Received: 31 August 2024 | Accepted: 10 September 2024

DOI: 10.1002/emp2.13319

JACEP OPEN
JOURNAL OF THE AMERICAN COLLEGE OF EMERGENCY PHYSICIANS OPEN
A GLOBAL JOURNAL OF EMERGENCY MEDICINE
Open Access

WILEY

IMAGES IN EMERGENCY MEDICINE

Imaging

Man with left flank pain and diphoresis

Yu-Xuan Jiang MD[1] | **Chun-Gu Cheng MD**[1,2] | **Yen-Yue Lin MD**[1,2]

[1]Department of Emergency Medicine, Taoyuan Armed Forces General Hospital, National Defense Medical Center, Taoyuan, Taiwan

[2]Department of Emergency Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

Correspondence
Yen-Yue Lin, No. 168, Zhongxing Rd., Longtan Dist., Taoyuan City 325, Taiwan.
Email: yyline.tw@yahoo.com.tw

1 | CASE REPORT

A 63-year-old man with hypertension presented to the emergency department with sudden onset of pain in the left flank with diaphoresis after heavy lifting. His temperature, pulse rate, and blood pressure were 37°C, 80 beats/min, and 183/88 mmHg, respectively. Physical examination revealed left flank knocking tenderness. Blood laboratory tests revealed a leucocyte count of 13,920/μL, hematocrit level of 30.6%, hemoglobin level of 10 g/dL, and creatinine level of 1.77 mg/dL. Urine examination revealed gross hematuria. The emergency physician performed ultrasonography, which demonstrated left renal parenchyma collapse with compression by a huge hypoechoic hematoma (Figure 1), and the diagnosis was confirmed by computed tomography (CT) (Figure 2).

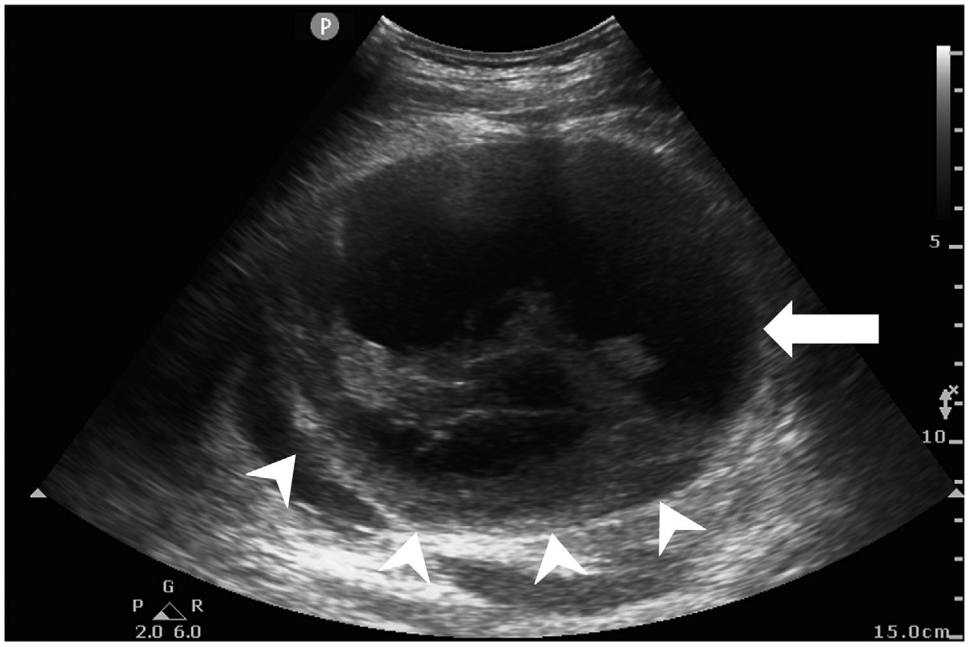

FIGURE 1 Sonographic image of the left flank region in the horizontal plane showing collapsed left renal parenchyma (arrowheads) compressed by a huge hypoechoic hematoma (arrow).

