Reviewer's report

Title: A Young Patient with visual loss

Version: 2 Date: 16 September 2007

Reviewer: Nathan Radcliffe

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Comments to authors:

In their case report, “A Young Patient with Visual Loss- Case Report,” the authors describe a 26-year old Caucasian female who suffered bilateral CRVO and had a nutritional deficiency of vitamins B-12 and folate likely causing severe pernicious anemia. In general, the case is well written and well presented.

The question posed by the authors is, “Can vitamin B12 and folate deficiency cause central retinal vein occlusion?” In addition, the authors raise the issue of homocysteine metabolism and conclude that “Homocysteine levels should be taken to establish the patient’s individual risk of Central Retinal Vein Occlusion”

In their review of 67 patients 55 years of age or younger with CRVO, Recchia et al.1 found 2 cases that were caused by undiagnosed anemia, however the authors did not specify whether B12 and folate were involved. Beyond this, I find only one case of CRVO associated with pernicious anemia, and this was in a patient who also had anticardiolipin antibodies.2 In a recent review of patients with central retinal vein occlusion who under 56 years of age, anemia was not mentioned.3 While there is a tremendous amount of data relating CRVO to elevated homocysteine levels,4-13 the authors did not report homocysteine levels in their patient and may want to avoid making conclusions on this aspect of
their case. Two investigations have found low serum folate levels in conjunction with HHcy in patients with CRVO,14-15 and a third study of 29 consecutive CRVO patients found these patients to have low methionine and vitamin B12 and increased HCY levels.16 Pernicious anemia was not reported in the above reviews.

In summary, the authors present a case that I believe is reportable, however, they may strengthen their case by stressing the unique aspects of this case, e.g., a bilateral CRVO (which in and of itself is reportable) in a young patient (again a rare occurrence) associated with pernicious anemia (reported only once, per my review). The information regarding B12, folate, and homocysteine has been reported previously, and seems less relevant than the profound anemia. As the authors correctly describe, the relationship between CRVO and homocysteine has not been conclusively demonstrated, but it has been reported. Furthermore, they did not obtain homocysteine levels on their patient, so why talk about homocysteine when there are so many more unique aspects to this nice case?

In summary, this article is worthy of publication, but the authors should consider restructuring the manuscript to focus on the unique aspects, bilateral CRVO in a young patient with pernicious anemia. This association may suggest that ischemia, rather than hypercoagulability, caused this CRVO, and ties nicely into recent reports of the use of anti-VEGF agents in treating CRVO.

References.


Revisions necessary for publication
1. Remove conclusions regarding homocysteine.

What next?: Accept after minor revisions

Quality of written English: Acceptable