



Figure 1. Ocular ultrasonography with choroidal mass (arrow) in the posterior chamber of the eye.



Figure 2. Ocular ultrasonography with serous retinal detachment (arrow) in the posterior chamber of the eye.



Figure 3. Fundoscopic examination with choroidal mass (arrow) in the posterior chamber of the eye.

[Ann Emerg Med. 2019;74:156.]

A 41-year-old man presented to our emergency department (ED) with approximately 1 week of gradual-onset, painless, cloudy vision in his right eye. He had a history of adenocystic carcinoma of the right submandibular gland, which had been resected. Several days before presentation, he had notified his oncologist of his eye issues and had magnetic resonance imaging, which did not reveal any ocular abnormalities. However, on the day of presentation he had been evaluated by his optometrist and told he needed to present to the ED. His vision was 20/60 on the left and 20/300 on the right, without any other significant physical examination findings. Bedside ultrasonography by an emergency resident revealed the concerning masses (Figure 1, Video E1 [available online at <http://www.annemergmed.com>]).

For the diagnosis and teaching points, see page 169.

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DIAGNOSIS:

Ocular metastases; specifically, 2 choroidal metastases with an associated serous retinal detachment (Figure 2). The findings were confirmed by ophthalmologic consultation with fundoscopic examination (Figure 3). The masses presumably led to the retinal detachment. The patient was assigned to hospice and died several months later.

Because the choroid is highly vascularized, it is the most common site of intraocular metastases. Sixty-six percent of patients with choroidal metastases have a history of a primary tumor elsewhere.¹ Breast and lung cancer are the most common primary cancers leading to ocular metastases.^{1,2} Choroidal metastases typically are wide-based, low-lying masses on ultrasonography, but will likely require an ophthalmologist for definitive diagnosis.³ The current standard of care for choroidal metastases is radiotherapy because it is eyeball sparing.⁴

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DIAGNOSIS:

Fournier's gangrene. Fournier's gangrene is a rare, life-threatening, rapidly progressive, infective necrotizing fasciitis affecting the genital, perineal, and perianal regions. It occurs mostly in men, with mortality ranging from 7% to 33%.¹ The majority of Fournier's gangrene consists of a polymicrobial infection (54%), with *Escherichia coli* as the most common pathogen (47%).² The diagnosis of Fournier's gangrene is primarily clinical and based on crepitus on palpation; however, this may not be present in 19% to 64% of cases, especially during early presentation.³ On the other hand, ultrasonography has a reported sensitivity of up to 88% and specificity of 93%⁴ and is a useful tool in early diagnosis of necrotizing fasciitis. Characteristic findings include thickened, edematous scrotal wall, hyperechoic foci with reverberation artifact, and dirty shadowing resulting from air surrounding the left testis and perineum.

The patient was resuscitated with intravenous fluids, broad-spectrum antibiotics, and fasciotomies with repeated extensive debridements, and discharged on postadmission day 37.

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