

Short reports

Schwannoma of the brachial plexus with intrathoracic extension

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Neurilemomas (schwannomas) are relatively rare tumours, a high proportion of which develop in the head and neck.¹ A review of 480 benign neurilemomas recorded in the literature mentioned only 24 cases arising from the brachial plexus,¹⁻⁵ all of which were characteristically difficult to diagnose, since they appeared as an increase in the supraclavicular volume which oriented diagnosis towards lipoma, lymphoma, metastatic adenopathy, and so on. None of the cases described mentioned an intrathoracic development of the tumour.

Case report

A 56-year-old woman was examined in April 1971, complaining of a fast growing palpable mass in the left supraclavicular triangle. A chest radiograph (fig 1) revealed a round opacity with clear edges in the upper region of the left hemithorax. Without further examination she was operated upon via a supraclavicular approach and a 6 x 4 x 2 cm lipoma was excised. She was discharged without further radiological investigations.

During a visit to our clinic in June 1975 she complained of a pain of three years' duration in the upper retrosternal region radiating to the lower part of the neck and to the left arm. A chest radiograph (fig 2) revealed a round opacity about 15 cm in diameter located in the upper third of the left hemithorax. Neurological examination revealed left myosis and hypoaesthesia of the upper left limb especially in the ulnar zone, with decreased reflexes in that extremity. In the corresponding supraclavicular fossa palpation caused pain but no mass could be felt.

Blood analyses were normal, but the electrocardiogram showed diffuse myocardial ischaemia. Spirometry revealed a slight restrictive limitation and immunological tests for the detection of hydatid cysts were negative.

In November 1975 a thoracotomy through the left fifth intercostal space was performed. A cystic tumour, 15 cm in diameter, was found in the upper region of the left hemithorax. It was highly vascular and attached to the lung and aorta, emerging through

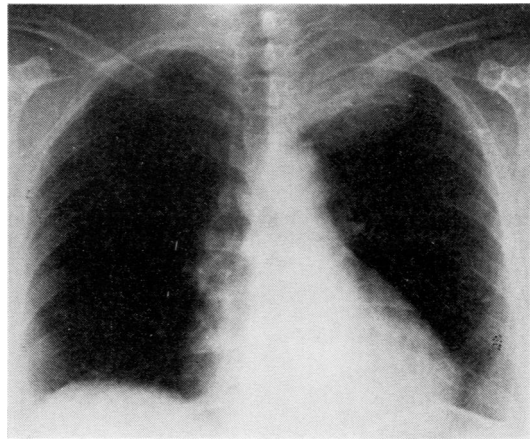


Fig 1 Radiograph of supraclavicular lipoma and intrathoracic neurilemoma.

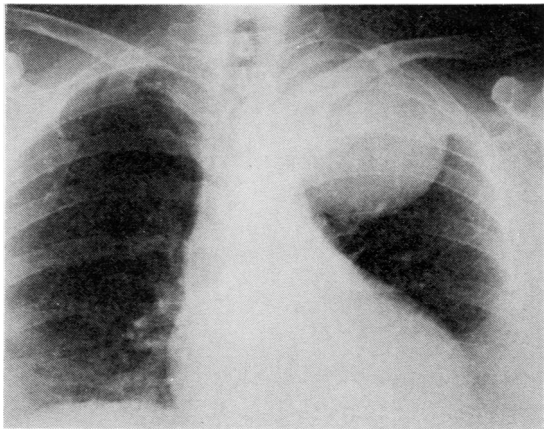


Fig 2 Neurilemoma in upper third of left hemithorax.

the thoracic cavity over the first rib, where haemostasis was extremely difficult.

Macroscopic examination showed a highly vascularised tumour containing a viscous citrine turbid liquid. The inner surface was covered with a 0.5 cm

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thick tissue of encephaloid aspect.

There were no postoperative disturbances though the patient showed an evident Horner's syndrome and significant paresis in the upper left extremity, from both of which she appeared to have recovered when discharged 10 days after the operation.

Histopathological examination of the tumour revealed a benign neurilemoma of the Antoni II type.

The last examination of the patient in June 1979 revealed a normal chest radiograph and absence of disturbances except for the persistence of the Horner's syndrome.

Discussion

A schwannoma of the brachial plexus is rare, and intrathoracic growth of the tumour has not previously been recorded. The explanation of the intracavitary growth could be found in the fact that the supra-clavicular space was previously occupied by a lipoma. Furthermore, the neurological signs suggested that the tumour had probably originated in the lowest

primary trunk of the brachial plexus.

On the other hand, the macroscopic characteristics of the tumour which seem not to correspond to the description of a typically small, solid, and encapsulated neurilemoma, could be explained by the well-known fact that in the few cases in which this kind of tumour reaches a large size it may show spontaneous degeneration and haemorrhage.¹

References

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