

Third Recidivism Resection of Schwannoma, Neurotomy of the N. peroneus superficialis, Nerve Reconstruction with Allograft and Defect Reconstruction with a free SCIP-Flap

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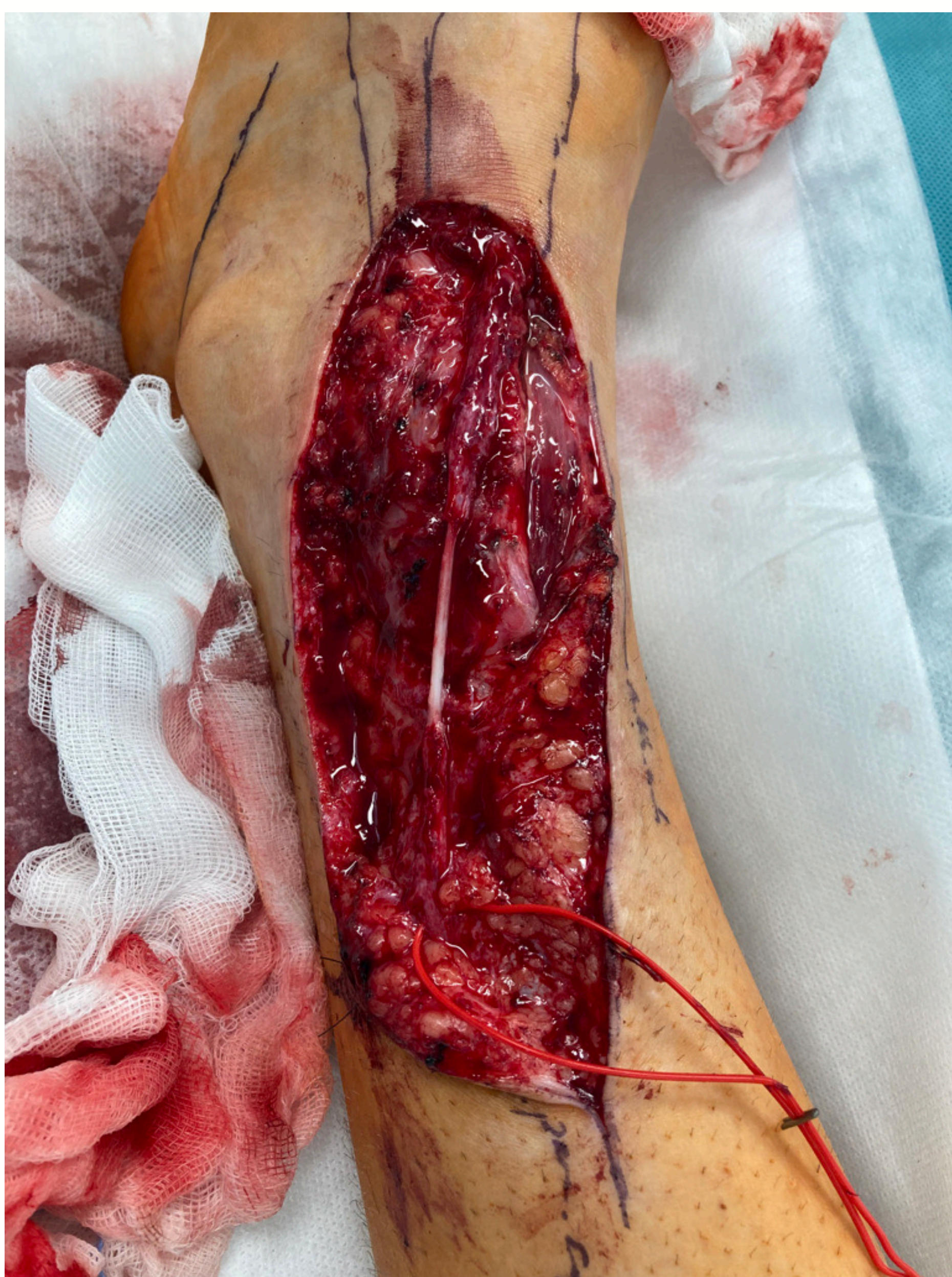
Introduction

We discuss the treatment of an 18-year-old male patient suffering of a third recidivism of schwannoma of the N. peroneus superficialis and bothering skin scarring with pain in the lower left leg. The patient was already treated twice in his home country Ukraine. Currently propagated techniques for reconstruction following schwannoma are either resection with neurolysis, reconstruction with nerve or allograft or neurotomy and RPNI (regenerative peripheral nerve interface). In some cases, the defect must be reconstructed either with a local or free flap as in this case.



Case Report

18-year-old male patient suffering from a third recidivism of a Schwannoma of the N. peroneus superficialis. Resection and Neurolysis of the Nerve was already twice performed in the Ukraine. Because of scarring tissue surrounding the nerve, the patient was suffering huge pain around the anterior foot ankle. We performed an exploration of the nerve, which was degenerated over about 3 cm distance, Schwannoma cells were isolated. Because of the degeneration of the nerve, we performed a neurotomy and reconstruction with an allograft. The scarring tissue was resected, and the resulting defect of about 10 x 15 cm was covered with a free SCIP Flap from ipsilateral side (anastomosed to the anterior tibial artery).



Result

The final result showed a very well-integrated free SCIP Flap and total relief of the patient's pain six weeks post operatively. Sensation recovery is still ongoing. No signs of neuropathies occurred. Full Range of Motion of the foot and no pain at all.

Conclusion

In the literature several techniques are described, either resection of the schwannoma, neurolysis and performing of RPNI/TMR. In our case we resected the degenerated nerve and performed a reconstruction with an allograft. Because of the surrounding scarring tissue, we had to perform a free SCIP Flap to cover the defect. The free SCIP Flap integrated very well.

