

Chien-Wei Tsai, MD; Chin-Wang Hsu, MD; Karen Chia Wen Chu, MD; Wen-Cheng Huang, MD

0196-0644/\$-see front matter

Copyright © 2019 by the American College of Emergency Physicians.

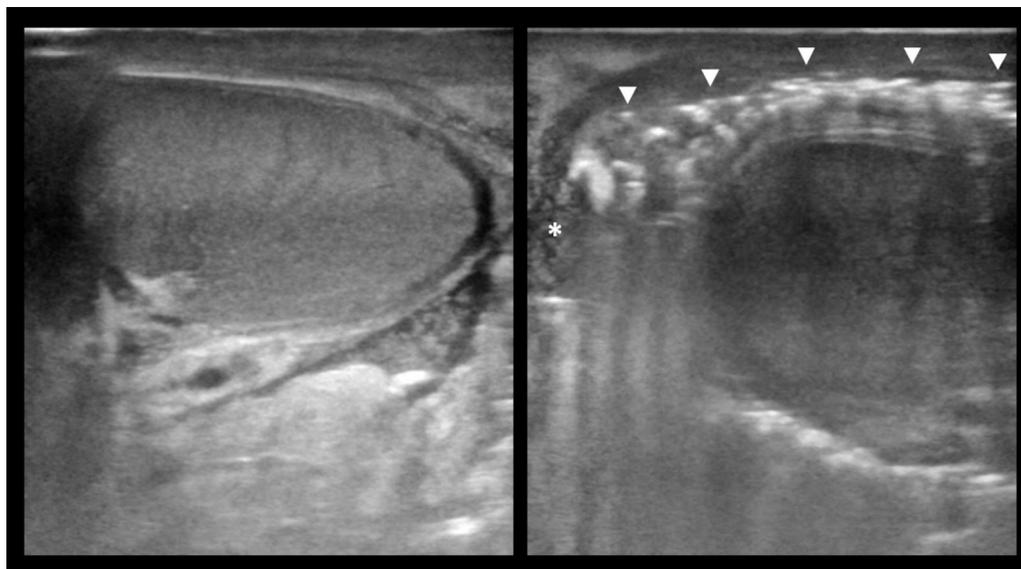
<https://doi.org/10.1016/j.annemergmed.2019.01.033>

Figure 1. Normal right side of the scrotum (left panel). Left side of the scrotum with multiple hyperechoic foci with dirty shadowing, resulting from air surrounding the left testis (arrowheads) and perineum (asterisk) (right panel).



Figure 2. Subcutaneous emphysema in the left side of the scrotum (arrow) and perianal region (arrowhead) (left panel). Air tracking into the left inguinal canal (arrow) (right panel).

[Ann Emerg Med. 2019;74:157.]

A healthy 65-year-old man presented to the emergency department with progressive difficulty in walking for 1 day. On examination, the patient had a temperature of 37.3°C (99.1°F), with a pulse rate of 88 beats/min and blood pressure of 148/84 mm Hg. He had a swollen erythematous scrotum bilaterally without crepitus, and tenderness over the perineal area, extending to both medial thighs. Investigations showed a WBC count of $12.3 \times 10^3/\mu\text{L}$ and a c-reactive protein level of 44.6 mg/dL. The emergency physician immediately performed scrotal ultrasonography (Figure 1, Videos E1 and E2 [available online at <http://www.annemergmed.com>]) and confirmed the diagnosis with computed tomography (Figure 2).

For the diagnosis and teaching points, see page 169.

To view the entire collection of Images in Emergency Medicine, visit www.annemergmed.com.

IMAGES IN EMERGENCY MEDICINE

(continued from p. 156)

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

Author affiliations: From the University of Pittsburgh Medical Center, Department of Emergency Medicine, Pittsburgh, PA.

REFERENCES

1. Shields CL, Shields JA, Gross NE, et al. Survey of 520 eyes with uveal metastases. *Ophthalmology*. 1997;104:1265-1276.
2. Ferry AP, Font RL. Carcinoma metastatic to the eye and orbit. I. A clinicopathologic study of 227 cases. *Arch Ophthalmol*. 1974;92:276-286.
3. Sobottka B, Schlote T, Krumpaszky HG, et al. Choroidal metastases and choroidal melanomas: comparison of ultrasonographic findings. *Br J Ophthalmol*. 1998;82:159-161.
4. Cho KR, Lee KM, Han G, et al. Gamma knife radiosurgery for cancer metastasized to the ocular choroid. *J Korean Neurosurg Soc*. 2018;61:60-65.

IMAGES IN EMERGENCY MEDICINE

(continued from p. 157)

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.

Author affiliations: From the Department of Emergency, School of Medicine, College of Medicine, and the Emergency Department, Department of Emergency and Critical Medicine, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan.

REFERENCES

1. Smith GL, Bunker CB, Dinneen MD. Fournier's gangrene. *Br J Urol*. 1998;81:347-355.
2. Tang LM, Su YJ, Lai YC. The evaluation of microbiology and prognosis of Fournier's gangrene in past five years. *Springerplus*. 2015;4:14.
3. Kane CJ, Nash P, McAninch JW. Ultrasonographic appearance of necrotizing gangrene: aid in early diagnosis. *Urology*. 1996;48:142-144.
4. Yen ZS, Wang HP, Ma HM, et al. Ultrasonography screening of clinically suspected necrotizing fasciitis. *Acad Emerg Med*. 2002;9:1448-1451.