



Bill Harvey discusses last week's condition (15.01.10)

The image above shows an inferior temporal branch retinal vein occlusion. There are multiple flame haemorrhages throughout the inferior fundus including the macular area, so one would expect a significant and sudden drop in acuity to be reported here. Note also the many scattered paler areas over the lesion. These cotton-wool spots indicate that this is an ischaemic vein occlusion. Figure 1 shows a similar lesion without cotton-wool spots, Figure 2 a central vein occlusion showing more extensive haemorrhaging, and Figure 3 shows the typical course of appearance as the haemorrhages reabsorb over the next couple of weeks.

Branch retinal vein occlusions are the commonest retinal vascular lesion after diabetic retinopathy. In the over 50s the prevalence is as high as one in 100 so, depending on your patient base, may present as often as once a month on average. The age link is because veins occlude with more regularity due to the cumulative impact of systemic disease such as hypertension, atherosclerosis and diabetes. These all tend to have greater impact in older patients, so these lesions are most unusual in apparently healthy younger patients. Vein occlusions may also occur with more unusual conditions, such as where the blood clots too readily or contains too many or poorly formed cells (sickle cell anaemia, leukaemia, vasculitis conditions and so on). The important point to remember is that the underlying cause is a vascular disease which needs medical management, not only to reduce the threat of recurrence or a contralateral ocular occlusion, but

reduce the long term potential for the primary disease to cause stroke, cardiac arrest and so on. Assuming the patient is not unwell, referral as soon as possible to the general practitioner for a systemic work up is indicated. If in any doubt, contact the local triage at the eye unit.

For eye care practitioners it is essential to remember another risk factor we haven't mentioned. Raised intraocular pressure causes vein occlusions. Any patient presenting with a vein occlusion must have tonometry and, if IOP is elevated, referred according to that. If in the late 20s and certainly 30s then the local eye unit is likely to want to see the patient on a same-day basis. The point to remember, therefore, is that the urgency of referral cannot be decided without either tonometry or a brief symptomatic review.

Were the patient in question to have no systemic symptoms and pressures fell within normal limits, the general practitioner should be reminded of the importance of the patient still being reviewed by an ophthalmologist (preferably within two weeks), not least in this case where the indication of ischaemia (cotton-wool spots) means that there is potential for proliferative disease in the months to come. Prophylactic laser may have to be used for this or to help resolve any macular oedema.

Name the condition

This week's image is courtesy of John O'Donnell, who is based in London

