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Case Report

Psoas muscle hematoma presenting as painful monoplegia ☆,☆☆

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ARTICLE INFO

Article history:

Received 24 November 2020

Revised 8 December 2020

Accepted 8 December 2020

Keywords:

Psoas hematoma

Lumbosacral plexus

Anticoagulation

ABSTRACT

I present here a case of psoas (retroperitoneal) hematoma; which is a rare, but potentially life-threatening acute condition, with a 30-day mortality of 10% from bleeding in the retroperitoneal space without associated trauma or iatrogenic intervention. A 59-year-old man who was on long-term anticoagulation for his atrial fibrillation presented to our facility with worsening pain in the left groin and being unable to move the left leg and walk. Computed tomography showed a large left psoas hematoma. He was treated conservatively which included reversal of his anticoagulation state. This case highlights the need for early diagnosis of psoas hematoma by computed tomography scan of the abdomen and pelvis to promptly initiate treatment to improve functional outcome.

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Case report

A 59-year-old-man with a history of hypertension, hyperlipidemia, morbid obesity, obstructive sleep apnea on bi-pap, and on chronic anticoagulation for atrial fibrillation and recurrent leg deep vein thrombosis presented with cellulitis of both legs. The following day he complained of sudden, progressively worsening discomfort in the left groin with being unable to move the left leg. When left leg was moved voluntarily, he screamed with excruciating pain. Neurological examination showed decreased muscle strength in the left

hip flexors and adductors and knee extensors, decreased reflexes, and decrease light-touch and pin-prick sensation in lumbar 1-4 distribution. His admission INR was 4.4 (therapeutic INR range for atrial fibrillation 2.0-3.0). Computed tomography of the abdomen and pelvis showed large left psoas hematoma (Fig. 1a-c, denoted by asterisk). Patient's coumadin was held and he received vitamin K replacement, analgesics for pain and antibiotics for cellulitis. Patient was transferred to in-house rehabilitation facility where he received physical and occupational therapies and was able to safely transfer and ambulate by himself and discharged home 2-months later.

☆ Funding: None.

☆☆ Competing Interests: None.

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<https://doi.org/10.1016/j.radcr.2020.12.030>

