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SCHWANNOMA AT THE DISTAL THIRD OF THE ULNAR NERVE ABOUT A CASE

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SUMMARY

Benign schwannomas are the most common nerve tumors. These tumors occur with predilection in the adult of 20 to 50 years, and always indifferently the man and the woman. The time of appearance of the first signs is usually long. Magnetic resonance imaging can guide the diagnosis but it is histology that confirms it. The treatment is essentially based on surgical enucleation. Evolution is generally favorable. We report here an observation of an isolated schwannoma of the ulnar nerve revealed by a subcutaneous mass of the anterior aspect of the left forearm in a patient age of 27 consults for a painless mass of the anterior aspect of the front left arm moving for 2 years. By detailing the diagnostic, therapeutic and evolutionary aspects through a review of the recent literature.

KEYWORDS: Schwannoma, ulnar nerve, surgical enucleation.

INTRODUCTION

Schwannoma is the most common benign tumor of the peripheral nerves. It develops at the expense of Schwann cells of the nerve sheath. It is an encapsulated lesion that rarely causes a neurological deficit. We report a case of schwannoma developed at the expense of the ulnar nerve.

PATIENT AND OBSERVATION

27-year-old patient, with no particular pathological history, presenting for two years a subcutaneous tumefaction of the anterior aspect of the painless left forearm(figure 1). The palpation shows a subcutaneous mass, of firm, regular consistency, mobile under the skin, the pressure of which is responsible for paresthesia in the ulnar territory (positive Tinel sign). The rest of the clinical examination is without abnormality

The standard radiograph of the forearm was normal, the paraclinical assessment was completed by an EMG which did not reveal any abnormalities and an MRI which revealed tumor with the same signal as the muscle tissue on the weighted sequences. T1 (Figure 2) and very intense signal in T2 with some central hyposignal areas (Figure 3). The patient underwent surgical enucleation of the tumor (Figure 4), the anatomo-pathological examination of the operative specimen (Figure 5) confirmed the diagnosis of benign schwannoma. At one year of decline, no recurrence was noted.

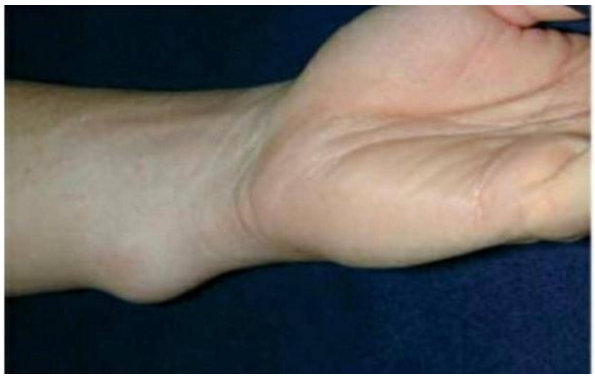

Figure1: old-dating schwannoma developing to the wrist,on the ulnar aspect.

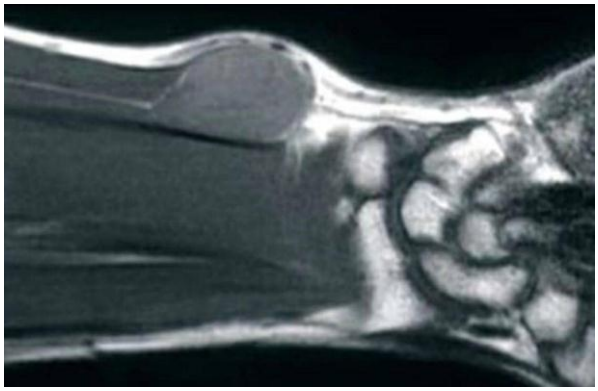

Figure 2: The lesion shows low intensity signal at SE T1 sequence MRI imaging.

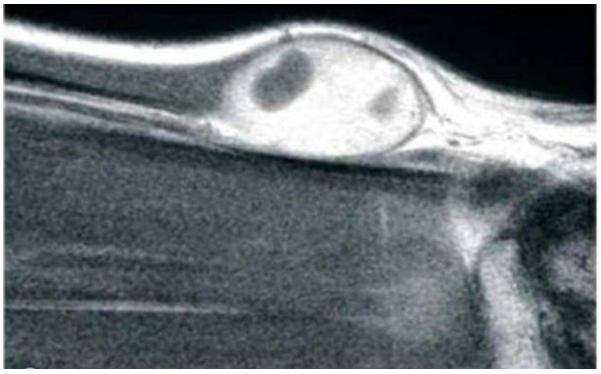

Figure 3: focal intensity signal modifications are present at SE T2 sequences after contrast infusion, because of degenerative areas developing into the lesion.

