MULTIPLE NEURILEMMOMAS WITH MUSCULAR ATROPHY

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A case of multiple, painful neurilemmomas located over the right forearm and hand with severe muscular wasting is presented.

Key words : Neurilemmomas, Disuse atrophy.

Neurilemmoma is an encapsulated subcutaneous tumour which is usually solitary and located over the flexure aspect of the upper extremity.[1] Benign in behaviour, it arises from the Schwann cells of peripheral nerves. In contrast, neurofibromas are multiple tumours, generally located on the central part of the body and form an important component of von Recklinghausen's disease.[2] The histopathology of both these lesions is distinctive, although some workers believe that they are variants of a common tumour of Schwann cell origin as suggested by their ultra-structural features.[3] The following report describes a patient having multiple painful neurilemmomas associated with muscular atrophy of the affected limb.

Case Report

A 20-year-old male farmer presented with painful swellings over the inner aspect of his right forearm of five years duration. The condition started as a small, tender swelling over the middle of the forearm which gradually increased in size. Similar discrete lesions appeared over the flexure aspect of the wrist, palms and proximal part of the middle finger of the same side. Due to intense pain, the patient was forced to totally avoid the use of that limb. Examination revealed multiple, tender subcutaneous nodules, ranging from 3-25mm in diameter, disposed in a linear fashion along the flexure aspect of the right upper limb extending from the middle of the forearm to the proximal part of the third finger. The nodules were better felt than seen, firm in consistency and the overlying skin was freely mobile. Marked wasting of all the muscles of the entire right extremity, including the small muscles of the hand, was seen. No other abnormality was present.

Routine blood and urine examination were normal. X-ray of the right forearm showed multiple subcutaneous soft tissue masses but there was no bony abnormality. X-ray of the skull was normal. Three nodules from the palm and the flexure aspect of the wrist were biopsied as the patient was not willing for excision of all the lesions. Sections taken from all the three nodular lesions showed similar histopathological features. The tumour was encapsulated and showed two distinct tissue patterns, (1) solid areas with well developed Verocay bodies, and (2) areas with a loose stroma showing irregularly oriented spindle cells and collagen fibres (Fig.1). The features were typical of neurilemmoma.

Comments

This report deals with an unusual clinical presentation of neurilemmoma. The tumours were multiple, tender and limited to the right upper limb. An additional interesting feature was the marked muscular atrophy in the affected limb. Although one third of the neurilemmomas may be painful,[4] their association with muscular atrophy is distinctly unusual. This is attributed

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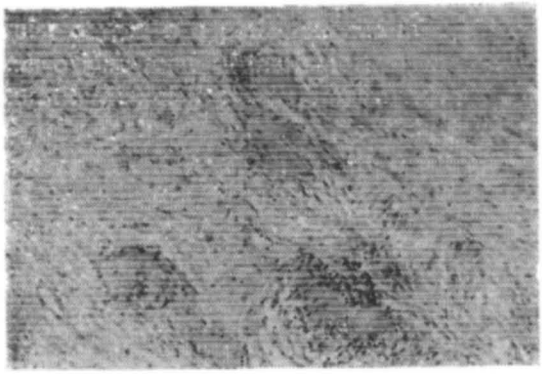

Fig. 1. Well-developed Verocay bodies with loose oedematous stroma (H&E x250).

to the severe pain in the tumour which greatly restricted the use of that limb.

Earlier reports of multiple neurilemmomas have described their association with von Recklinghausen's disease.[2] Three of the multiple nodules biopsied in our case were histopathologically neurilemmomas. The other nodules which could not be excised were also painful and located on the forearm with similar clinical features. Further, since no sings of von Recklinghausen's disease were present, it is most likely that all the other nodules were also neurilemmomas. In the present case, an early diagnosis and timely surgical excision of the lesions could have prevented the associated muscular atrophy.

References

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