



Sporadic Neurofibroma in an Uncommon Site

Authors

Surendher Kumar R, Ashish Jose, Sandeep MMR, Krishnagopal R.

Department of Orthopaedics, Mahatma Gandhi Medical College
& Research Institute, Pondicherry, India

ABSTRACT

Neurofibromas are benign tumours of the peripheral nerves. They can be solitary or multiple. Multiple neurofibromas are seen as a part of von Recklinghausen's disease where they are evenly distributed over the body surface. However solitary neurofibroma is not associated with von Recklinghausen's disease and is commonly seen in young adults¹. Neurofibromas exhibit a predilection for the head and trunk compared to other parts of the body². We report a case of sporadic neurofibroma in a rare site – the popliteal fossa.

Key words: Neurofibroma, von Recklinghausen's disease.

CASE REPORT

A 47 year old male presented to our outpatient department with a swelling over the posterior aspect of his right knee which had progressively developed over the past 3 years (Fig.1). Initially the swelling was asymptomatic but over the past 4 months he developed pain over the swelling. On examination, there was a soft 8x5x3 cm swelling over the popliteal fossa which was mobile. The skin over the swelling appeared normal and there was no local rise of temperature or tenderness over the swelling. The knee movements were free and full. Radiograph of the knee showed no abnormality. Ultrasonography showed a well defined solid mass in the popliteal fossa. We planned for an excision biopsy. The tumour was seen arising from the posterior tibial nerve sheath and was excised (Fig.2). Histopathological examination of the specimen confirmed the diagnosis of Neurofibroma.



Figure 1: Right knee swelling

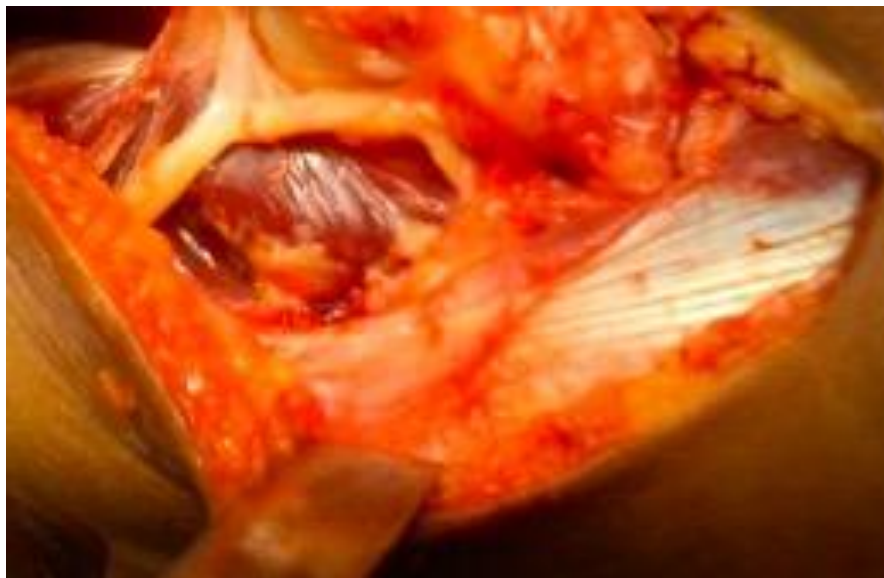


Figure 2: Surgical excision of the mass.

DISCUSSION

Neurofibromas are benign peripheral nerve sheath tumours. They can be single or multiple³. They initially arise from the supportive tissue within the nerve. Solitary neurofibromas are not very common. Neurofibromas commonly occur in the head and trunk. They are very rarely seen in other parts of the body. In 1949, a plantar neurofibroma was reported by Herzog in a case of von Recklinghausen's disease⁴. In 1994, Yamamoto reported a case of plantar neurofibroma⁵. A solitary neurofibroma of popliteal fossa was reported in 2002 by Nassiri et al⁶. Neurofibromas can be asymptomatic or cause progressive pain, numbness and weakness. Symptomatic neurofibromas require surgical excision.

CONCLUSION

Neurofibromas may be multiple or they can occur as solitary tumours. They are rarely seen in the extremities. Excision of the neurofibroma mass is warranted when there is pain, neurological symptoms or any cosmetic disfiguration.

REFERENCES

1. Young Bok Lee, Jae In Lee, Hyun Jeong Park, Baik Kee Cho. Solitary Neurofibromas: Does an Uncommon Site Exist? *Ann Dermatol.* 2012 Feb; 24(1): 101–102.
2. Bologna JL, Jorizzo JL, Rapini RP. *Dermatology.* 2nd ed. Elsevier limited; 2008. pp. 1801–1802.
3. Geist JR, Gander DL, Stefanac SJ: Oral manifestations of neurofibromatosis types I and II. *Oral Surg Oral Pathol*, 1992; 73: 376-381.
4. Herzog EG. Neurofibroma of the sole in a case of von Recklinghausen's disease. *J Bone Joint Surg Am.* 1949;31B:227.
5. Yamamoto T, Ohkubo H, Nishioka K. Plantar neurofibroma associated with palmoplantar pustulosis. *J Am Acad Dermatol.* 1994;31:122–123.
6. Solitary neurofibroma of popliteal fossa. Nassiri R, Mansour-Ghanaei F, Shafaghi A, Purrasuli Z, Martinez J. *Case Rep Clin Pract Rev*, 2002 ; 3(3): 133- 135.