

Figure 2. A macular schisis detachment of the right eye. A, Fundus photograph of the right eye with fluid extending from the optic disc, a double ring sign consistent with a retinal detachment and overlying retinoschisis, and deep subretinal yellow precipitates in the macula. B, Fluorescein angiogram demonstrates an area of hyperfluorescence in the central and inferotemporal margin of the right optic nerve without subretinal leakage. C, Optical coherence tomography of the right eye with a horizontal scan revealing outer layer retinoschisis connecting to the optic disc. D, A vertical scan through the fovea revealing a neurosensory retinal detachment with overlying retinoschisis.

schisis and retinal detachment in the absence of a congenital optic pit. This case raises the question whether acute rises in intraocular pressure from glaucoma can produce structural defects in the optic nerve head that can lead to a schisis detachment similar to that seen in cases of congenital optic pits.

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Retinal Vascular Occlusion With Overlying Vitreous Hemorrhage Masquerading as a Tumor

Uveal melanoma is the most common primary intraocular malignancy in adults. A collar button-shaped lesion is most often a melanoma, particularly when it has low internal reflectivity and moderate vascularity on ultrasonography. We describe a patient who had a choroidal mass with these features, which was identified as a fi-

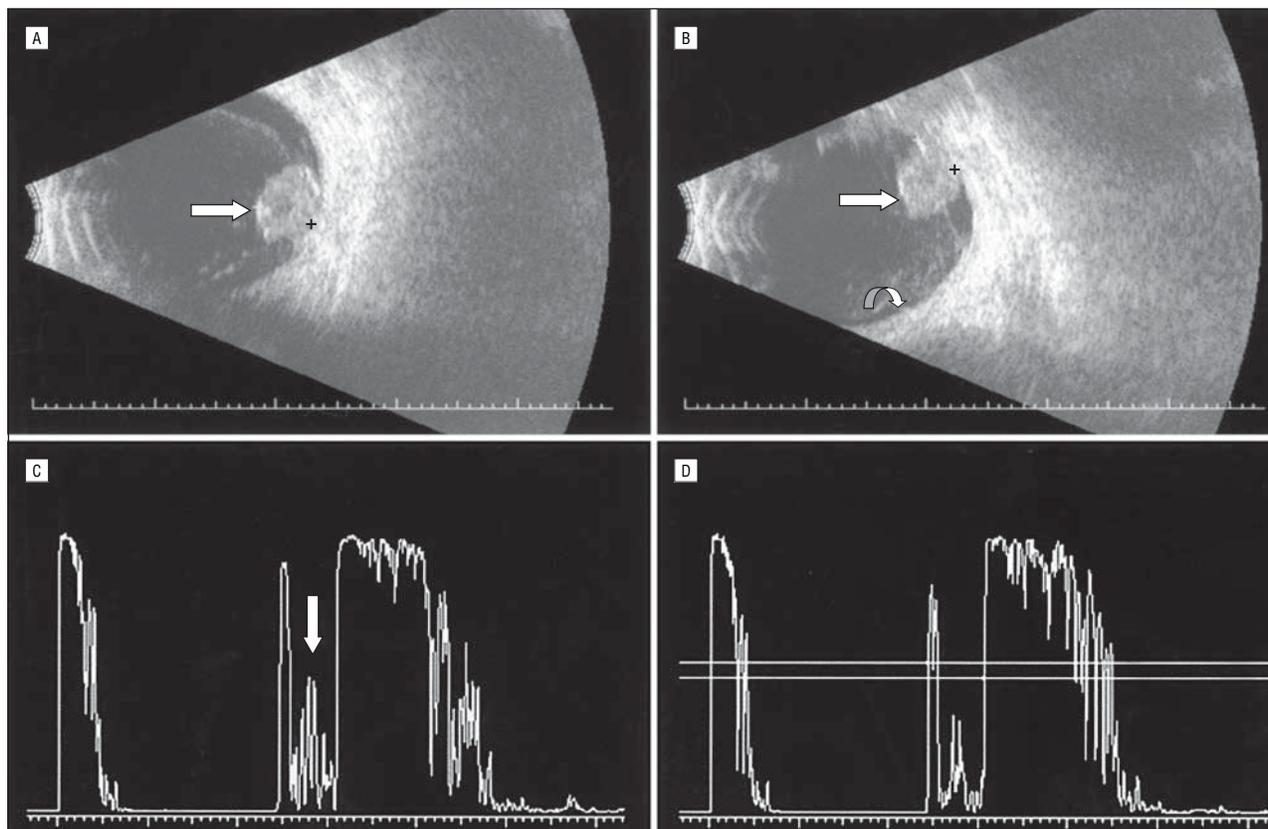


Figure 1. Standardized A- and B-scan ultrasonography findings at initial examination. A, Transverse B-scan ultrasonography of the collar button-shaped lesion (arrow). Maximum elevation was 4.8 mm (basal diameter, 6.7 mm laterally and 4.3 mm radially). B, Longitudinal B-scan ultrasonography shows the lesion (arrow) and optic nerve (curved arrow). C, Standardized A-scan examination at tissue sensitivity shows low-medium reflectivity (arrow). D, Standardized A-scan examination at measuring sensitivity.

brous membrane and blood clot with a branch retinal vein occlusion.

Report of a Case. A 73-year-old white man with a history of branch arterial occlusion in the right eye, branch vein occlusions in both eyes, sectoral laser photocoagulation in the right eye, and cataract extractions in both eyes was evaluated for a mass in his right eye. He also had polycythemia vera, hypertension, peripheral vascular disease, myocardial infarction, cerebrovascular event, and atrial fibrillation, which were being treated with warfarin sodium.

