Benign Peripheral Nerve Sheath Tumors: A 10 Year Hospital Based Study

Malik Abdul Rouf[1*], Shayesta Ali[2], Altaf Rehman Kirmani[3], Abdul Rashid Bhat[4]

[1] Senior Resident, General Surgery Department, SKIMS
[2] Senior Resident, Anaesthesiology Department, SKIMS
[3] Professor, Neurosurgery Department, SKIMS
[4] Professor, Neurosurgery Department, SKIMS

Corresponding Author: Dr. Malik Abdul Rouf

Email: smalikabdulrouf@gmail.com

Abstract

Background: Benign nerve sheath tumours present as isolated soft tissue masses and are classified as solitary neurofibroma and schwannoma. They cause virtually identical symptoms and signs, and there are no clinically distinct pathognomonic features. Failure to appreciate the possibility and the nature of these tumours at the time of surgery may lead to a catastrophic loss of function for the patient. Aim of the study is to analyse peripheral nerve sheath tumours in reference to; Hospital based incidence, age and sex distribution peripheral nerve involved most preoperative diagnostic tool efficacy histopathological variations and surgical outcome. **Materials and Methods:** the study was carried out at SKIMS Srinagar from January 2005 to October 2014.Study included 49 patients, with an average age of 38 years (range 7-65 years). The diagnostic tools used were FNAC, NCV, USG, & MRI for location & provisional diagnosis, surgical excision was performed and final diagnosis achieved by HPE. **Results**: The incidence of isolated peripheral nerve sheath tumors in our study was 4.9 per year. In case of schwannomas upper limbs were involved more frequently than lower limbs (2:1), while neurofibromas were more evenly distributed (1.16:1). Presenting symptoms were mass, pain, weakness, dysesthesia an average follow-up of 6 months after surgery pain syndromes had complete resolution in 66% vs 44%, paraesthesia 80% vs 50% and motor strength restoration to normal in 45.5% vs 6.25% patients in schwannomas and neurofibromas respectively. **Conclusion:** Meticulous dissection with Intracapsular tumour removal under magnification can achieve complete tumour removal without neurological loss or recurrence.

Key Words: schwannoma, neurofibroma, microsurgical excision, paraesthesia, mass