

for scleral perforation, particularly for trainee surgeons. Ambidexterity can be achieved with practice over a period of time under an operating microscope.

Back problems related to posture adopted during surgery are due to bending and leaning over the operating site when standing. This is again minimal with the use of operating microscope, required only during break localization and cryopexy.

We strongly believe that using the microscope will result in better trained, more dexterous vitreoretinal surgeons, with less risk of inadvertent scleral perforation during surgery and less prone to back problems in later life.

#### Reference

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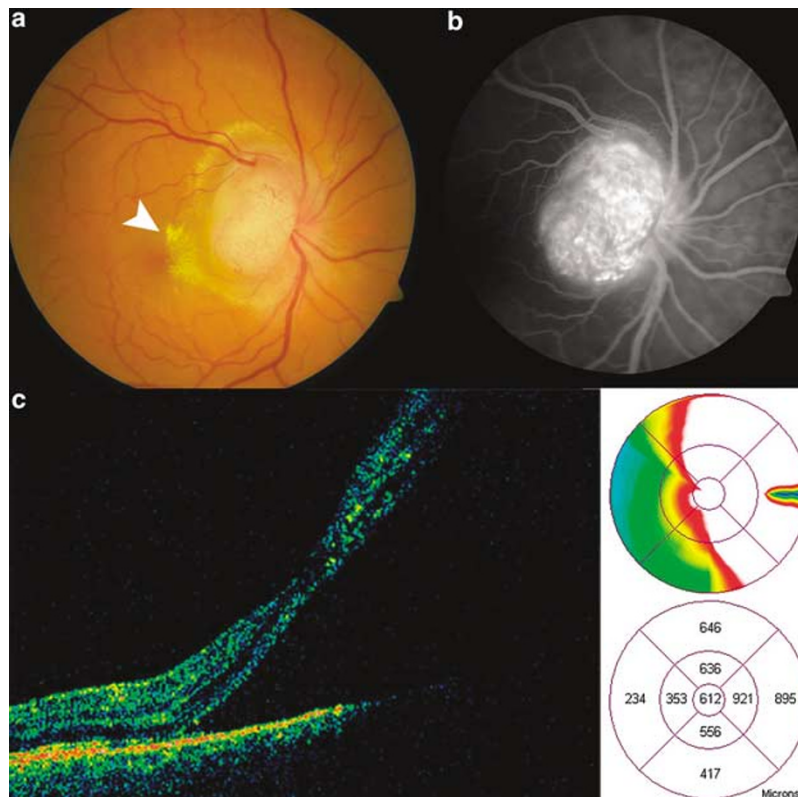
#### Sir, Combined treatment of a juxtapapillary retinal capillary haemangioma with intravitreal bevacizumab and photodynamic therapy

The treatment of juxtapapillary retinal capillary haemangioma (RCH) raises difficulties because of the vicinity to the optic nerve. As juxtapapillary RCHs are frequently located at the temporal site of the disk,<sup>1,2</sup> chronic leakage often threatens the macula.<sup>3</sup> Photodynamic therapy (PDT) with verteporfin has shown to succeed in shrinking RCH, but repeated treatment often resulted in poor functional results.<sup>2,3</sup> We report on a case of juxtapapillary RCH, successfully treated with a combination of intravitreal bevacizumab and PDT.

