

## Case study: AVM

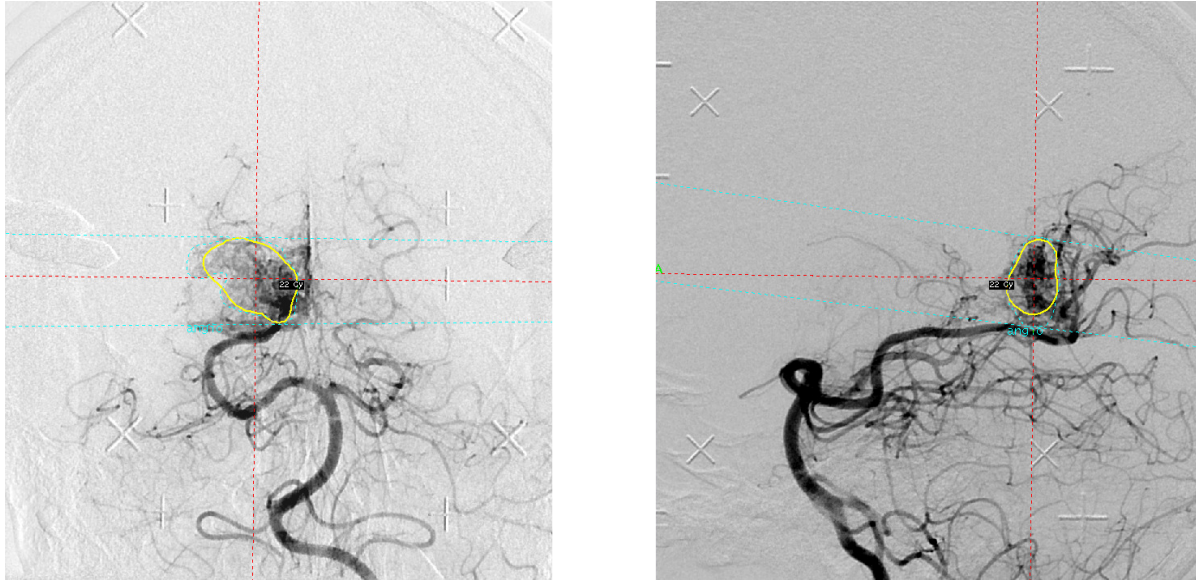


Figure 1 (above): Digital subtraction angiography on the day of treatment with the treatment plan to the nidus overlaid.

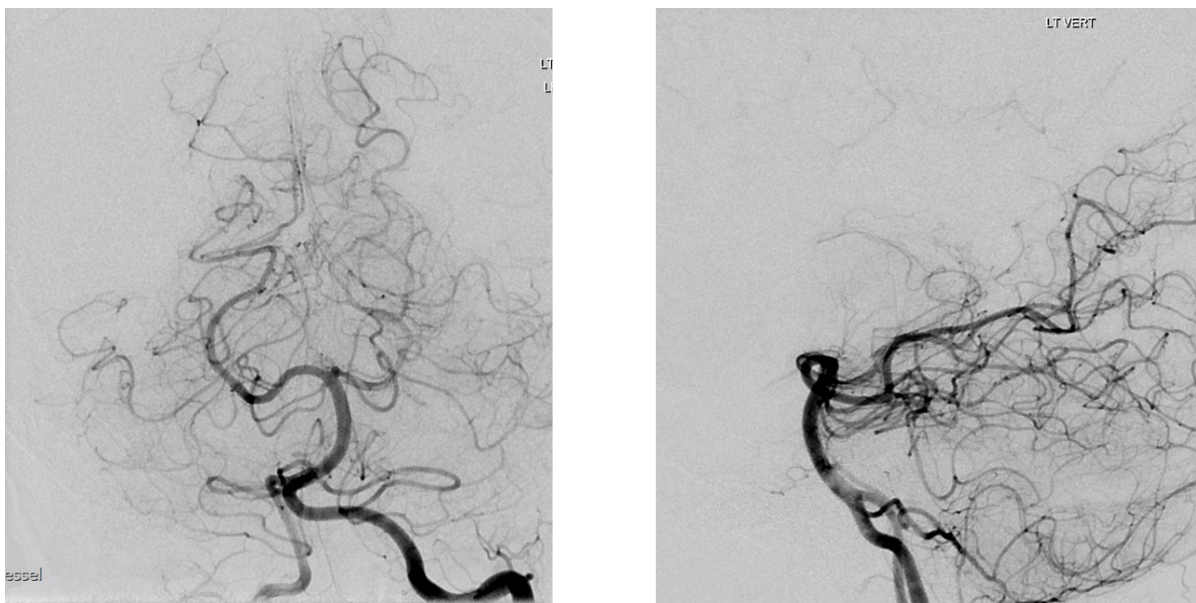


Fig 2 (above): Digital subtraction angiography two years post treatment shows complete obliteration of the AVM.

<b>Patient</b>	30 year old female
<b>Diagnosis</b>	AVM
<b>Treatment</b>	22Gy to 55% isodose in a single fraction



### **Patient History**

This patient suffered from a spontaneous intraventricular haemorrhage in May 2014 whilst pregnant. Further investigation revealed that this was caused by a ruptured arteriovenous malformation. Her baby was delivered by caesarean section with no complications. Her AVM was treated with glue embolisations and the residual was considered suitable for Gamma Knife treatment.

### **Treatment**

On the day of treatment the AVM was imaged using digital subtraction angiography (figure 1) and MRI. The nidus of the AVM was identified and delineated. Treatment was planned to the nidus only, and 22Gy to the 55% was delivered in a single fraction.

### **Follow up**

MRI scanning at one year and 18 months post treatment showed a steady decrease in the amount of vascularity of the AVM. Two years post treatment a digital subtraction angiogram was performed (figure 2) and complete obliteration of the AVM was confirmed.