Clinical picture

A voluminous glomus tumor of the leg

Glomus tumors are uncommon benign neuromyoarterial tumors, classically known to induce incoercible localized pain. Seventy percent of them are located in the hands, particularly in the sub-unngual region.1–3 They usually represent small tumors that do not generally exceed 1 cm in diameter.1–3 We would like to report here a voluminous glomus tumor located in the leg with a delay to diagnosis related to its unusual anatomic location.

A 54-year-old woman consulted in 2011 for recurrence of left calf enlargement associated with chronic pain. She initially consulted 4 years ago and was diagnosed with Cockett's syndrome, as the cause of compression of the common venous outflow tract of the left lower extremity. The percutaneous placement of one stent into the left common iliac vein resulted to a complete reduction of calf's volume and pain. Two years later, the reappearance of similar symptoms due to stent migration was successfully treated with the placement of a second stent. At 6- and 12-month follow-up, Doppler ultrasound revealed a good patency of superficial and deep veins of the left leg and stents.

A few months ago, she complained about increasing pain, tenderness and paresthesia with burning sensations of her left calf. At physical examination, she presented with stiffness and increased volume of the calf, and its palpation exacerbated the pain. Venous Doppler ultrasound noted normal patency and competency of the stents and left leg veins but detected a 60 x 60 mm popliteal mass. Magnetic resonance imaging (MRI) revealed a soft tissue lesion extending in the anterior and posterior area of the leg (Figure 1). Histopathologically, the biopsy concluded to a glomus tumor. The patient underwent a complete excision of the tumor, which was curative and led to a complete resolution of the symptoms (Figure 2). At 12-month follow-up, no evidence of recurrence has been noted.

Glomus tumors classically present with a triad of symptoms: pain, localized tenderness and hypersensitivity to cold.4 Despite their classic clinical

Figure 1. Magnetic resonance imaging of the glomus tumor of the leg. (A) T1 Fat-Sat gadolinium axial view showing the soft tissue lesion extending in the anterior and posterior area of the leg with an intense and heterogeneous contrast enhancement after gadolinium injection. (B) On T1 Fat Sat Gado SAG view, the lesion was 4.5 (transversal diameter) x 8 cm (high) in its anterior location and was 5 cm (transversal diameter) x 13 cm (high) in its posterior location.

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presentation and the sensitivity of MRI, the delay from the first symptoms to the tumor diagnosis is mostly high, as such as 11 years. The occurrence of glomus tumors in extradigital locations provides an even greater diagnostic challenge. In a series of 56 patients with extradigital glomus tumors, the anatomic site was the leg in only three cases, and multiple tumors were reported in 11% of the cases.4

In our observation, despite its volume, the tumor was particularly difficult to diagnose due to its uncommon location and the possible confusion with a post-phlebitis syndrome. MRI was helpful for its diagnosis and precise anatomical position. Surgical excision is the rule and it is generally curative.4

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References