

An Atypical Giant Schwannoma of Median Nerve in the Distal Arm

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INTRODUCTION:

Schwannomas, which develop from Schwann cells are most common benign tumors of peripheral nerve. Reported large median nerve sheath tumors are rare and accounts about 7%.

REPORT:

A 64 years old lady presented with painful swelling over her left arm for past 10 years. A round, hard, non-mobile mass about 4x4cm at the volar aspect of left distal arm on examination. Tinel's sign was positive. Patient has reduced FDP power and sensation of index finger. MRI revealed left mid-third arm solid cystic mass (3.6x4.4x5.6 cm) compressing adjacent biceps brachii muscle, median nerve and brachial vessel. A trucut biopsy was proceeded and HPE reported as Schwannoma of median nerve.

Patient underwent excision of the tumor under general anesthesia. Intraoperatively, a round and yellow- pink tumor enveloped in an eccentric true capsule in between biceps brachii muscle. The nerve fibers entering and exiting the tumor was isolated. Encapsulated 5x6x6 cm sized mass of median nerve removed from distal arm.

Postoperatively, numbness over the index finger resolved and improvement in FDP power of index finger with well healed wound.

Figure 1: MRI

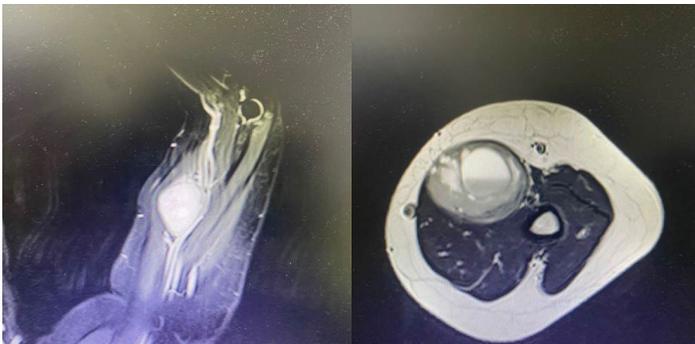
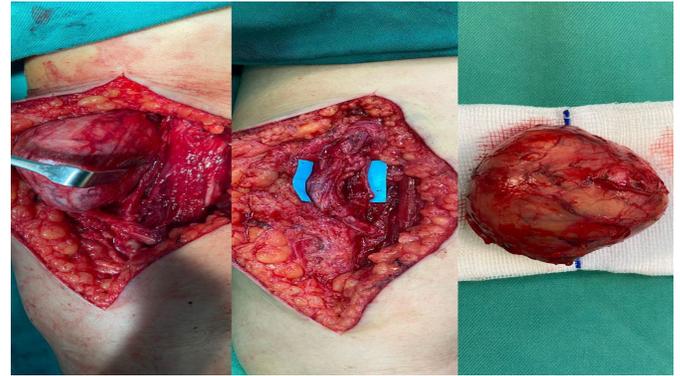


Figure 2: Intraoperative images of the tumor



CONCLUSION:

Schwannomas also known as neurilemmoma. It emerges from nerve covered with Schwann cells sheaths surrounded by true capsules consisting of epineurium. MRI is an important tool in identifying surrounding structures enclashing the tumor which indirect help in preoperative planning. Preoperative biopsy is important to rule out malignant peripheral nerve sheath tumor. Complete resection provides a better prognosis and reduces recurrence. Lastly, schwannomas originating from median nerve in distal arm are rare. In our case, in spite big tumor, nerve fibers are identified carefully from tumor and preserved using microsurgical technique. We also achieved our goal in terms of patient's satisfaction and expectation post-surgery. A thorough preoperative settings are vital for good functional outcome and good prognosis in peripheral nerve sheath tumor cases.

REFERENCES:

1. Deepak H, Raadhika R, Sreeramulu PN. Giant median nerve schwannoma a one of its kind case in rural tertiary care center. Surg Case Rep. 2019; 3(1):4-5