

Sir,  
**Response to Mr Imran Rahman**

Rahman's report of his local, prospective study provides further evidence of the inadequate opportunities to complete full intraocular procedures available to SHOs, especially in these days of extreme pressure to maximise throughput. Once again it demonstrates that this cannot be explained in terms of the pressure of larger list sizes. What is particularly impressive in his report is the way in which this information was used to reverse the situation and substantially increase the opportunities available to SHOs. While we would agree that negative comments on their own do not lead to change, his work shows the importance of listening to the concerns of junior doctors and acting to address them. We hope that the striking success of his department in doing so will encourage other departments to follow their example.

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Sir,  
**Paradoxical worsening with superior ophthalmic vein thrombosis after gamma knife radiosurgery for dural arteriovenous fistula of cavernous sinus: a case report suggesting the mechanism of the phenomenon**

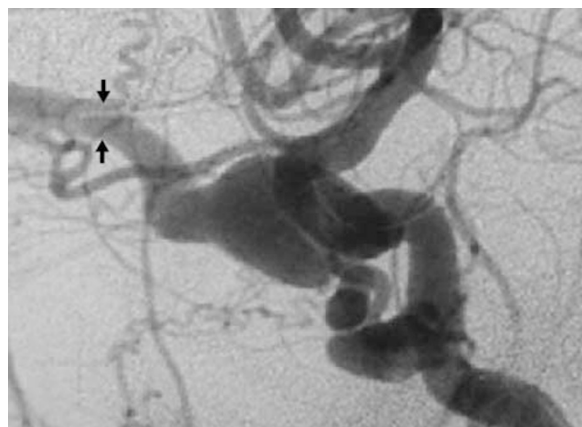
Stereotactic gamma knife radiosurgery is proposed as a safe, less-invasive and effective treatment for low-flow

dural arteriovenous fistula of cavernous sinus (DAVFCS).<sup>1</sup> With the integration of the stereotactic angiographic and magnetic resonance (MR) imaging results during radiation dose planning, gamma knife radiosurgery imposes minimal damage to the adjacent vital structures.<sup>2</sup> Progressive occlusion of the fistula may impose less haemodynamic impact to the cerebral vascular network compared to endovascular treatment. We report a case of paradoxical worsening of symptoms and signs with superior ophthalmic vein (SOV) thrombosis and central retinal vein occlusion (CRVO) after gamma knife radiosurgery before complete obliteration of the fistula. The MR images depict the mechanism of this phenomenon.

#### Case report

A 37-year-old woman was diagnosed with DAVFCS and received gamma knife radiosurgery in the other hospital. Angiographic examination showed a left side-type B DAVFCS,<sup>3</sup> which was drained into the anterior and inferior compartment of the left cavernous sinus and subsequently into the left SOV (Figure 1). At 1 month after gamma knife radiosurgery, she developed increasing proptosis and vision deterioration in her left eye and was referred to our department.

The best-corrected visual acuity was 6/5 in the right eye and 6/10 in the left eye. Fundus examination and fluorescence angiography disclosed CRVO in the left eye. MR examination revealed a prominent left side cavernous sinus and absence of flow void phenomenon in the left SOV (Figure 2). The abnormal flow void signal at the anterior portion of the left cavernous sinus before treatment was replaced by soft tissue signal, indicating thrombus formation at this portion (Figure 3a and b). Doppler ultrasonography revealed no flow in the



**Figure 1** Angiography before gamma knife radiosurgery showed a prominent left superior ophthalmic vein (arrows) draining the anterior compartment of the cavernous sinus.