

Unusual cause of Sciatica

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Patient:

A 42 year old female with history of schwannomas in her left thumb, left L2-L3 neural foramina levels, and right posterior knee, that were previously resected, presented with recurrence of numbness and tingling in her right lower extremity.

Case Description:

After the schwannoma from her posterior knee was resected, she had pain relief for ~ 2 years. For the past year, she notes intermittent pain, worse with prolonged sitting, in the right buttock and patchy discomfort radiating down her leg into the dorsal aspect of her toes.

On exam, she had symmetric and full strength bilaterally. Workup included normal right knee and hip MRI and EMG showing right peroneal mononeuropathy with conduction block proximal to the fibular head. Prior to potential peroneal nerve decompression, there was still concern for pathology along the sciatic nerve, so she was referred for an US evaluation of the sciatic and peroneal nerve.

US evaluation found intraneural ganglion vs schwannoma in the sciatic nerve sheath 8 cm proximal to the popliteal fossa with extension into the common peroneal nerve sheath.



Short (top) and long (bottom) axis view of sciatic nerve with schwannoma measurements marked: height-1.39 cm and length - 1.61 cm. You can see the intraneural schwannoma compressing the sciatic nerve (S).

Discussion:

Schwannomas are typically benign, slow-growing, peripheral nerve sheath tumors composed of well-differentiated Schwann cells that form the myelin sheath.^{1,2,3} Schwannoma is the most common benign peripheral nerve sheath tumor, but sciatic nerve involvement is rare with incidence of six cases per million people.^{1,2} Typically, they are found in people 20-50 years old and cause sciatica symptoms not relieved by activity modification or medications and can be painful to palpation.^{1,2,3} Diagnosis is made by ultrasound or MRI and treatment is surgical excision with pathology confirmation.^{2,3} Our patient had significant pain and discomfort, so she underwent excision of the neuroma with pathology confirming schwannoma.

Conclusion:

Although only 1% of sciatica is attributed to a sciatic schwannoma, it is important to keep schwannomas, which can be evaluated with in-office ultrasound, as a part of the broad differential diagnosis.³

References:

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