Case Report

A Large Vascular Leiomyoma in Femoral Triangle

Bhavinder Arora

Abstract

Angioleiomyoma is a benign soft-tissue vascular tumor arising from the smooth muscle of the tunica media. It is more common in females. Lower extremities, particularly the lower leg and foot, are more affected. Cutaneous vessels are common site of origin. The main vessel- the femoral vein- is a rare site for the origin for a angioleiomyoma. We present a case of a large femoral triangle angioleiomyoma arising from the femoral vein. A clinical presentation, diagnosis, and radiological and histopathological findings are discussed.

Key Words: Angioleiomyoma, femoral triangle, soft-tissue swellings, vascular leiomyoma

Introduction

Angioleiomyoma or vascular leiomyoma is an uncommon benign tumor of vascular origin. It commonly arises from tunica media of vessels, particularly veins of the lower limbs.[1] Angioleiomyoma occurs more commonly in middle-aged females. Origin in the head and neck region and upper extremity is also reported. This report describes a patient with an angioleiomyoma of the femoral vein originating in the femoral triangle. Only one case of vascular leiomyoma of great saphenous vein in femoral triangle has been reported in medical literature.[2] Besides discussing the rare origin and site in femoral triangle, pathological and radiological findings are also discussed.

Case Report

A 46-year-old female presented with a 10 cm non-tender, smooth, firm, mobile swelling in the right femoral triangle. The patient complained of mild pain at the site. A clinical diagnosis of sub-fascial lipoma was made. Ultrasonography revealed a solid swelling in the femoral triangle. Fine-needle aspiration cytology was reported as neurolipomatosis. The patient was advised excision and operated under regional anesthesia. A solid 10 cm mass excised [Figure 1]. The tumor was adherent to the femoral vein [Figure 2]. There was no extension into lumen of the femoral vein; it was excised easily without necessitating femoral vein repair. On gross appearance, the excised specimen was a solid, well-capsulated, gray tumor [Figure 3]. The histopathological report of the excised swelling confirmed the diagnosis of vascular leiomyoma, the histological slide showing smooth muscle proliferation around thin walled blood vessels [Figure 4].

Discussion

An angioleiomyoma is generally reported to occur as a single well defined swelling, about 2 cm in diameter, occurring on the extremities. Lower extremities are more commonly affected in females. In males, both upper extremities and lower extremities are equally affected.[3] Females aged 40–60 years are known to suffer from angioleiomyoma in 50–70% of patients.[4] They can occur in skin, subcutaneous tissue and fascia with an origin in small veins.

Angioleiomyoma can be painful in 60% of patients. Pain when present is paroxysmal in nature and can be initiated by minor stimuli such as touch.[5] The differential diagnosis includes the commonly occurring swellings such as lipoma, fibroma, schwannoma, and ganglia or solitary neurofibromas.

Various views have been expressed about origin of this tumor. The most common theory is that a vascular angioleiomyoma arises from the smooth muscle in the tunica media of the veins.[6] The second theory is that angioleiomyoma is hamartoma. The third theory is that angioleiomyoma arises from the smooth muscles of a hemangioma. It was also suggested that angioleiomyoma is an example of vascular malformation rather than a true tumor.[6] Hachisuga et al. have described four

Department of General Surgery, Pt. B.D. Sharma PGIMS, Rohtak, Haryana, India

Address for correspondence: Dr. Bhavinder Arora, E-mail: drbhavinderarora@gmail.com

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Conflicts of interest
There are no conflicts of interest.

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Conclusion
First, a detailed description of a large size angioleiomyoma of approximately 10 cm is given while most of the case reports describe a size of only 0.5–2.0 cm. Second, it is arising from the femoral vein which is a large diameter vein in comparison to most of angioleiomyomas arising from small diameter veins. Third, the presence of angioleiomyoma in femoral triangle is very rare that too not producing any compression symptoms. Despite the ultrasonography, MRI, and fine-needle aspiration, preoperative clinical suspicion is equally important. The concluding diagnosis of angioleiomyoma is made only after simple excision of mass and its histopathology.
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