Initially, his visual acuity was 20/400 OD and 20/60 OS. His funduscopic examination revealed a vitreous hemorrhage in the right eye and an old branch vein occlusion in the left eye. Contact B-scan examination of the right eye demonstrated a solid-appearing, collar button-shaped lesion (basal diameter, 6.7 mm laterally and 4.3 mm radially) with moderate vascularity in the

nasal quadrant. Standardized A-scan examination demonstrated low internal reflectivity and regular structure with an elevation of 4.8 mm (**Figure 1**). Although echographic findings were consistent with a choroidal melanoma, a dense vitreous hemorrhage with a melanoma less than 5 mm thick is uncommon.¹ This diagnosis was considered because the patient was taking warfarin. After discussing the treatment options, the patient elected observation. At 2 months, the vitreous hemorrhage was unchanged according to clinical and ultrasonographic examination. After 5 months, the vision remained at 20/400 OD owing to the vitreous hemorrhage. Ultrasonography showed that whereas the lesion size was unchanged, the internal reflectivity became irregular on A-scan examination and the echolucency at the lesion's base was smaller on B-scan examination (data not shown). At 8 months, the vision was 20/200 OD. The nasal lesion was visible, but de-

tailed characterization was prevented by the vitreous hemorrhage. Ultrasonography showed that the lesion thickness had shrunk to 2.3 mm, and the entire lesion moved with the vitreous on dynamic ultrasonography, suggesting that the lesion was a clot (**Figure 2**). The patient opted for pars plana vitrectomy. Intraoperatively, a nasal clot was identified overlying a prominent pre-retinal fibrous membrane within the old branch vein occlusion. Histopathologic examination of the vitreous aspirate showed hemorrhage without malignant cells. Postoperatively, the patient's vision has remained at 20/50 OD without a mass.

Comment. Peripheral disciform lesions, choroidal hemorrhages or granulomas, macroaneurysms, and intraretinal schisis hemorrhages with or without vitreous hemorrhage may mimic choroidal melanomas.^{2,3} We report an unusual case of a nonclearing vitreous hemorrhage caused by a retinal vascular occlusion that

