



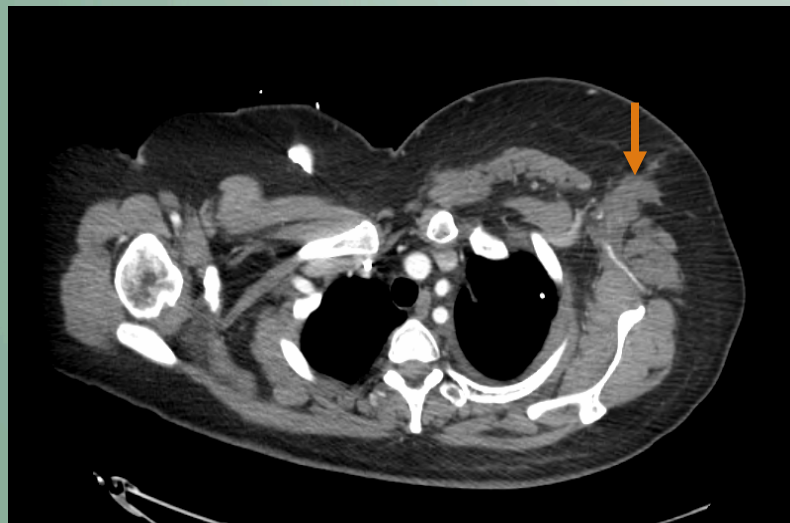
Axillary Nerve Transection After Removal of An Axillary Merkel Cell Carcinoma

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Introduction

- Oncologic resection of malignant masses involves inclusion of healthy tissue
- Chemotherapy, radiation, prior resection all distort the surgical field
- Axillary tumors are challenging given their proximity to the brachial plexus, large vascular structures, and the lungs
- Peripheral nerve injuries are therefore not uncommon in upper extremity oncologic surgery

Figure 1



Clinical Presentation

- 49-year-old woman with a slow growing left axillary mass over two years (Figure 1)
- Associated upper extremity paresthesia and weakness
- Biopsy positive Merkel cell carcinoma
- Resistant to initial chemoradiation therapy
- Underwent surgical extirpation of left axillary mass

- Immediate axillary and radial nerve deficits post-operative day one

Surgical Findings

- Radiated wound bed
- Transected axillary nerve
- Intact radial nerve via intra-operative nerve stimulator

Figure 2

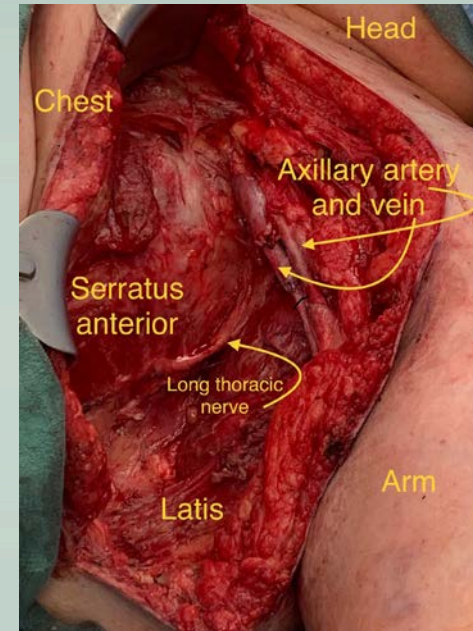


Figure 3

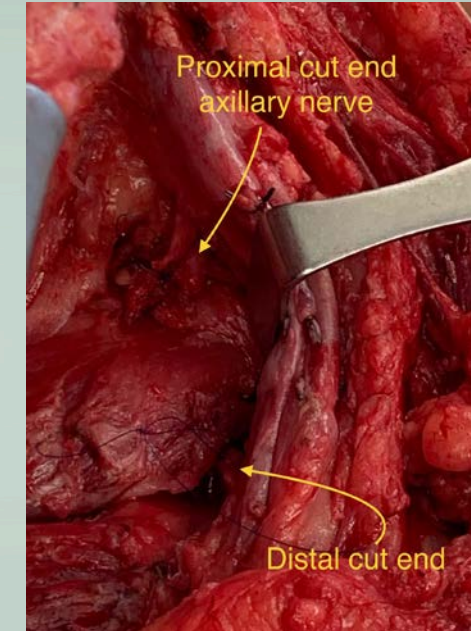
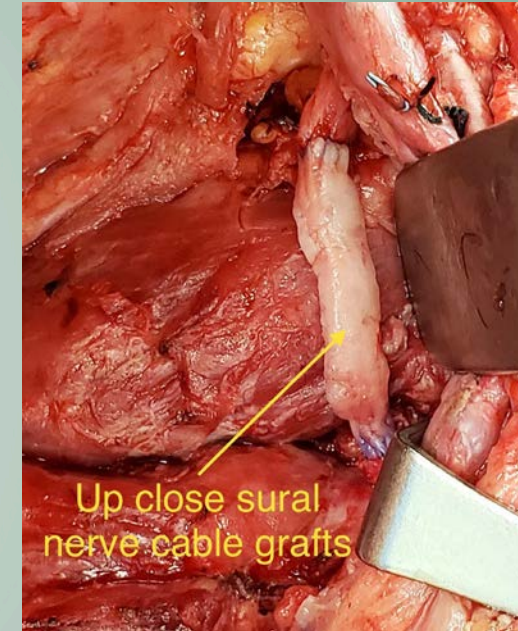


Figure 4



Treatment & Conclusions

- Reconstruction was performed with sural nerve cable grafting (Figures 2-4) for the axillary nerve and the clinical radial nerve palsy was monitored
- Electromyography at five months post-operative demonstrates diffuse plexopathy
- Early diagnosis of malignant axillary masses is vital to decrease involvement of important surrounding structures
- Early recognition of peripheral nerve injuries is imperative to preserve patient function and reduce morbidity