



Spontaneous Retroperitoneal Hematoma in a Patient on Lifelong Anticoagulation with Secondary Femoral Neuropathy: A Case Report

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INTRODUCTION

Retroperitoneal hematoma is defined as bleeding into the retroperitoneal space. While traumatic retroperitoneal injury is common, spontaneous retroperitoneal hematoma (SRH) is relatively rare with a documented rate of 0.6-6.6%^{1,2}. The pathogenesis of SRH is hypothesized to be associated with vasculopathy and arteriosclerosis or minor trauma in the microcirculation^{3,4}. Risk factors for SRH include anticoagulation (50-89% of SRH patients), female sex, age >70, pregnancy, abnormal coagulation, arteriosclerosis, cirrhosis, and renal disease.

Spontaneous retroperitoneal hematoma typically presents with abdominal pain (67.5%), hip pain (22.5%), leg pain (23.8%), and back pain (21.3%)⁵. Rarely, symptoms associated with lumbosacral plexus compression are present with leg numbness and weakness present in less than 10% of cases⁵. Misdiagnosis of spontaneous retroperitoneal hematoma occurs in approximately 10.1% of patients⁵.

CASE DESCRIPTION

A 52-year-old male with significant past medical history of mechanical aortic valve requiring lifelong Coumadin presented to the pain management office for evaluation of low back pain and consultation about epidural steroid foraminal injections. A month ago, he started to have burning low back pain radiating to the right anterior thigh associated with right lower extremity weakness and numbness. He has a sensation of water dripping down his right anterior thigh. He reported his weakness was severe to the point that he could not ambulate in first few weeks and needed a wheelchair. He denies history of trauma and recent surgical procedures. Physical exam was remarkable for 4/5 strength in the right quadriceps, reduced sensation along right medial thigh, right medial calf, and right medial ankle, and absent right patellar reflex.

RESULTS

In addition to the multilevel spondylosis, magnetic resonance imaging (MRI) of lumbar spine showed 7.2 cm x 4.7 cm x 4.0 cm hyperintense lesion in the right iliacus consistent with retroperitoneal hematoma, solid mass, or abscess. MRI of pelvis showed a 6.0 cm x 3.1 cm x 3.7 cm collection in right iliacus most consistent with hematoma. Electromyography (EMG) revealed suspect subacute on chronic L4 radiculopathy in the right lower extremity.

The orthopedist diagnosed his low back pain being secondary to L4 radiculopathy, thus he referred the patient to pain management for epidural steroid foraminal injections. In actuality, it was a femoral neuropathy secondary to retroperitoneal hematoma given the imaging and clinical presentation of improving back pain and right lower extremity weakness since onset.

