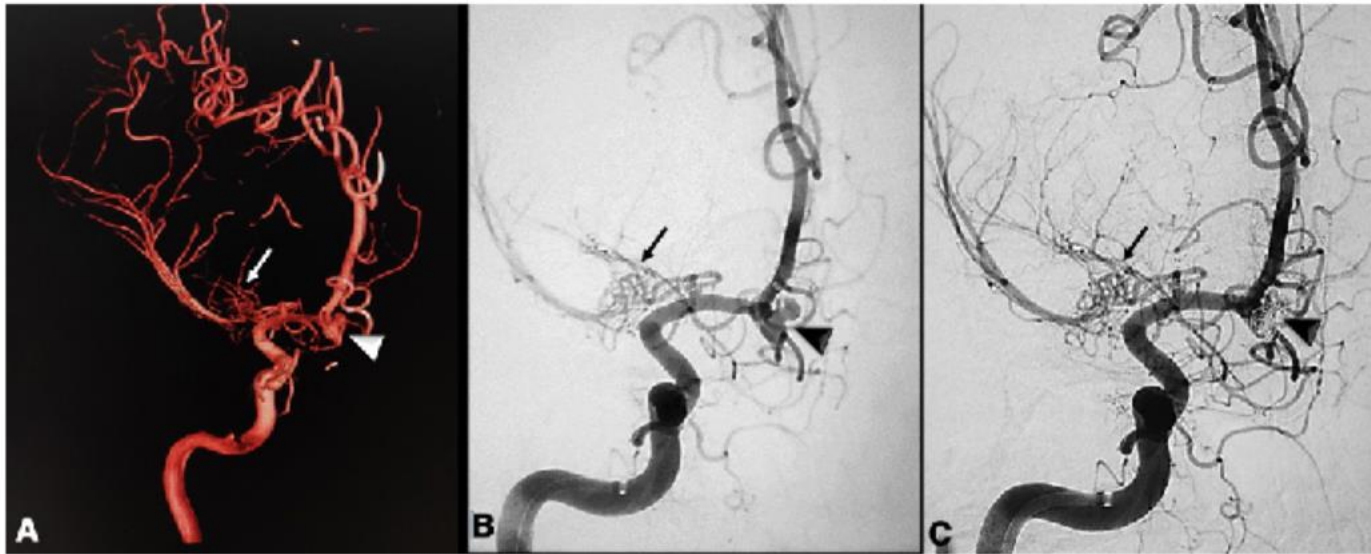


Figure 2 Digital subtraction angiography with a three- dimensional rotational angiogram (A) shows lobulated saccular aneurysm (arrowhead) in the axis of flow- related stress (B) for which endovascular coiling is done (C). Rete MCA (thin arrow) is seen with the absence of normal MCA origin. MCA,middle cerebral artery. [Collapse](#)

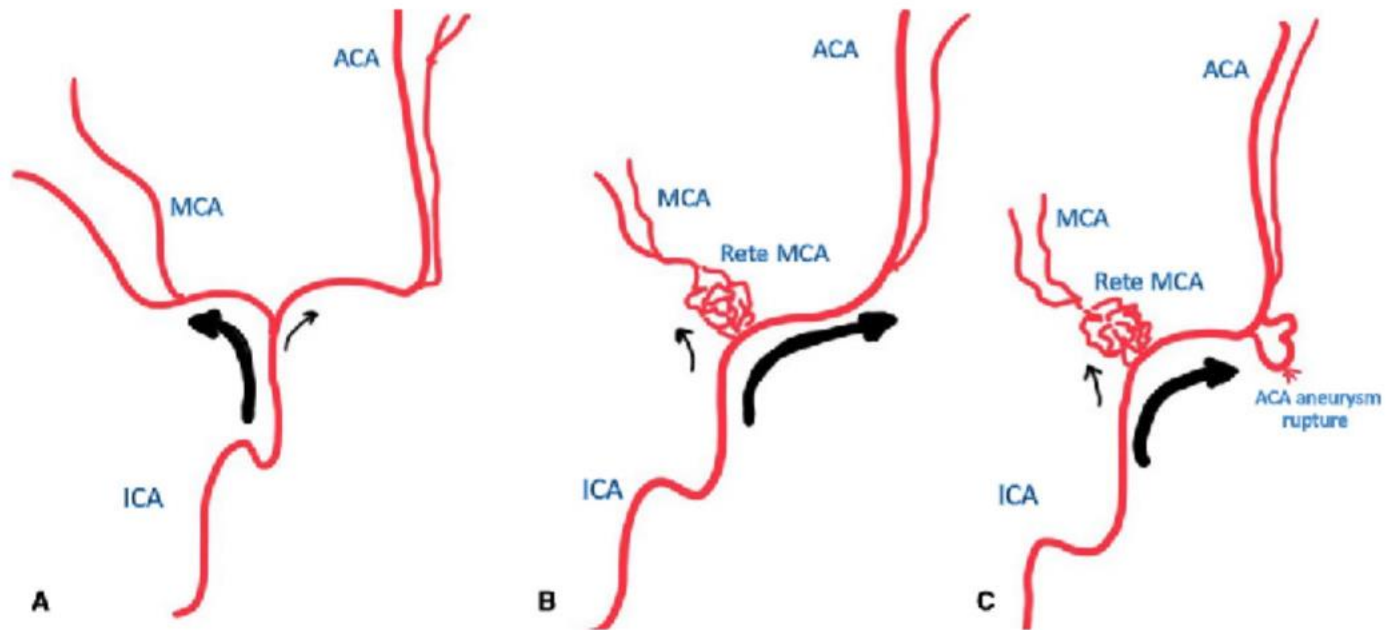


Figure 4 Schematic diagram showing pathophysiology of altered flow dynamics in rete MCA causing aneurysmal growth and rupture at the ACA curvatures.

Figure 4 Schematic diagram showing pathophysiology of altered flow dynamics in rete MCA causing aneurysmal growth and rupture at the ACA curvatures. (A) Normal adult MCA with the bulk flow from ICA towards MCA. (B) Rete MCA causing bulk flow redirection towards ACA. (C) Aneurysmal formation and rupture at the points of chronic haemodynamic stress due to altered flow-dynamics. ACA, anterior cerebral artery; MCA, middle cerebral artery. (ICA: Internal Carotid Artery) [Collapse](#)