

## SCHWANNOMA OF THE POSTERIOR TIBIAL NERVE IN LEPROSY PATIENT: IMAGING FEATURES

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Schwannoma is a slow growing tumor, usually encapsulated, which rarely undergo malignant transformation. Represents 5% of soft tissue tumors, most commonly found between the fourth to sixth decades of life<sup>1-2</sup>. The tumor has a predilection for the head, neck and flexor surfaces of the upper and lower extremities but posterior tibial nerve schwannoma has also been described<sup>3</sup>. Man and women are equally affected<sup>1,4</sup>.

### Case Report

The author's describe a 51 year old male, with arthralgia on the right elbow, and multiple painful purpuric macules and plaques with asymmetric distribution in the trunk and in the extremities. He had pain and thickening in left ulnar and cubital nerves course suggestive of neuritis. He was diagnosed of lepromatous leprosy and started a multidrug therapy for leprosy and prednisone 60 mg/day to neuritis, with a clinical improvement after 5 months of treatment. Subsequently developed severe pain in right leg, first episode of neuritis in the posterior tibial nerve and was submitted to neurolysis, but the pain in foot persisted. After 6 months he had a palpable and painful mass in popliteal fossa and image studies were requested. Ultrasonography (US) showed a well-defined, hypochoic, heterogeneous and oval mass measuring



**Figure 1.** Longitudinal US - over the right popliteal fossa showed a well-defined, hypochoic, heterogeneous and oval mass (2.4 x 1.9 cm and 1.5 x 1.2 cm), along the tibial nerve.



**Figure 2.** Sagittal spin-echo T1-weighted MR image of the knee shows the mass to be homogeneous and isointense relative to skeletal muscle (Figure 2A) and T2-weighted MR image shows a well-defined mass within the popliteal fossa. The mass is mildly heterogeneous with a signal intensity greater than that of fat (Figure 2B), measuring 2.5 x 2.2 cm and 1.5 x 1.2 cm.

2.4 x 1.9 cm and 1.5 x 1.2 cm, along the tibial nerve (Figure 1). Magnetic resonance imaging (MRI) of the knee was performed. On spin-echo T1-weighted MR images, the lesion was homogeneous and isointense relative to skeletal muscle (Figure 2A) and T2-weighted MR images demonstrated the lesion to be mildly heterogeneous, with a signal intensity greater than that of fat (Figure 2B), measuring 2.5 x 2.2 cm and 1.5 x 1.2 cm.

The diagnosis of schwannoma was made, based on clinical and radiological findings. Clinical symp-

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toms resulted from tumor location and size, with neurologic dysfunction from local mass effect<sup>4</sup>. US is a non-invasive convenient tool that can be used to evaluate a soft-tissue mass as schwannoma, and important features include the presence of a capsule, the eccentric position of the nerve relative to the mass, and a cystic lesion within it<sup>2</sup>. The MR imaging appearance of the schwannoma in this case is similar to that of others reported in the literature<sup>5</sup>. Surgical resection of schwannoma is the treatment of choice<sup>6</sup>. The recurrence on long term follow up, after complete surgical excision, is rare<sup>6</sup>.

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