Schwannoma of Saphenous Nerve in the Medial Ankle

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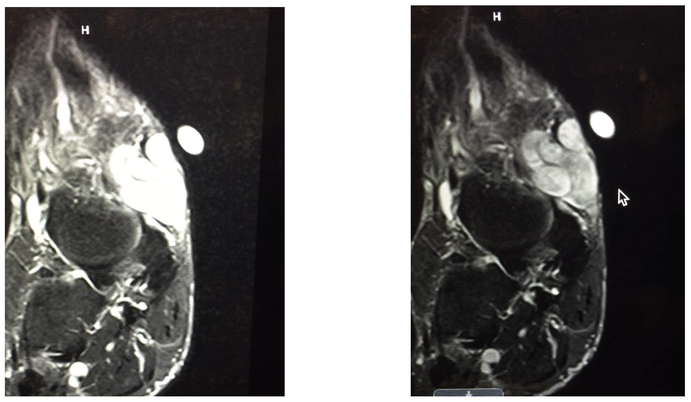
PURPOSE & LITERATURE REVIEW

Schwannomas in the foot and ankle are a fairly rare soft tissue disorder. However, these space occupying lesions can cause significant functional and cosmetic limitation. This case study intends to describe the diagnosis and treatment of an overall healthy male with soft tissue mass excision along the medial ankle that returned as a Schwannoma. Very few case reports of schwannomas in the lower extremity have been reported, and of these, even fewer are involving the saphenous nerve [1].

CASE STUDY

A sixty-four year old male presented to the office with a medial ankle soft tissue mass. The lesion had been present for many years and has slowly increased in pain and has become very irritating in shoe gear, especially over the last 2 years. An MRI was performed (Fig 1a,1b) which identified the mass as an approximately 3.5 cm x 3.0 cm x 2.5 cm multi-septated cystic appearing lesion superficial to the right medial malleolus. Clinically, the mass was firm to the touch and was able to be moved below the surface. Clinical pictures of the mass (Fig 2a) were obtained which show the cosmetic and structural level of the deformity. Pathologically, the mass immunostained strongly for S-100 protein, a hallmark finding of a schwannoma[2,3].

FIGURE 1a, 1b – PRE-OPERATIVE IMAGING



OPERATIVE PROCEDURE

The patient was brought into the operating room and put under light sedation and a local block was administered. A thigh tourniquet was placed and the right extremity was exanguinated and prepped and draped. Attention was directed to medial ankle where a large soft tissue mass was appreciated. Skin incision was made and deepened into the subcutaneous layer. A 6 cm incision was made from the level of medial malleolus extending distally directly over the lesion. A soft tissue lesion which was vascularized with a grape like cluster appearance was identified immediately deep to the fascial layer. The lesion was excised in total and measured 4.5 cm x 4 cm x 3.5 cm (Fig 2b). The mass was coursing along the Saphenous nerve and appeared to be an extension of the nerve intraoperatively. Any and all stalks and extending branches of the mass were removed, external neurolysis was performed, and the site was flushed with saline. The Mass was sent for pathology. Layered closure was performed with vicryl and nylon for skin closure.

FIGURE 2a, 2b – CLINICAL / INTRA OP IMAGES

RESULTS & DISCUSSION

The excision of a painful soft tissue mass, identified by MRI, pathology, and intra-operative findings as a schwannoma of the saphenous nerve is described in this study. The incidence of schwannomas in the lower extremity has been documented as being rare, and to the authors knowledge, the incidence of a Saphenous nerve schwannoma is even less. Many other case reports discuss schwannomas of the posterior tibial or sural nerves, but not of the saphenous. We present a case of an active sixty-four year old male with painful soft tissue mass. The surgical technique in this study suggests that surgical excision in toto is an excellent choice for these kinds of soft tissue lesions. Following surgical intervention with complete excision of the lesion, the patient was followed up very closely. Sutures were removed at 2 weeks and the patient was weight bearing immediately after surgery. It has been over 18 months since the initial operation, and the patient has not shown any signs of recurrence of the lesion, as well as showing complete relief of pain without any post operative neurologic deficit.

REFERENCES

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