# CORRESPONDENCE

## Retinal Arterial Occlusions in Young Adults

EDITOR:

IN THE ARTICLE "RETINAL ARTERIAL OCCLUSIONS IN young adults," by C. M. Greven, M. M. Slusher, and R. G. Weaver (Am J Ophthalmol 120:776–83, December 1995), the authors discuss various associated factors leading to a hypercoagulable state or embolic condition in patients less than 40 years old with retinal arterial occlusions. However, hyperhomocysteinemia, a newly recognized risk factor for the occurrence of premature arterial occlusive disease, was not excluded in the patients. From a study published in THE JOURNAL, we concluded that hyperhomocysteinemia predisposes to the development of premature retinal artery and retinal vein occlusion.[1] It should be recognized that the prevalence of hyperhomocysteinemia is much higher than that of homocystinuria, which is another disorder associated with central retinal artery occlusions in young adults.[2,3]

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## AUTHOR REPLY

WE APPRECIATE THE COMMENTS OF DRS. CRUYSBERG and Deutman. Their paper describing hyperhomocysteinemia as a treatable risk factor in young people with retinal vascular occlusions facilitates our understanding of these events. The patients in our series were treated before 1993 when their article appeared, and therefore our patients were not examined for hyperhomocysteinemia. However, in the future we will use the information they have provided in examining young patients with retinal vascular occlusive disease.

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EDITOR:

IN THEIR VALUABLE RECENT ARTICLE, "RETINAL ARTERIal occlusions in young adults", by C. M. Greven, M. Madison Slusher, and R. G. Weaver (Am J Ophthalmol 120:776–83, December 1995), the authors describe retinal artery occlusions in 27 eyes of 21 patients under 40 years of age. Cardiac valvular disease, present in four (19%) patients, was the most commonly recognized etiologic factor. Emboli were identified in seven (33%) patients, five of whom had cardiac or cerebrovascular sources. The authors note that their incidence of detectable emboli is higher than in previous studies.

The presence of visible emboli in retinal artery occlusions is important for many reasons. In older patients, although central retinal artery occlusion can occur in the setting of temporal arteritis and primary vasospasm, it more commonly results from emboli from atherosclerotic carotid arteries or diseased cardiac valves to the central retinal artery. Likewise, in Greven and associates and other studies of patients younger than 40 years, three of five patients with central retinal artery occlusion had visible emboli; one had an atrial myxoma and one had an internal carotid artery thrombus. Also, some studies have