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Multiple Peripheral Schwannomas of the Upper Limb – A Case Report

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Abstract **Case Report**

Schwannomas are the most common benign tumors of peripheral nerves, typically presenting as solitary, slow-growing lesions. Multiple schwannomas are rare and may indicate underlying syndromic conditions. We report a 68-year-old woman presenting with multiple upper limb nodules. MRI revealed well-defined lesions with T1 isointensity, T2 hyperintensity, and heterogeneous gadolinium enhancement. Surgical excision confirmed benign schwannoma. MRI is essential for evaluation, but histopathological confirmation remains mandatory.

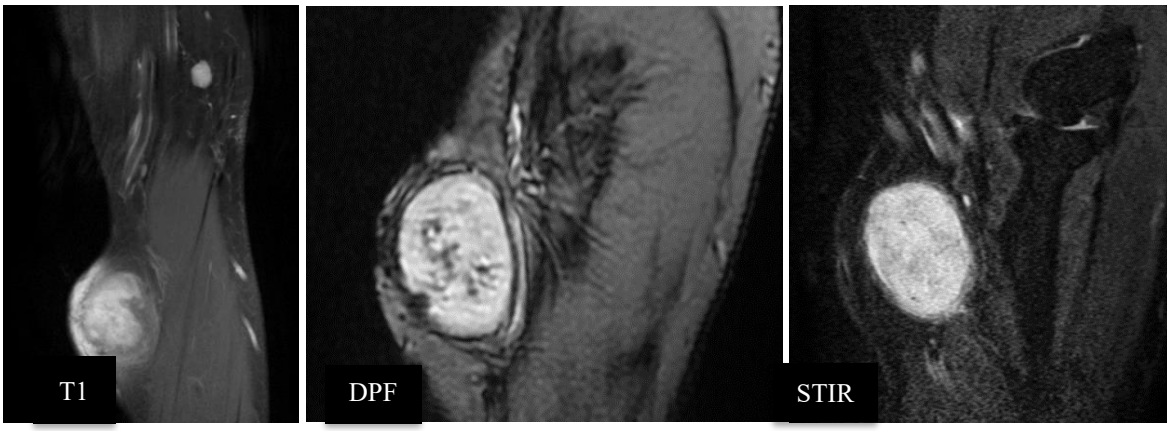
Keywords: Schwannoma, Peripheral nerve tumor, MRI, Upper limb, Case report.

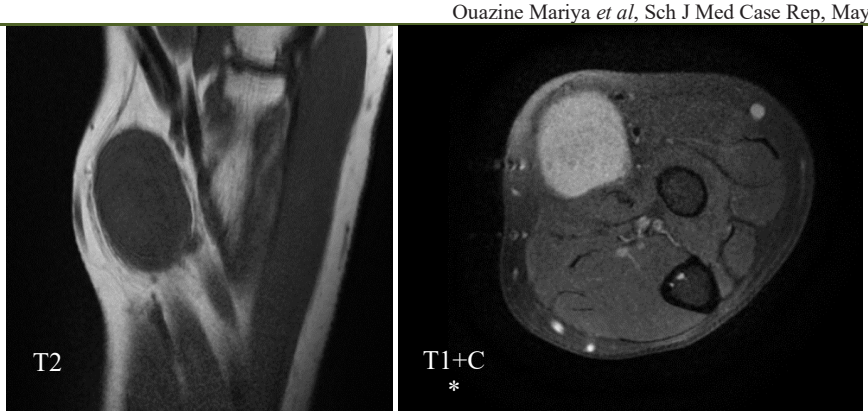
INTRODUCTION

Schwannomas are benign encapsulated tumors arising from Schwann cells. They are typically solitary and slow-growing. Multiple schwannomas are uncommon and may be associated with schwannomatosis or neurofibromatosis type 2. MRI plays a central role in diagnosis, although histology is required for confirmation.

CASE REPORT

A 68-year-old woman presented with multiple painless subcutaneous nodules of the upper limbs evolving over three years. MRI demonstrated well-defined lesions, isointense on T1, hyperintense on T2, with contrast enhancement. The main lesion was surgically excised. Histopathology confirmed benign schwannoma.





DISCUSSION

Schwannomas, previously referred to neurinomas or neurilemmomas, represent the most common benign tumors of the peripheral nerves, accounting for approximately 70% of such cases [2–5]. These tumors typically arise between the ages of 20 and 50 and affect males and females equally.

These tumors predominantly occur in the upper limbs, particularly involving the median nerve and its branches. In the lower limbs, they frequently affect the posterior tibial nerve. The tumor may extend along the entire course of the nerve.

They are encapsulated, well-circumscribed, and generally located eccentrically relative to the nerve axis. This displacement pushes the nerve fascicles aside rather than infiltrating them, which explains the often-minimal clinical symptoms, even when the tumor reaches a considerable size. Malignant transformation is exceedingly rare [5].

The diagnosis should be considered in patients presenting with radicular or distal pain and paresthesia in the absence of significant neurological deficits. A palpable mass may be detected during clinical examination. In rare instances, a motor deficit may be observed.

MRI is the gold standard for evaluating schwannomas. Typically, the lesion appears as a fusiform mass aligned with a peripheral nerve or neurovascular bundle. It presents as hypo- to isointense on T1-weighted images and hyperintense on T2-weighted images. Intratumoral heterogeneity may be present, complicating the differentiation from neurofibromas.

MR angiography can be useful in assessing the tumor's relationship with adjacent vascular structures [2–4].

On ultrasonography, schwannomas appear as well-defined, hypoechoic lesions, eccentric to the nerve. The affected nerve retains its fascicular pattern, and the tumor displaces but does not invade adjacent structures. In cross-section, a “target sign” may be visible.

The main differential diagnosis is neurofibroma, which tends to appear as a solid, centrally located mass lacking a preserved fascicular architecture [5].

CT imaging is generally less sensitive and specific than MRI for soft tissue evaluation. However, it may be beneficial in assessing bone involvement or vascular relationships.

Schwannomatosis represents a particular form of schwannoma presentation, characterized by the presence of multiple lesions, sometimes arranged in a segmental distribution along the nerve pathways. MRI remains the reference examination for their detection, as these lesions display the same radiological features as isolated schwannomas. The identification of multiple localizations should therefore systematically raise the suspicion of this diagnosis and prompt a thorough evaluation of other nerve segments [6-7].

Histopathological examination remains essential to confirm the diagnosis and differentiate schwannomas from other peripheral nerve sheath tumors [2–4].

Surgical excision is the treatment of choice. Due to their well-defined and encapsulated nature, schwannomas can often be completely resected without damaging the parent nerve [5].

CONCLUSION

MRI is essential for characterization of peripheral nerve tumors, but histological confirmation remains necessary. Multiple lesions should prompt investigation for syndromic conditions.

REFERENCES

1. Sanoussi K. *et al.,* [2006]. Chirurgie de la main, 25, 131–135.
2. Boukhris JM. *et al.,* [2015]. Pan African Medical Journal, 21, 98.
3. Chagou A. *et al.,* [2020]. Pan African Medical Journal, 37, 233.

4. Peyre M., Kalamarides M. Prise en charge des schwannomes des nerfs périphériques et des schwannomatoses. La Lettre du Neurologue, 31 mars 2019.
5. Aniss Chagou *et al.,* Schwannome du nerf sciatique : à propos d'un cas. Pan African Medical Journal, 2020.