Journal of Acute Medicine 10(1): 48-49, 2020
DOI:10.6705/j.jacme.202003_10(1).0007
Make Your Diagnosis

Asymmetric Psoas Lines

Yuan-Chih Tsai[1,2], Sai-Wai Ho[1,2,*]

[1]Department of Emergency Medicine, Chung Shan Medical University Hospital, Taichung, Taiwan
[2]Department of Emergency Medicine, Chung Shan Medical University, Taichung, Taiwan

Case Presentation

A 53-year-old woman with bipolar disorder presented to the emergency department (ED) with left lower quadrant abdominal pain, from which she had been suffering for four days. The pain was radiated to anterior thigh of left leg. There was no vomiting or diarrhea. On arrival at the ED, she was conscious. Her vital signs were as follows: blood pressure of 137/95 mmHg, heart rate of 116 beats/min, respiratory rate of 16 breaths/min, and body temperature of 36.6˚C. The physical examination revealed tenderness in the left abdominal area without rebounding pain. Laboratory findings showed a white blood count of 9,740/mm^3, hemoglobin level of 9.1 g/dL, and platelet count of 333,000/mm^3. Plain abdominal radiographs showed asymmetric psoas lines (Fig. 1). Subsequent computed tomography (CT) of the abdomen revealed a left psoas hematoma with active bleeding (Fig. 2). The patient was admitted and hemophilia A was the final diagnosis. With no further complications, she was discharged after three days of receiving infusions of recombinant factor VIII concentrates.

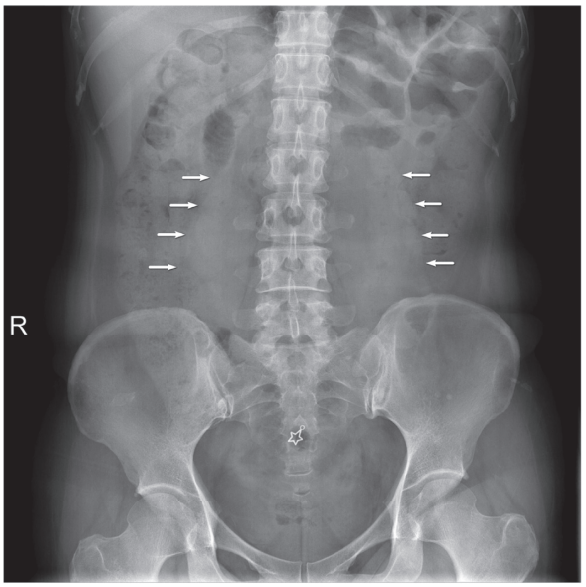

Fig. 1. Plain abdominal radiographs showing asymmetric psoas lines (arrows).

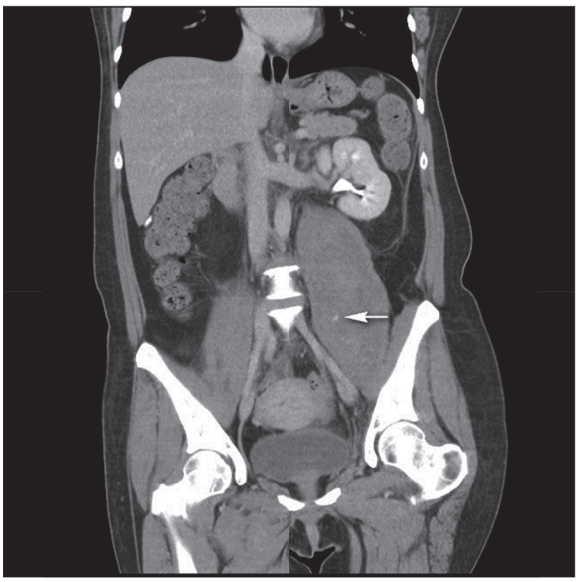

Fig. 2. Computed tomography scan of abdomen showing left iliopsoas muscle hematoma with active bleeding (arrow).

Received: April 23, 2019; Revised: June 25, 2019; Accepted: July 8, 2019.
*Corresponding author: Sai-Wai Ho, MD, Department of Emergency Medicine, Chung Shan Medical University Hospital, No. 110, Sec. 1, Chien-Kuo N. Rd., Taichung 402, Taiwan. E-mail: hswk@ymail.com

Discussion

Spontaneous iliopsoas muscle hematoma is a relatively rare but serious complication associated with a bleeding disorder. It was first reported by Tallroth in 1939 in a patient with hemophilia.[1] Since then, cases associated with anti-coagulant drug use, Gaucher's disease, liver cirrhosis, dengue fever, and hypertensive urgency have been reported. Unilateral abdominal or flank pain is a common clinical presentation. This is occasionally accompanied by lower extremity weakness or paresthesia if the femoral nerve is compressed by the hematoma.[2] Usually, the hematoma resorbs spontaneously with bed rest and correction of the bleeding abnormality. Transcatheter arterial embolization and surgical intervention is performed only in the case of conservative therapy failure or unstable vital signs.[3] Diagnosis can be made by imaging examinations, such as sonography and CT. However, in the absence of an obvious previous history of coagulopathy, diagnosis can be difficult. In ED, plain abdominal radiograph is an imaging screen commonly performed for initial evaluation of acute abdominal pain. It is worth noting that several signs on plain abdominal radiograph indicated life-threatening condition with vascular or gastrointestinal origins.[4] In addition, this case report highlights an important radiologic sign for spontaneous iliopsoas muscle hematoma, of which emergency physicians should be aware.

References

1. Basheer A, Jain R, Anton T, Rock J. Bilateral iliopsoas hematoma: case report and literature review. *Surg Neurol Int* 2013;4:121. doi:10.4103/2152-7806.118561
2. Seijo-Martínez M, Castro del Río M, Fontoira E, Fontoira M. Acute femoral neuropathy secondary to an iliacus muscle hematoma. *J Neurol Sci* 2003;209:119-122. doi:10.1016/s0022-510x(03)00005-4
3. Qanadli SD, El Hajjam M, Mignon F, Bruckert F, Chagnon S, Lacombe P. Life-threatening spontaneous psoas haematoma treated by transcatheter arterial embolization. *Eur Radiol* 1999;9:1231-1234. doi:10.1007/s003300050824
4. James B, Kelly B. The abdominal radiograph. *Ulster Med J* 2013;82:179-187.