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HEMANGIOMA CAUSING ONSET OF PAIN AND LIMITATION OF MOTION IN THE LOWER EXTREMITY

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Intramuscular hemangiomas are rare benign tumors, making up 0.8% of all hemangiomas. Intramuscular hemangioma is a relatively rare occurrence in young adults. The majority of cases involve females. Over 90% of all intramuscular hemangiomas are misdiagnosed. We report an intramuscular hemangioma diagnosed after orthopedic complaints.

Key Words: Intramuscular hemangioma, lower extremity pain.

BACAKTA AĞRI VE YÜRÜME KISITLILIĞINA YOL AÇAN İNTRAMUSKÜLER HEMANGİOMA

İntramüsküler hemanjiomalar tüm hemanjiyomaların %0.8'ini oluşturan benin tümörlerdir. Intramüsküler hemanjioma genç erişkinlerde göreceli olarak nadir görülür. Vakalar kadınlarda daha çok görülür. İntramüsküler hemanjiomaların %90'ından fazlası yanlış tanı alırlar. Ortopedik yakınmaları sonrasında intramüsküler hemanjioma tanısı alan bir olguyu bildiriyoruz.

Anahtar Kelimeler: İntramusküler hemanjioma, alt extremite ağrısı.

INTRODUCTION

Intramuscular hemangiomas are rare benign tumors, making up 0.8% of all hemangiomas (1). Intramuscular hemangioma is a relatively rare occurrence in young adults. Of the reported cases, approximately 45% were located on the lower extremity. The majority of cases involve females (2). The etiology of this entity is unknown and some authors think it is a neoplasm, whereas others think it is a hamartoma or malformation (3). Over 90% of all intramuscular hemangiomas are misdiagnosed (4). They usually are diagnosed during the first three decades of life. Ninety-eight percent of patients present with a history of soft tissue swelling present for 1 month to 20 years (5). The most common associated symptom is pain with increased exercising of the muscle, which can ultimately impair function. The recommended treatment for this tumor is total excision.

We report the diagnosis and management of a rare intramuscular hemangioma located within the vastus medialis part of the quadriceps femoris muscle.

CASE REPORT

A 24-year-old female attended the clinic of orthopedics due to pain in the lower half of her right thigh. After a tender mass was palpated on the physical examination, an MR visualization of the region led to the diagnosis of hemangioma. She was referred to the department of cardiovascular surgery at our hospital. Her history revealed a swelling in the erect position and intermittent claudication on walking 50-100 meters. However, the pain did not cease upon resting. Bruising or feeling cold did not occur. Claudication prevented her from walking. The other findings were palpable pulses of the pedal arteries on both feet, circumference difference of 1.5 cm between the thighs in favor of the right, absence of any murmur or thrill over the mass, and normal laboratory findings. MR of the distal half of the right thigh revealed the following results: a 5 x 3 cm hyperintense mass with smooth lines located within the vastus medialis part of the quadriceps femoris muscle. It was a space occupying lesion taking contrast and presenting a hemangioma (Figure 1). On Digital Subscription Angiography, capillary-like staining of the superficial femoral artery and drainage veins over Hunter's canal were observed, representing a vascular malformation like hemangioma. After total excision of the mass under spinal anesthesia, the pathologic examination suggested the diagnosis of cavernous type hemangioma. On the sixth day after the operation she was discharged. Recurrence was not observed on her one-year postoperative follow up.

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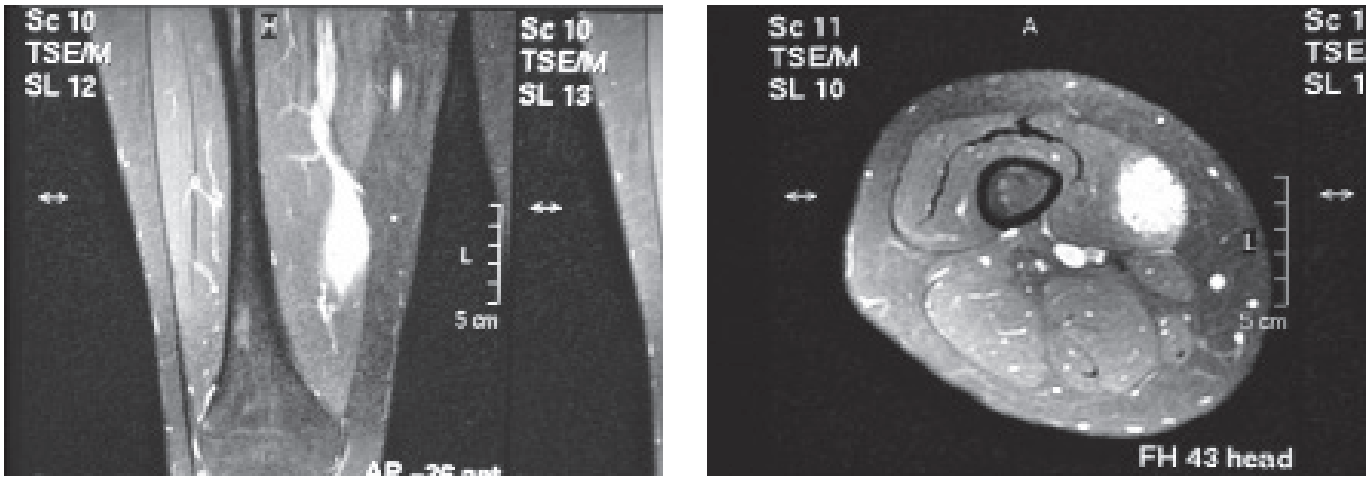

Figure 1: Right femur MR: a 5 x 3 cm hyperintense well-demarcated mass with smooth lines within the vastus medialis muscle on sagittal (A) and transverse (B) planes.

DISCUSSION

An intramuscular hemangioma should be considered when a soft tissue mass is palpable and is associated with pain. Intramuscular hemangiomas progressively enlarge locally but never metastasize (1). Hemangiomas are congenital lesions that usually become apparent during the first decade of life although they may not become symptomatic until a later age. Usually no pulsations or bruits are evident, and angiography shows a tumor-like blush without the appearance of large feeder vessels. Further subdivision is often based on the size of the predominant vessel: small (capillary), large (cavernous), or mixed. Histologically, all are thin-walled vessels without dysplastic elements (6). The differential diagnosis may include hemangiomas from lipomas, hernias, hematomas, soft tissue sarcomas and lymphomas (7). Magnetic resonance imaging is the recommended diagnostic tool for identifying an intramuscular hemangioma. In the past, computerized tomography, nuclear scanning and angiography were the modalities used to evaluate soft tissue masses (2).

Pain is the cardinal symptom, occurring in about 60% of cases. A mass is always present (found in 98%) (1).

There is general agreement that females are affected more often than males, and that was true for the current population (1.5 to 1). The average and median ages in the current study were 30 years, coinciding with previous reports (3).

Treatment of an intramuscular hemangioma should be individualized for every patient after evaluating the tumor's location, accessibility, and depth of invasion; the patient's age; and cosmetic considerations. Various methods of treatment include cryotherapy, radiation therapy, and the injection of a sclerosing agent. However, the treatment of choice is surgical excision. A pathologic examination should be used to confirm an intramuscular hemangioma (2).

Whenever a mass of soft-tissue density is encountered in the skeletal muscle in a young adult, hemangioma should be considered in the differential diagnosis.

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