Intramuscular Hemangioma Presenting with Radiculopathy: Report of a Case

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Although hemangioma is a common soft-tissue tumor, a deep-seated hemangioma such as intramuscular hemangioma (IMH) is relatively rare. It is a benign tumor that usually presents before the age of 30, making up 1% of all hemangiomas. The most common site of occurrence is the lower extremities. Skeletal muscle is the most common site for deeply seated hemangiomas. Pain is the cardinal symptom occurring in about 60% cases. The differential diagnosis includes lipoma, fibroma, enlarged lymph nodes, compartment syndrome, hematoma, hernia, and soft tissue sarcoma. Many treatment modalities for the symptomatic IMH have been used, but complete surgical excision with a clear margin is the preferred treatment. We present here a case of a 30 year-old male with a large lumbar paraspinal hemangioma presenting with radicular symptoms in his leg. To the best of our knowledge, there is only one such case reported in the literature so far.

Key words: intramuscular hemangioma, radiculopathy

Case Report

A 30 year-old Taiwanese male was referred to our institution with a two-year history of a tender mass localized to the left paraspinal musculature of his lower back. This lesion had been discovered two years earlier and found to be slowly enlarging. It did not cause pain at the beginning. The referring physician, after clinical and radiological assessment, was concerned about the possibility of a primary neurogenic tumor of the lumbar spine or soft tissue sarcoma. The pain was initially limited to the lower back, but in the weeks preceding his admission, began to radiate downwards to the left hip and anteromedial aspect of the thigh. The symptom was worsened by forward leaning or sideway bending of his waist. The pain was rated as 5/10 at its peak. The patient's medical history was otherwise unremarkable.

On physical examination, the patient had a 115×100 mm, fixed, deep-seated subcutaneous mass, localized mainly in the left paraspinous musculature of his lower back. There were no cutaneous color changes overlying the mass, but mild tenderness was elicited with palpation. The muscle strength of left hip flexion was MRC (Medical Research Council) grade 4. Plain radiographs of the abdomen showed no specific findings. A magnetic resonance imaging study showed a 60×100×50 mm mass enclosed within the lumbar muscles at the L3, L4 and L5 levels with high signal intensity on T2- and isosignal intensity on T1-weighted images. There were regions of high enhancement after gadolinium application with several small signal void lesions (Fig 1), suggesting hemangioma, sarcoma, or peripheral nerve sheath tumor.

A longitudinal incision of 15 centimeters was made over the mass. Subcutaneous tissues were divided using electrocautery splitting the paraspinal musclesatraumatically. Palpation and dissection continued down to the left L3 transverse process where the margin of the soft-tissue component was firmly located. We noticed...