



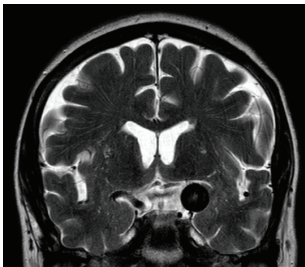
*Thank you to Rebecca Nobes from PRP Warriewood for contributing this issue.*

## CLINICAL HISTORY

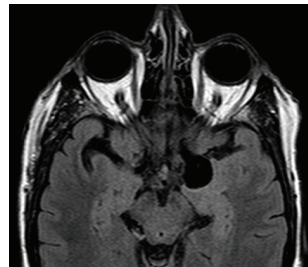
A 74-year-old female was referred to PRP for an MRI brain scan after experiencing absence episodes. She had no significant past medical history.

## IMAGING FINDINGS

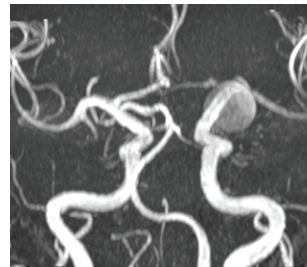
MRI with magnetic resonance angiography (MRA) revealed a 15 mm saccular aneurysm in the distal left internal carotid artery (ICA), visible in T2 coronal (**Fig. 1**), FLAIR axial (**Fig. 2**), and 3D MRA (**Figs. 3, 4**) images. No thrombus was detected within the aneurysm.



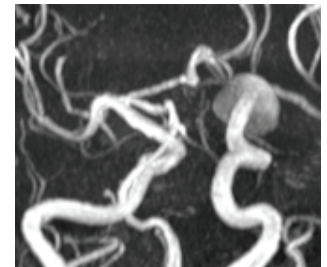
**Figure 1:**  
Coronal T2 Image



**Figure 2:**  
Axial FLAIR image



**Figure 3:**  
3D TOF MRA



**Figure 3:**  
3D TOF MRA.

## DISCUSSION

- Saccular aneurysms, also known as berry aneurysms due to their morphology, account for 80-90% of intracranial aneurysms. Prevalence ranges from 0.2-8.9%, with 15-30% of patients having multiple aneurysms. They have a familial predisposition and are linked to various conditions, such as connective tissue disorders (e.g., Ehlers-Danlos syndrome).
- A ruptured berry aneurysm is the most common cause of non-traumatic subarachnoid hemorrhage (SAH), which can be fatal.
- Unruptured aneurysms can be treated with endovascular coiling or surgical clipping, depending on size, location, and previous SAH history.
- MRA is an effective method of diagnosing aneurysms. The sequence takes 3-4 minutes to perform, in addition to other sequences. MRA can detect aneurysms in asymptomatic patients, allowing timely treatment, and can be used for follow-up in patients with known aneurysms.
- MRA does not require contrast and uses the time-of-flight (TOF) technique to capture blood flow.

### MEDICARE REBATE INFORMATION FOR GP-REFERRED BRAIN MRI

#### Item No. 63551

Referral by a medical practitioner (excluding a specialist or consultant physician) for a scan of head for a patient 16 years or older for any of the following:

- Unexplained seizure(s)
- Unexplained chronic headache with suspected intracranial pathology