A rare case of warfarin induced iliopsoas Hematoma

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ABSTRACT

Iliopsoas hematoma is localized collection of blood outside the vessels in the iliopsoas muscle, it can be due to trauma or any other pathology. Here we present a rare case of iliopsoas hematoma of 56 year old male who arrived at the emergency room with complaints of acute pain and progressive swelling in the left thigh and left iliac fossa region and unable to walk. The patient has a history of left ventricular failure with IHD and was using warfarin 10 mg for the last 6 months. Patient was vitally stable with complete functional deficit of all muscles dependent on the left lumbar plexus and his Coagulation profile was deranged. Ultrasound showed a thick fluid collection, which was Psoas hematoma and confirmed on Computed tomography of the pelvis. Warfarin was stopped immediately, conservative management was continued. Although it is a very rare case, still it should be kept in mind with differentials of iliopsoas fossa pain in patient on warfarin therapy.

**Keywords:** Iliopsoas hematoma, Warfarin, Drug adverse effect, Anticoagulation complication


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INTRODUCTION

A hematoma is a localized collection of blood outside the vessels due to either disease or trauma cause by injury, surgery or sometimes blood oozes from broken capillaries due to anticoagulation therapy. Iliopsoas hematoma is formation of hematoma in iliopsoas muscle, it can cause after a trauma, bleeding disorders, extension of bleeding from other structures and rarely as complication of anticoagulation use. The most commonly used anticoagulant worldwide is warfarin. It act in liver by blocking the function of the vitamin K epoxide reductase complex, thus decreasing the availability of reduce form of vitamin K that are required for gamma carboxylation of vitamin K-dependent coagulation factors. Warfarin should be monitored due to individual variation regarding response and dose and its interaction with other drugs.

Due to limited available data and research the mechanism of Iliopsoas hematoma is uncertain, but still there is about 0.1 to 0.6% of incidence of retroperitoneal bleeding in patients undergoing Anticoagulation therapy.

CASE REPORT

A 56-year-old male reported in Emergency Department with complaints of acute pain and progressive swelling in the left thigh and left iliac fossa region. He was unable to walk. The patient had a history of left ventricular failure with IHD and was using warfarin 10mg per day for the last six months. The patient was admitted to the surgical unit on call for further evaluation and management.

On General Physical Examination, he was vitally stable, and having conjunctival hemorrhages in left eye. Abdominal examination shows, tenderness on palpation over left iliac fossa with no guarding, rigidity or rebound tenderness. Left thigh examination shows medial aspect diffuse swelling, having mild tenderness and overlying skin bruises with no mass palpable. Patient was unable to extend his thigh. Neurological examination showed a complete functional deficit of all muscle’s dependent on the left lumbar plexus (femoral and obturator nerves), with hypoesthesia and abolition of the ipsilateral knee reflex. Ultrasound show a thick fluids collection having posterior enhancement with 240 ml collection over the psoas muscle extending to the pelvis suggestive of Psoas abscess. Computed Tomography of the pelvis showed a massive hematoma of the psoas extending into the thigh.

Blood tests showed the clotting profile of the patient abnormally high (PT=27, control=14 INR=1.9, APTT=38,
clinical presentation, and a platelets count of 51000/μL. Warfarin was stopped immediately. Hemoglobin levels were monitored for four consecutive days, which remained the same thereby excluding any active ongoing loss of blood. The complete recovery of lower limb paralysis was resolved over the course of three weeks. Conservative management was continued with follow up after three months due to the hematological and neurological co-morbidities of the patient. The patient remained asymptomatic during and after the follow up period.

Figure 1: Ultrasound showing enlargement of left iliopectineus muscle with collections.

Figure 2: CT scan showing left psoas thickening

DISCUSSION

It can present mainly as groin pain with neurological signs which have many differentials but one common is disc prolapse, although disc prolapse can cause lower limb weakness, one of the rare differentials of iliopectineus hematoma (IPH) should be in mind while seeing a patient who is on anti-coagulation drugs. Iliopectineus hematoma is a rare complication of anticoagulant treatment. Although usually unilateral, a few cases of bilateral iliopectineus hematoma have been reported in the literature. For better clinical outcome and less complications early diagnosis of iliopectineus hematoma is necessary which is based on clinical features and radiological investigations like ultrasound and CT scan pelvis. CT scan with contrast is most sensitive method for confirmation of IPH. Choa et al has also reported a case in which patient on warfarin for her cardiac condition developed acute unilateral iliopectineus hematoma presented as groin pain. This case report is in accordance to our study with addition that our patient had neuropathy too. Different approaches are used for treatment of iliopectineus hematoma, but here conservative approach is started with immediate discontinuation of anticoagulation therapy, bed rest, and hemodynamic stability. Surgical approach and transcatheter arterial embolization (TAE) is also used but in case of hemodynamically unstable patient and severe hematomas.

CONCLUSION

Iliopectineus hematoma should be considered in any patient who is admitted to the emergency department with femoral neuropathy or groin pain and is currently under treatment with anticoagulant therapy. Hence it is concluded that patient who are been on anticoagulation therapy should be monitored continuously and need close observation for such complications.

AUTHOR’S CONTRIBUTION

Qayyum SF: literature review, proof reading.
Imran A: literature review, proof reading.
Anwar F: Manuscript writing.
Khata SK: literature review.
Hayat A: literature review and proof reading.

Disclaimer: None.
Conflict of Interest: None.
Source of Funding: None.

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