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Varfarin Kaynaklı Psoas Hematomuna Bağlı Kendiliğinden Düzelen Femoral Sinir Paralizisi

A Case of Self-Resolving Femoral Nerve Palsy Due to Warfarin-Induced Psoas Hematoma

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Öz

Femoral sinir paralizisi uzun seyri boyunca herhangi bir yerde sıkışabilmesine rağmen klinik pratikte nadir görülen bir durumdur. Antikoagülan tedavinin majör komplikasyonlarından biri olan retroperitoneal hematomlar femoral sinirde kompresyonuna neden olabilir. Bu olguda, varfarin kaynaklı spontan psoas hematomuna bağlı femur sinir felci olan 85 yaşında erkek hasta sunuldu.

Anahtar Kelimeler: Femoral sinir paralizisi, Psoas hematomu, Varfarin, Retroperitonal hemoraji

Abstract

Femoral nerve palsy is a rare condition in clinical practice, though the femoral nerve can be compressed anywhere along its long course. Retroperitoneal hematomas are one of the major complications of anticoagulant therapy and can cause compression on the femoral nerve. In this case, a 85-year-old male patient with femoral nerve palsy due to warfarin-induced spontaneous psoas haematoma was presented.

Keywords: Femoral nerve palsy, Psoas hematoma, Warfarin, Retroperitoneal hemorrhage

INTRODUCTION

Femoral nerve is the major branch of lumbar plexus, supplying the muscles of the anterior thigh. It originates from the nerve roots L2, L3 and L4. It follows retroperitoneal course through the psoas major muscle. It is most vulnerable to injury within the body of psoas muscle and at the iliopsoas groove. Retroperitoneal hematomas can cause compression on the femoral nerve at these levels. Risk factors for spontaneous retroperitoneal hemorrhage are anticoagulant therapy, the elderly and hemodialysis (1). Herein we report a case of femoral neuropathy caused by retroperitoneal hematoma during anticoagulant therapy.

CASE REPORT

A 85 year-old male patient was presented with a right-sided groin pain, bruising of the flank and difficulty in walking. He was taking warfarin for cerebrovascular accident and atrial fibrillation since 2016. On his neurological examination; the strengths of hip flexor and knee extensor muscles were 2/5, with hypoesthesia in the anteromedial thigh and absent of knee-jerk reflex. The psoas sign was positive. There was no history of trauma. Magnetic resonance imaging (MRI) of lumbosacral was performed. Encapsulated within the right psoas muscle, a hematoma of 3.5*3.5 cm with heterogeneous intensities containing different period blood destruction elements was observed (Figue 1). Blood tests showed hypocoagulation (INR:2,13) and mild anemia (Hb:10,31 g/dl, Ht:31,5%). The patient was consulted with cardiology clinic for the management of anticoagulant therapy. Femoral nerve neuropthy was detected in Electromyography (EMG).

Conservative treatment approach was applied. Bed rest is recommended. Gabapentin for pain relief, complex B vitamins for nerve regeneration and home exercise program for muscle strengthening were given. On his control examination, the strengths of hip flexor and knee

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extensor muscles were 4/5. The patient's visual analogue scale decreased from 9 to 2 and functional ambulation classification score increased from 1 to 4. The exercises of balance-coordination and resistance strengthening were recommended.

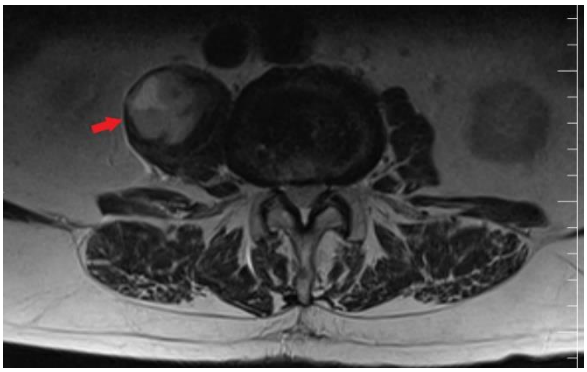

Figure 1. Hematoma on T2-weighted images sequence in axial plane

DISCUSSION

Warfarin is used both primary and secondary prevention of thromboembolic events. Intracranial and extracranial (e.g. gastrointestinal, retroperitoneal) hemorrhages may be seen during warfarin use. Extracranial hemorrhages in anticoagulant therapy are usually seen in the first month of drug initation and gradually decrease in the following months. But it's developed after long-term use of warfarin in our case. The risk of hemorrhage is directly proportional to the INR level. The INR level of 3 and above increases the risk of bleeding significantly. The INR value was 2.13 in our patient and he was low-risk group for major hemorrhagic complications (2).

The femoral nerve can be compressed anywhere along its long course. The weakness of the hip flexor and knee extensors indicates that the lesion is at more proximal levels as in our case. Femoral neuropathy caused by iliacus hematoma is presented with acute onset groin or back pain, ecchymosis over the flank, reduced muscle strength in knee extensors and hip flexors, and diminished patellar reflex. In the differential diagnosis, ureteric stones, aortic dissection, aneurysm of the aorta, lumbar spondylosis with radiculopathy are initially considered (3).

MRI should be considered in the first place to show deep tissues effectively. Computerized tomography can be performed in patients with MRI contraindicated. Ultrasonography is technically difficult due to the deep localisation of the muscles. EMG is a useful technique for differential diagnosis. The treatment can be conservative, transarterial embolization, image-guided percutaneous drainage and surgical decompression. Unless trauma, large hematomas and progressive neurological findings, conservative treatment is recommended (4).

Iliopsoas hematoma should be suspected when a patient receiving anticoagulant therapy presents with sudden muscle weakness, pain and hypoesthesia in legs.

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