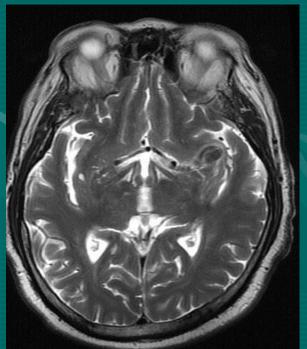
# Endovascular management of complex aneurysm of MCA with incorporated major branches

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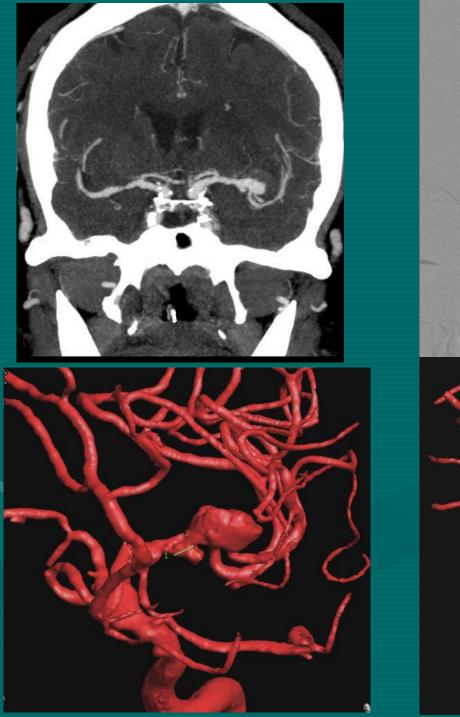
• A 63 years old man, he suffered from right limb weakness for 2 hours

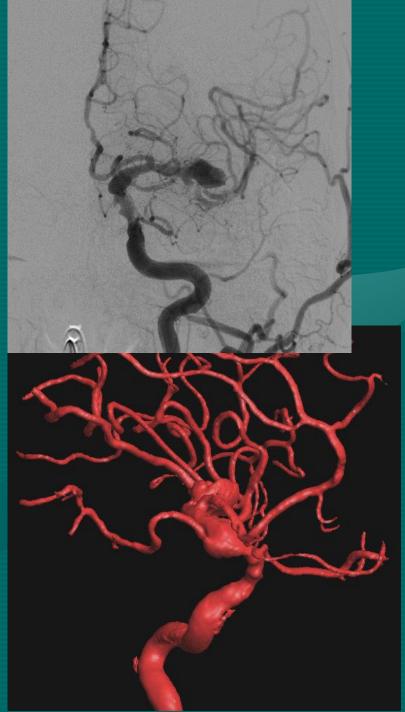












### Imaging findings

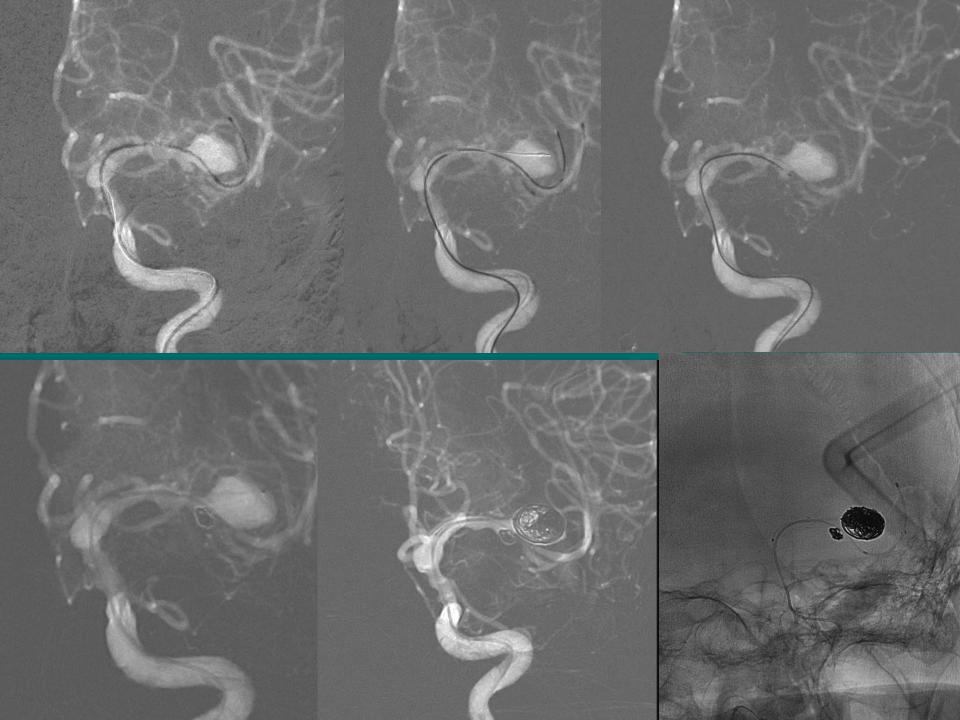
- CT, MR: acute infarction in the left basal gangia.
- DSA: an 11mm saccular aneurysms at the distal M1 of left MCA with incorporated two major branches of MCA arising from the inferior aspect of aneurysm sac; another small saccular aneurysm, size about 3.5mm at the distal M1 of left MCA.

## Endovascular management (1)

- How to protect the two major branches of M1 of left MCA?
- Catheter-, balloon- and/or stent- assisted coil embolization?
- Flow-diverter?

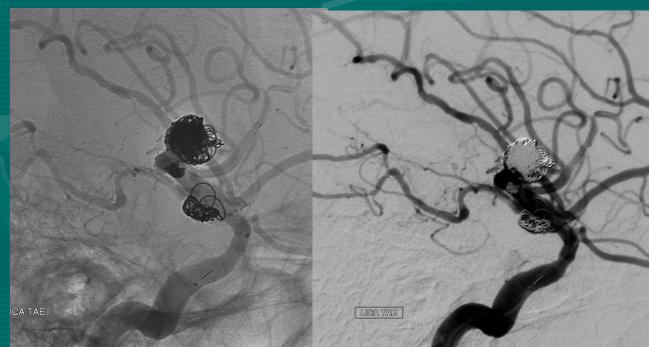
#### Endovascular management (2)

- Stent-assisted and catheter-assisted coil embolization of two major branches of M1 of left MCA.
- Elective coil embolization of aneurysm sac with dense embolization of superior aspect of aneurysm sac and loose coiling of inferior aneurysm sac in which incorporated major branches.
- Intermittent DSA check the patency of incorporated branches during coiling.









#### **Brief Discussion**

- Aneurysm sac with incorporated branch poses the challenge of endovascular coiling with potential risk of occlusion of incorporated branch(es).
- Stent-, balloon-, catheter-assisted techniques may help to protect the incorporated branch.
- Selection of protective device depends on anatomy of parent artery/aneurysm sac/incorporated branch.