CLINICAL PRACTICE Clinical Images Fracture Blisters



Josue Zapata, MD, MBA, Erika Price, MD, MPH, and Susan Wlodarczyk, MD

Department of Medicine, University of California, San Francisco, 4150 Clement Street, Bldg 203 1A-64, San Francisco, CA, USA.

J Gen Intern Med 37(11):2866
DOI: 10.1007/s11606-022-07568-4
© This is a U.S. government work and not under copyright protection in the U.S.; foreign copyright protection may apply 2022

A 68-year-old man with a history of diabetes and atrial fibrillation on anticoagulation presented with left ankle pain and swelling with overlying fluid-filled blisters on his skin. Two days prior, he had injured his ankle but did not seek medical care. His vital signs were within normal limits and examination of the ankle was notable for pain with passive and active range of motion and cutaneous blistering over his medial ankle (Figure 1). X-ray of the left ankle revealed an acute trimalleolar ankle fracture.



Fig. 1 X-ray of the left ankle revealed an acute trimalleolar ankle fracture

Fracture blisters are tense vesicles or bullae filled with clear fluid or blood that appear on the overlying skin in the first 24 to 48 hours after an acute fracture.^{1, 2} Fracture blisters most commonly develop over the ankle and elbow where there is little soft tissue surrounding the bones. Following a fracture, rapid accumulation of tissue edema increases interstitial pressure that disperses along skin planes and forms vesicles or bullae.³

Fracture blisters are generally benign but may be mistaken for other blistering lesions and can complicate postoperative wound healing and delay surgical intervention. Early surgical repair can prevent the development of fracture blisters.¹

Corresponding Author: Josue Zapata, MD, MBA; Department of Medicine, University of California, San Francisco, 4150 Clement Street, Bldg 203 1A-64, San Francisco, CA 94121, USA (e-mail: josue.zapata@ucsf.edu).

REFERENCES

- Varela CD, Vaughan TK, Slemmons BK. Fracture blisters: clinical and pathological aspects. J Orthop Trauma 1993:7(5)417-27.
- 2. Buckley WR, Lobitz WC. The fracture blister. N Engl J Med. 1953:249(1):11-3.
- McCann S, Gruen G. Fracture blisters: a review of the literature. Orthop Nurs. 1997:16(2):17-22.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.