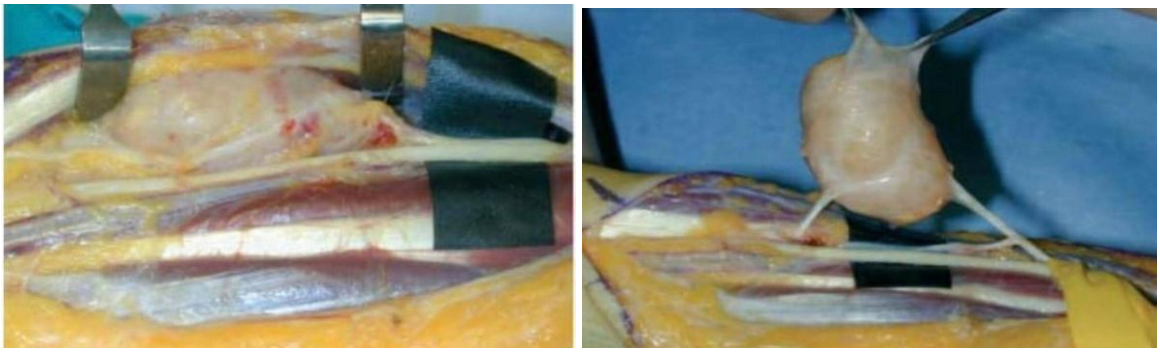

Figure 4 and 5: intraoperatively the tumor appears to originate from The dorsal sensitive branch of the ulnar nerve.

DISCUSSION

Benign schwannomas; formerly called neuromas, are the most common nerve tumors.[1] They develop at the expense of Schwann cells, forming a macroscopically smooth, rounded, yellowish and encapsulated proliferation.[1,2] They are easily cleavable from the nervous bundles that they repress instead of invading them; thus allowing a complete enucleation of the tumor.[1,2] The malignant transformation is exceptional or even discussed, it would occur mainly in the context of a disease Recklinghausen.[2] These tumors occur with predilection in the adult of 20 to 50 years, and always indifferently the man and the woman. They are localized preferentially to the anterior surface of the upper limbs, typically at the level of the large nervous trunks.[3,4] The diagnosis of benign schwannoma should be considered in the presence of pain or paresthesia of the upper limb with no obvious clinical abnormality.[3,5,6] Schwannomas are isolated tumors of moderate size and slow growth, palpable when they are bulky or superficial. The time of appearance of the first signs is usually long; often several years.[7] Paresthesia-like pains are often the first and only manifestations.[6] Sensory and objective motor deficits are rare because of the non-infiltrative nature of the tumor, which explains why electromyographic exploration is generally normal.[6] The MRI allows to direct the diagnosis by highlighting a tumor with the same signal as the muscle tissue on T1-weighted sequences and a very intense signal in T2 with some central hyposignal areas, but it does not differentiate schwannomas of neurofibromas[2-6], it is the histology which makes it possible to confirm the diagnosis.[1,2,5,6] Histologically, solitary neurofibroma is the main differential diagnosis.[1-6] The ideal treatment of these tumors consists of a surgical enucleation with careful dissection of the neighboring nerve bundles[3,5,6,8] as was the case with our patient; however, simple resection of the tumor with its nerve of origin is sometimes possible in case of distal localization on a superficial sensory nerve.[8] Evolution is generally favorable after surgical resection.

CONCLUSION

Schwannoma is the most common tumor of the peripheral nerves. He sits more readily in the extended areas of the limbs. Magnetic resonance imaging can guide the diagnosis but it is histology that confirms it. The treatment is essentially based on surgical enucleation. Evolution is generally favorable.

Consent

The patient has given their informed consent for the case to be published.

Competing interests

The authors declare no competing interest.

AUTHORS' CONTRIBUTIONS

All authors have read and agreed to the final version of this manuscript and have equally contributed to its content and to the management of the manuscript

REFERENCES

1. Alnot JY, Bosquet L, Cheveigné C, Génin J. Paris, France: Encycl-méd-chir; 1989. Tumeur primitives des nerfs périphériques.
2. Enzinger FM, Weiss SW. 2nd. USA: Saint-Louis Mosby; 1988. Soft tissue tumors.
3. Amis JA, Smith W. Neurilemoma of the tibial nerve. J. Bone Joint Surg, 1992; 47(A): 433–444.
4. Hecht OA, Haas A. Regional multiplicity of neurilemoma. Hand, 1982; 14(1): 97–99.
5. Culvin WT, Johnson KA, Rieman HM, Spiegl PV. Neurolemoma of the lower extremity. Foot and Ankle, 1986; 6(B): 194–198.
6. White NB. Neurilemomas of the estremities. J Bone Joint Surf., 1967; 49(A): 1605–1610.
7. Prusick VR, Herkowitz HN, Davidson DD, Stamboch JL, Rothman RH. Sciatica from a Sciatic Neurilemoma. J Bone Joint Surg (Am), 1986; 68(1): 1456–1457.
8. Baugher WH, McCarthy EJ, Wolock BS. Neurilemoma of the sciatic nerve micking tarsal tunnel syndrome. J Bone Joint Surg., 1989; 71(A): 932–934.