FIGURE 1. ANATOMY OF PELVIS

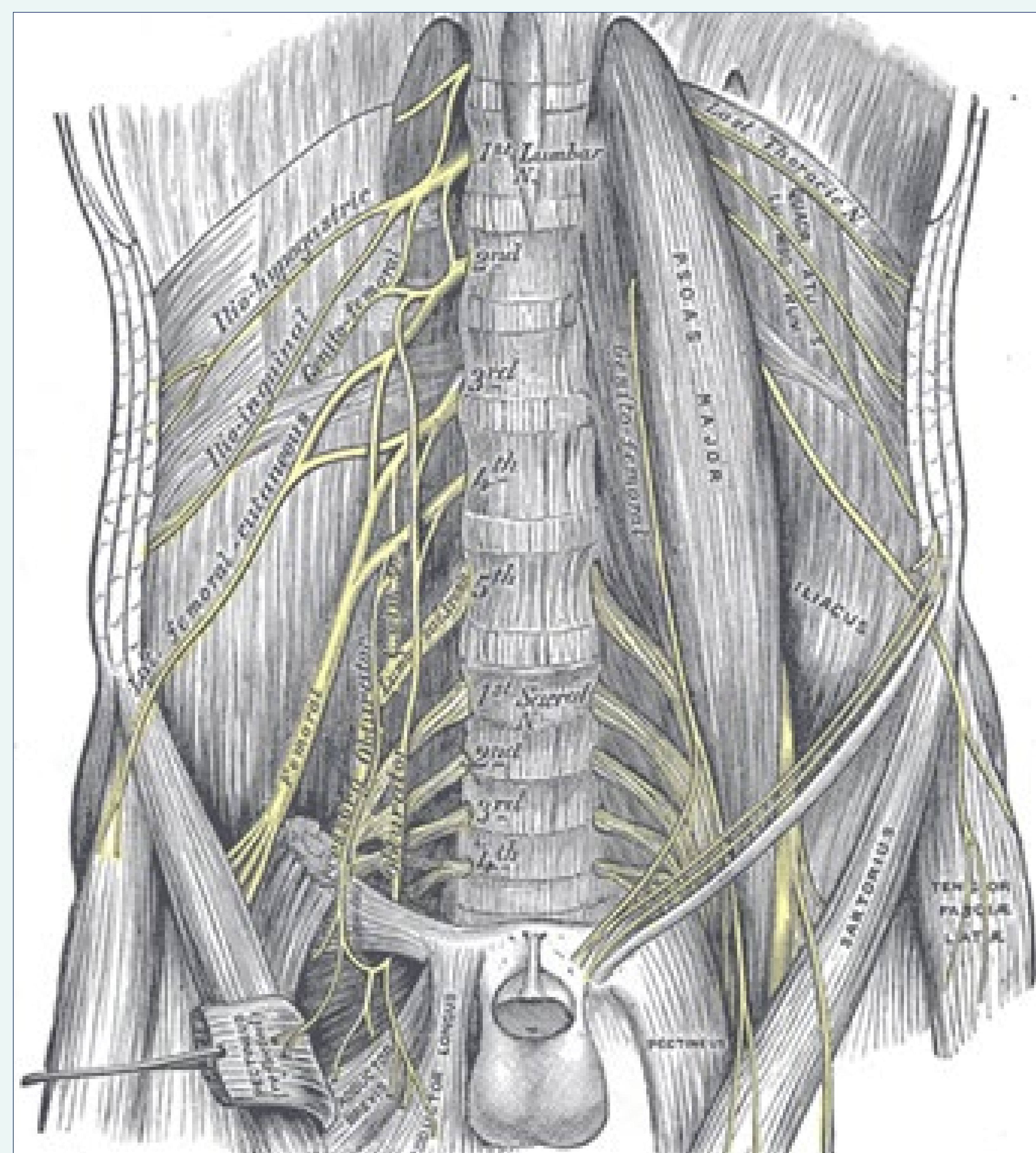


FIGURE 2. ABDOMINAL CT OF RETROPERITONEAL HEMATOMA



DISCUSSION

Studies have shown that the incidence of spontaneous retroperitoneal hematoma is rare, occurring 0.6-6.6% of the time with many cases being found only in case reports^{1,2}. Lower extremity pain and weakness occur <10% of the time⁵. Two-thirds of patients with SRH were on anticoagulant therapy, while one-third of these patients were on antiplatelet therapy⁵. In this case, the patient presented with low back pain, right lower extremity pain, and secondary femoral neuropathy. Compression of femoral nerve results in radiating anterior thigh pain, decreased sensation of medial leg, and absent patellar reflex.

A majority of patients received treatment of blood products and reversal of coagulopathy when indicated. Surgery is indicated for patients who have failed angiographic procedures or significant compressive nerve symptoms⁷.

CONCLUSION

Spontaneous retroperitoneal hematoma is an uncommon but potentially lethal condition with non-specific presentation that can lead to misdiagnosis and delayed treatment. This case showed the importance to have a broad differential for low back pain. Despite being a rare cause of low back pain, spontaneous retroperitoneal hematoma should be kept in the differential given its dramatically different treatment from other causes of low back pain.

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