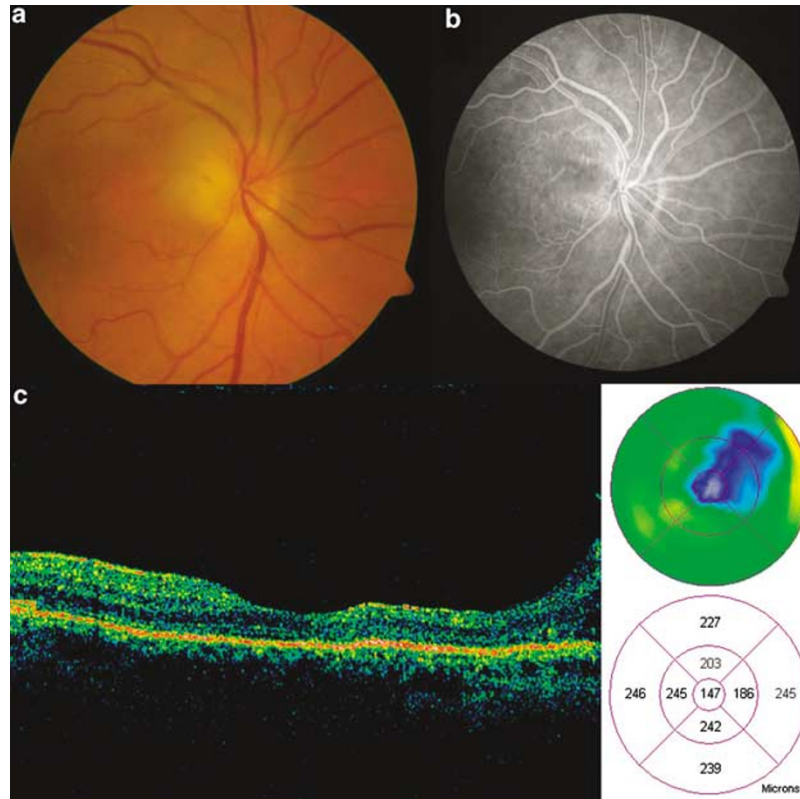
#### Case report

A 58-year-old patient complained about diminished vision since 2 days. Visual acuity (VA) was RE: 20/200 and LE: 20/25. Ophthalmoscopy revealed an elevated mass overlying the temporal half of the optic nerve with invasion of the peripapillary area and macular exudation (Figure 1). Fluorescence angiography showed early hyperfluorescence of the tumour vessels. Perimetry revealed a centrocoecal scotoma. Systemic staging was unremarkable.<sup>1</sup>

Informed consent was obtained in accordance with IRB approval. Two days after the intravitreal injection of 1.25 mg bevacizumab, a decrease in exudation was seen. VA increased to 20/40. Two weeks later, PDT (verteporfin



**Figure 1** (a) Fundus photograph demonstrates the endophytic growth of the juxtapapillary capillary haemangioma and the concomitant exudation involving the fovea (white arrow). (b) Fluorescein angiography showed early hyperfluorescence of the prominent tumour. (c) Initial optical coherence tomography showing horizontal section through the fovea (left) and retinal thickness map (right).



**Figure 2** (a) At 12-month examination, marked tumour regression to a fourth of the original volume was seen. Only minor paleness of the temporal disk corresponded to the limited scotoma. (b) Only very slight hyperfluorescence was detected in fluorescence angiography. (c) Nearly regular foveal anatomy was obtained by optical coherence tomography following combined bevacizumab and PDT treatment allowing a good VA of 20/25.

6 mg/m<sup>2</sup> over 10 min) was performed with an irradiation time of 166 s. Four weeks after the PDT, the tumour showed marked regression and an increase in VA to 20/25. Perimetry also revealed regression of the scotoma to a small inferotemporal spot. One year after the therapy, the macula remained dry and VA was 20/25 (Figure 2).

**Comment**

The case presented underlines that bevacizumab treatment alone can cause a reduction of the tumour-associated exudation, presumably by depleting endothelial fenestrae and altering intercellular adhesion molecules.<sup>4</sup> Vascular complications and phototoxicity are most likely the reasons for the vision loss after PDT in juxtapapillary RCH.<sup>2</sup> The anti-exudative effect of bevacizumab promises better delineation of the juxtapapillary RCH and consequently allows more precisely adjustment of the PDT irradiation to minimize the collateral damage. The single combination therapy of bevacizumab and PDT had a longlasting effect and thus eliminated the necessity of further destruction by repeated PDT.<sup>5</sup> Long-term follow-up of other cases is necessary to make a conclusive statement about the combination therapy of juxtapapillary RCH.

**References**

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Conflict of interest: None

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