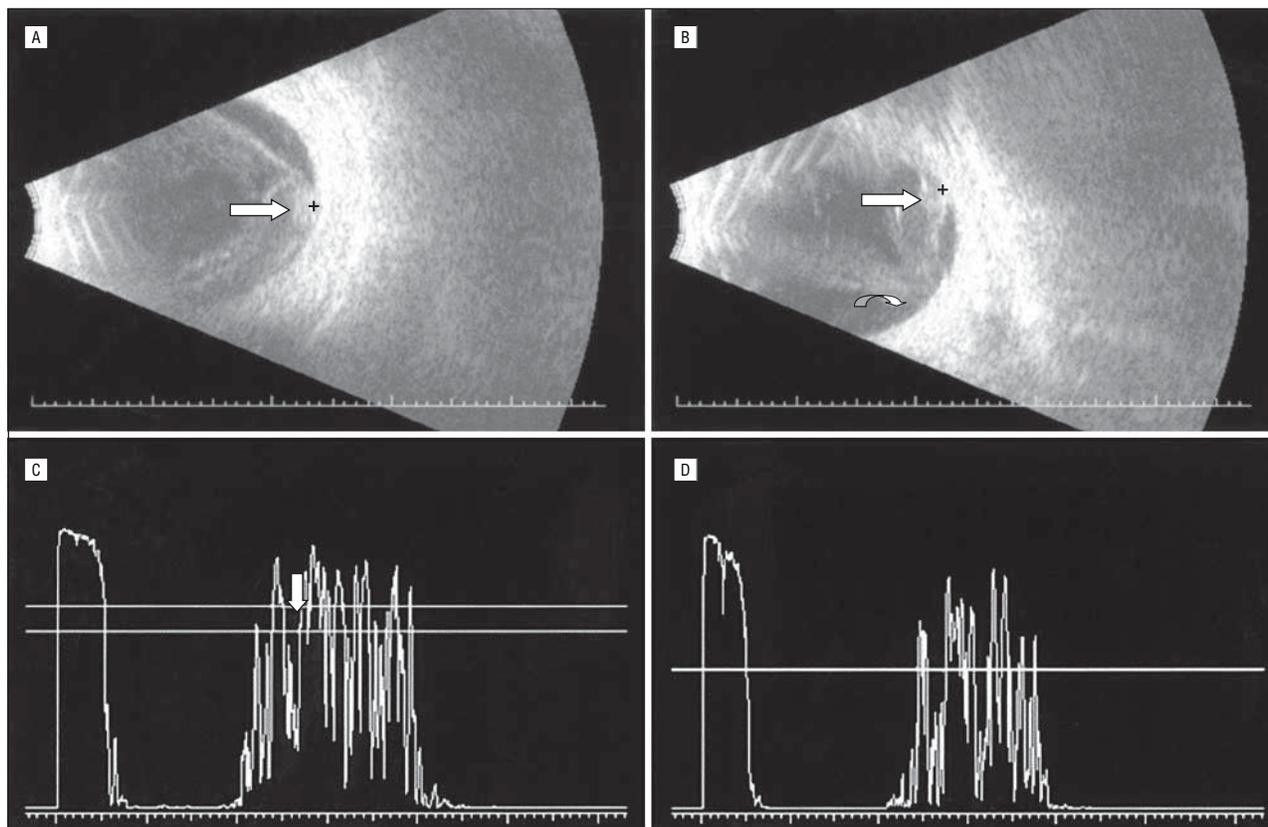


Figure 2. Standardized A- and B-scan ultrasonography findings at 8 months. A, Transverse B-scan ultrasonography shows a 2.3-mm-thick nasal lesion (arrow). B, Longitudinal B-scan ultrasonography shows the lesion (arrow) and optic nerve (curved arrow). C, Standardized A-scan examination at tissue sensitivity shows medium reflectivity. D, Standardized A-scan examination at measuring sensitivity.

ultrasonographically mimicked a choroidal melanoma. The initial ultrasonographic characteristics suggestive of a melanoma include the collar-button shape, low internal reflectivity, and moderate vascularity. The reduction in lesion thickness and change from low-medium to medium internal reflectivity on A-scan examination across time argue against a melanoma.³ Whereas the collar-button shape is characteristic of a melanoma, other lesions such as choroidal metastases and disciform processes can have this configuration.^{3,4} We presume that the sizable preretinal fibrosis accounts for the vascularity seen on ultrasonography, and the membrane size explains the diffuse rather than expected focal nature of the vascularity. Although the long duration of the vitreous hemorrhage argues against a melanoma, the clinical picture was complicated by the use of warfarin.¹ The dense vitreous hemorrhage seen initially as well as the changing characteristics on serial ultrasonographic examinations helped

determine the ultimate diagnosis and guided the physicians in avoiding unwanted treatment.

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Histopathological Features of Conjunctival Sarcoid Nodules Using Noninvasive In Vivo Confocal Microscopy

Sarcoidosis is characterized by granulomatous inflammation, which may affect multiple organs or systems, most commonly including the lungs, skin, joints, and eye. In patients with typical ocular inflammatory disease, biopsy of conjunctival lesions, with finding of the classic noncaseating granulomas, may be helpful in confirming the diagnosis of sarcoidosis. In vivo confocal microscopy (IVCM) allows noninvasive in vivo examination of the eye at the cellular level. Until recently, IVCM has been used solely to describe cornea-related pathologic characteristics. We performed noninvasive IVCM on sarcoid granulomas of the conjunctiva to try and delineate the typical histopathological features seen in sarcoidosis. The images obtained by IVCM were then compared with a conjunctival biopsy specimen taken after IVCM imaging.