

Radical Resection of an Intraneural Synovial Cell Sarcoma of the Tibial Nerve

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This video demonstrates limb-sparing surgery involving radical resection of synovial cell sarcoma arising from the tibial nerve. The alternative procedure for this 12-year-old patient is a below-knee amputation; however, after thorough discussion with the patient and his family, a limb-salvage procedure was performed. Subsequently, the patient underwent 3 months (two cycles) of preoperative chemotherapy after pathologic analysis and diagnosis. Ultimately, to prevent recurrence, the tibial nerve was resected, with transections distally and proximally up to the junction with the sciatic nerve. The sural nerve was harvested from the contralateral leg and transferred to the tibial nerve defect with sufficient coaptation. This was performed to restore function of the lower leg. At 4 months postoperatively, the patient was doing well overall, with no residual enhancing lesion observed on recent MRIs.