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CORRESPONDENCE

Sir,

Prolonged follow-up period following intravitreal bevacizumab injection for stage 3+ retinopathy of prematurity

Data from the Beat-ROP study indicate that bevacizumab (Avastin; Genentech Inc., South San Francisco, CA, USA) treatment results in a lower rate of retreatment compared with conventional laser treatment for Zone 1 retinopathy of prematurity (ROP).[1] However, the suppression of angiogenesis means that follow-up until vascularisation into Zone 3 can be dramatically prolonged, as it was with the case we present here.

Case report

A female, born at 22 weeks and 6 days gestational age (birth weight 535 g), had initial ROP screening at 30 + 4 weeks when retinal vascularisation was only present in Zone 1 in both eyes (BE). At 33 + 3 weeks corrected gestational age (CGA), the left eye was graded as ROP stage 3 in Zone 1 with plus disease, while the right eye was graded Zone 1 stage 2 with plus disease. Both pupils dilated poorly with persistent tunica vasculosa lentis, and 0.625 mg bevacizumab was injected intravitreally bilaterally. By 2 weeks the disease had regressed bilaterally to stage 1 with pre-plus features only.

Retinal vascularisation progressed extremely slowly into Zone 2, and weekly examination had to be continued until 50 weeks CGA. The child was then reviewed 2 weekly until 58 weeks CGA when the retinal vascularisation was completed.

Comment

The anti-VEGF injections proved highly effective at suppressing the ROP process, but delayed normal retinal vascularisation necessitating follow-up for 35 weeks. If this treatment becomes widely used, it will place an increased burden on ophthalmologists involved in ROP management as well as on parents who will be required to bring back infants long after discharge. The natural history of ROP progression after treatment with anti-VEGF agents is less well understood and the safe follow-up duration has yet to be defined. In contrast, following laser treatment, permanent regression can be more confidently ascertained despite incomplete vascularisation beyond the ridge.

Wu *et al*[2] also mentioned an average follow-up period of 8.34 months for their 23 patients who were reviewed until full retinal vascularisation was seen, thus indicating a requirement for prolonged follow-up.

We feel patients for single modality anti-VEGF treatment should be carefully selected and the likely need for prolonged follow-up taken into consideration when making management decisions.

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Optic pit with macular schisis: subtle but discernible

I just read the case report on 'idiopathic macular hole' in a child in the April 2012 issue of *EYE* journal.[1] I was surprised to see that an open-and-shut case of optic disc pit with macular schisis has been described as 'idiopathic' in this report.[2] There is no full-thickness macular hole in the reported case; what is reported as a macular hole is actually a well-described outer retinal dehiscence (Figure 2 of the article).[2,3] Even if the pits were invisible (it is clearly visible in Figure 1 at 3:00 meridian), the tell-tale schisis on OCT gives the clue to the presence of an occult optic disc dysplasia as the cause of maculopathy.[4] Therefore, this is certainly not the first report of an 'idiopathic' macular hole in a child, as there was neither a full-thickness hole at presentation nor was the pathology idiopathic. In fact, the surgeon created an iatrogenic macular hole (Figure 3) in this patient, a possibility that we have described previously.[3] However, I agree with the surgical management of the maculopathy and suspect that the tiny postoperative macular hole might have closed subsequently.

Conflict of interest

The author declares no conflict of interest.

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Sir,

Occult optic disc pit with macular schisis

We would like to thank Dr Shukla for his comments related to our recent case report relating to a child with an outer retinal layer anomaly at the fovea.[1] Shukla claims that we were incorrect to classify this as a full-thickness macula hole. We note that we did not claim that this was a full-thickness macular hole, and our case report highlights that the defect was only affecting the outer retinal layers,[2] which when defined by Gass would fit with a stage I macula hole.

However, we agree that we were incorrect to classify this curious outer retinal layer dehiscence with macula hole nomenclature, as on reflection we agree that this is more likely to be a case of an occult optic disc pit with macular schisis. We read with interest the case series of Shukla *et al*'s relating to the optic disc pit,[3] but regret that we were unaware of this article at the time of our initial case presentation, which was submitted for publication before Shukla *et al*'s published case series.

We are impressed that Shukla found this case of optic disc pit to be 'open-and-shut'. Even on subsequent review of our images, we find that the optic disc is the same size as the fellow eye and this is atypical, as 79% of optic disc pits occur in discs that are larger than the fellow eye.[4] Further, although the disc image (Figure 1) is suggestive of a probable disc pit temporally, the disc OCT (Figure 2) does not clearly demonstrate this.

In summary, we therefore agree with Shukla that this case is probably an optic disc pit associated with macular schisis, and we are glad that their management would have been similar and indeed the patient has done well post-operatively. We do, however, feel that this case is not that typical, and overall there remains more to be learnt about optic disc pits and macular schisis. Hopefully, more information will be obtained about optic disc pits from the planned UK prospective study in association with the British Ophthalmic Surveillance Unit.

Conflict of interest

The authors declare no conflict of interest.

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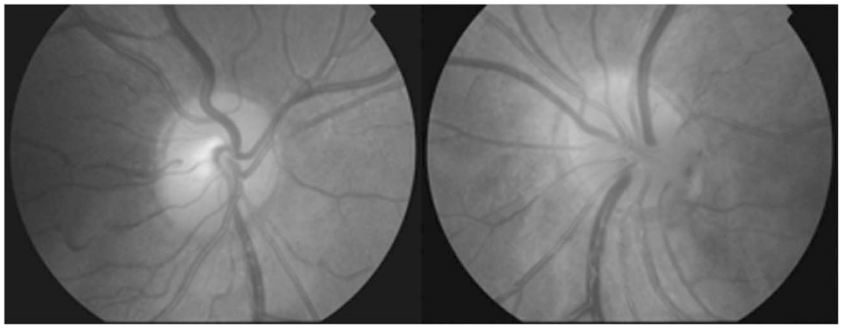

Figure 1 The right optic disc appears normal. The left optic disc is the same size, but despite this it appears to have a probable optic disc pit temporally.

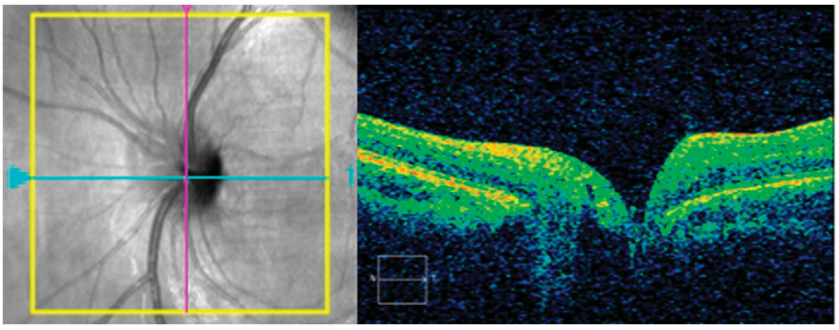

Figure 2 OCT of the left optic disc.