A 94-year-old man was referred for evaluation of a left choroidal mass. He reported progressively worsening vision and photopsias in the left eye for several months. Outside records reported nonexudative AMD in the right eye and exudative AMD in the left. The left eye had been treated for at least 7 years with multiple intravitreal injections of aflibercept or ranibizumab, administered in the inferotemporal quadrant of the globe, most recently 1.5 years before presentation. A dilated examination 1 month before presentation did not describe a tumor, but the mass was seen on fundus photography and B-scan ultrasonography. It is unknown if prior photography had been ultrawide field. Medical history was notable for cutaneous melanoma behind the left ear 10 years earlier, with no known recurrence or metastases after wide local excision.

On examination, visual acuity was 20/40 in the right eye and counting fingers in the left eye. The inferotemporal quadrant of the left eye had stippled and mildly elevated episcleral pigmentation with associated prominently dilated vessels. The posterior segment could not be visualized.

Ultrasound biomicroscopy and B-scan ultrasonography demonstrated a large mushroom-shaped ciliochoroidal mass projecting into the anterior vitreous and filling nearly half of the globe. Liver function test results were normal; computed tomography of the chest and abdomen/pelvis revealed no metastases. Given the size of the mass and poor visual prognosis, enucleation was recommended. Fine-needle aspiration biopsy (FNAB) was performed on the enucleated eye after the surgical procedure; a scleral flap was created over the tumor, and the mass was sampled with a 25-gauge needle.

Histopathologic examination revealed a 1.3 × 1.2 × 1.1-cm uveal melanoma, with mixed epithelioid and spindle cell pattern, centered on the ciliary body with extension into the choroid (Figure 2A and B). Tumor cells coated the angle structures and the anterior and posterior surfaces of the iris. Within the inferotemporal sclera overlying the tumor, there were several vertical transscleral scars (Figure 2C). Intrascleral and extrascleral extension of tumor cells was present along these tracts (Figure 2D). The tracts corresponded to sites of previous intravitreal injections, whereas extrascleral tumor cells in the conjunctival substantia propria corresponded to the episcleral stippled pigmentation seen clinically (Figure 1); the tracts were not in the location of the FNAB. Gene expression profiling (Castle Biosciences) revealed a class 2, preferentially expressed antigen in melanoma (PRAME)–positive tumor. With extrascleral extension, adjuvant orbital radiotherapy was considered but deferred given the patient’s advanced age and uncertain benefit.