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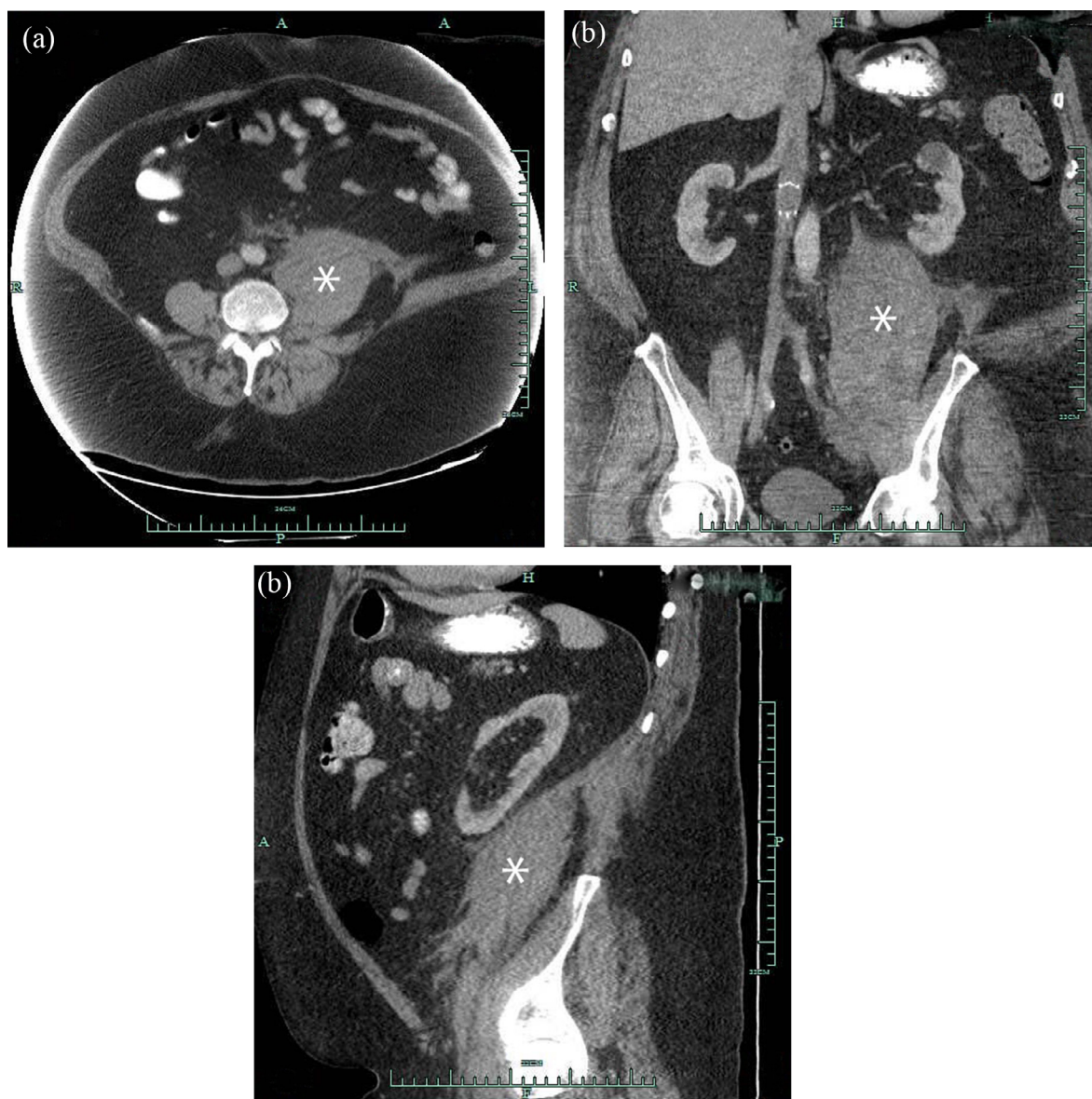


Fig. 1 - (a) Coronal abdominal CT showing a large left retroperitoneal (psoas) hematoma (*). (b) Sagittal abdominal CT showing a large left retroperitoneal (psoas) hematoma (*). (c) Axial abdominal CT showing a large left retroperitoneal (psoas) hematoma (*).

Discussion

The psoas muscle is in the lower lumbar region of the spine (retro-peritoneal space) and extends through the pelvis to the femur. This muscle flexes the hip joints, a movement essential in walking. Incidence of psoas hematoma in patients undergoing therapeutic anticoagulation is 0.6%-6.6% [1,2]. Warfarin, unfractionated and low-molecular weight heparin have been mainly implicated [1-3]. Clinical features are varied and vague [4]. Abdominal and pelvis computed tomography scan is more sensitive in diagnosing this condition. [5]. All patients, whatever the underlying etiology, should be closely monitored and managed with fluid resuscitation, blood transfusion and normalization of coagulation factors [6]. Surgical drainage of the hematoma reduces the effect of

tamponade but damages the lumbar nerve plexus and worsens leg weakness. There is a single case report of percutaneous hematoma drainage to restore femoral nerve function after being compressed by heparin-induced retroperitoneal hematoma [7]. Psoas hematoma needs to be differentiated from other conditions which cause abdominal, flank or groin pain such as acute pancreatitis, ruptured aortic aneurysm, laparoscopic urologic intervention, or penetrating injuries.

Patient Consent

This could not be obtained as veteran as transferred out of state close to his other family members following his diagnosis and completion of treatment.

Author Contributions

Dr. Meheroz H. Rabadi - Study concept and design, Data acquisition, Analysis and interpretation, Write-up of the manuscript for intellectual content, Study supervision

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