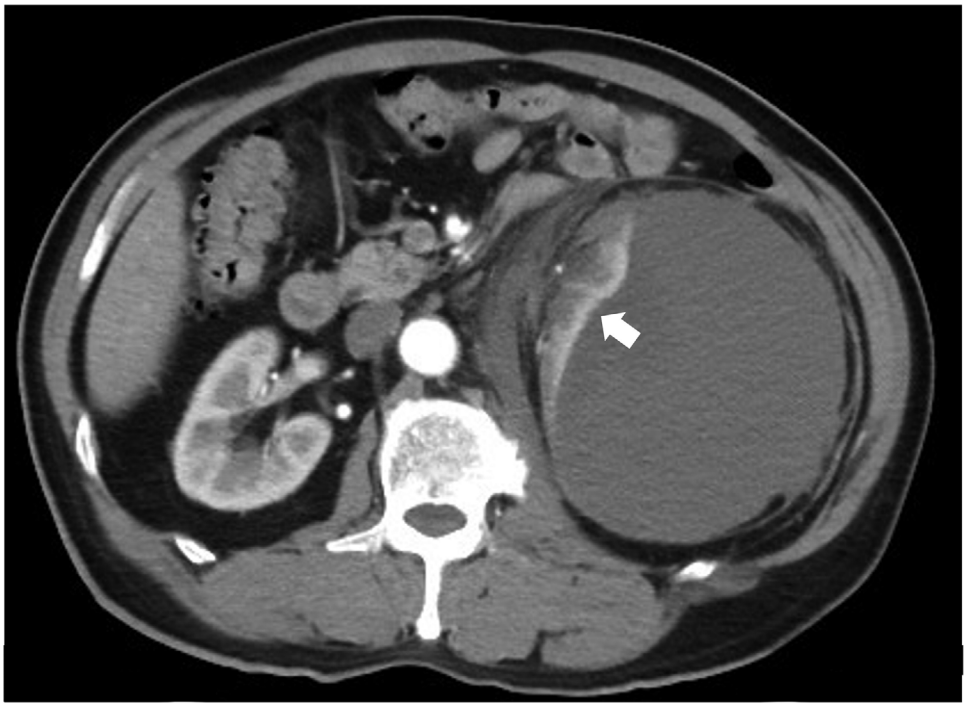

FIGURE 2 Axial view of contrast-enhanced computed tomography of the abdomen showing a large left perirenal hematoma of approximately $14 \times 10\ cm^2$ in size compressing the left kidney (arrow).

2 | DIAGNOSIS

2.1 | | Wunderlich syndrome

After a diagnosis of Wunderlich syndrome, the patient received CT-guided drainage catheter placement performed by a radiologist. He recovered well postoperatively and was discharged 6 days after presentation.

Wunderlich syndrome is a rare condition characterized by spontaneous nontraumatic renal hemorrhage into the subcapsular and perirenal spaces.[1] The classic Lenk triad of acute flank pain, palpable flank mass, and hypovolemic shock is observed in less than 25% patients.[2] Most patients present with isolated flank pain when brought to the emergency department.[2] Wunderlich syndrome can be misdiagnosed as renal colic, thereby delaying prompt resuscitation. Contrast-enhanced CT is a standard imaging modality with 100% sensitivity for diagnosing Wunderlich syndrome.[1] Abdominal sonography can be an alternative for early diagnosis.

REFERENCES

1. Simkins A, Maiti A, Cherian SV. Wunderlich syndrome. *Am J Med*. 2017;130(5):217-218. doi:10.1016/j.amjmed.2016.11.031
2. Parmar N, Langdon J, Kaliannan K. Wunderlich syndrome: wonder what it is. *Curr Probl Diagn Radiol*. 2022;51(2):270-281. doi:10.1067/j.cpradiol.2020.12.002

How to cite this article: Jiang Y, Cheng C, Lin Y. Man with left flank pain and diphoresis. *JACEP Open*. 2024;5:e13319. https://doi.org/10.1002/emp2.13319