DOI: 10.1002/emp2.13027

IMAGES IN EMERGENCY MEDICINE

Nontrauma and Medical



Woman with right leg swelling

Cheng Chen MD¹ Po-Wei Chen MD, MS^{2,3} ©

- ¹Department of Internal Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan
- ²Division of Cardiology, Department of Internal Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan,
- ³Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan

Correspondence

Po-Wei Chen, MD, MS, Division of Cardiology, Department of Internal Medicine, National Cheng Kung University Hospital, 138 Sheng-Li Road North District, Tainan 70403, Taiwan.

Email: huntershobow@gmail.com

Funding information

National Cheng Kung University Hospital, Tainan, Taiwan, Grant/Award Number: NCKUH-11203019

1 | INTRODUCTION

A 77-year-old woman presented with progressive swelling in her right leg for 1 month. She had undergone bilateral total hip arthroplasty (THA) 2 years previously. A venous duplex ultrasound was conducted and revealed a noncompressible femoral vein along with a cyst-like lesion right beside the vessel. Further computed tomography (CT) was performed.

DIAGNOSIS 2

Hematoma-associated deep vein thrombosis (DVT). The CT revealed the presence of a hematoma near the right hip screw resulting in compression of the right femoral vein (Figure 1). After multidisciplinary discussions with an orthopedic surgeon and a radiologist, a CT-guided percutaneous drainage procedure was performed. Because of the compression caused by the hematoma, we administered a reduced dose of

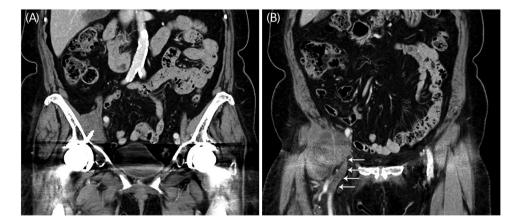


FIGURE 1 (A) A coronal computed tomography scan displayed fluid collection in the right iliopsoas muscle adjacent to the right hip joint. (B) Right femoral vein was compressed with distal venous filling defects (arrows).

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2023 The Authors. JACEP Open published by Wiley Periodicals LLC on behalf of American College of Emergency Physicians.

enoxaparin in consultation with the cardiologist. The swelling in the leg exhibited significant improvement on the day after the drainage procedure.

DVT is a common complication of THA. However, most thromboembolic events are reported to develop within 4 weeks postoperatively. 1,2 Besides, few reports have documented the management of cases where thrombi coexist with a hematoma. 3-5 In the present report, because of the significant time gap of 2 years between the THA and presentation at our department, the surgeon had difficulty establishing a clear association between the surgery and DVT. Additionally, the coexistence of a hematoma and DVT complicated the assessment and the balancing of bleeding risk versus thrombotic risk before anticoagulation therapy for DVT could be initiated. Collaborative efforts with cardiologists, surgeons, and radiologists can be highly advantageous.

ORCID

Po-Wei Chen MD, MS https://orcid.org/0000-0003-2300-0698

REFERENCES

 Lee SY, Ro du H, Chung CY, et al. Incidence of deep vein thrombosis after major lower limb orthopedic surgery: analysis of a nationwide claim registry. Yonsei Med J. 2015;56(1):139-145. doi:10.3349/ymj.2015.56.1. 139

- Dahl OE, Gudmundsen TE, Haukeland L. Late occurring clinical deep vein thrombosis in joint-operated patients. Acta Orthop Scand. 2000;71(1):47-50. doi:10.1080/00016470052943883
- Shieh AK, Lum ZC, Singh AK, et al. External iliac vein compression secondary to osteolysis-induced hematoma in total hip arthroplasty. Arthroplast Today. 2019;5(3):279-283. doi:10.1016/j.artd.2019.04.006. Published 2019 Jun 19.
- Tudoran C, Tudoran M, Abu-Awwad A, et al. Spontaneous hematomas and deep vein thrombosis during the recovery from a SARS-CoV-2 infection: case report and literature review. *Medicina (Kaunas)*. 2022;58(2):230. doi:10.3390/medicina58020230. Published 2022 Feb 2.
- Takenori T, Saito H, Kijima H, et al. A case of deep vein thrombosis caused by hematoma following total knee arthroplasty. Clin Med Res. 2018;7(5):131-134. doi:10.11648/j.cmr.20180705.15

How to cite this article: Chen C, Chen P-W. Woman with right leg swelling. *JACEP Open*. 2023;4:e13027.

https://doi.org/10.1002/emp2.13027