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Case Report

Schawannoma of Unusual Localization: A Case Report

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Abstract: Mediastinal schwannoma is a rare entity. We report the clinical observation of a 40-year-old patient with large posterior mediastinal schwannoma. This tumor was accidentally discovered during the realization of a chest X-ray in the context of a pneumopathy. A first biopsy was in favor of a schawannoma. The diagnosis of this entity is important as it determines the management of the patient

Keywords: Schawannoma, Mediastinal, chest X-ray.

INTRODUCTION:

Mediastinal schwannoma is a rare entity. The symptomatology remains insidious and nonspecific. MRI is the neuroradiological examination of choice; it allows a better exploration of the tumor and its relationship with adjacent structures. The treatment of this lesion is surgical and must result in its complete removal. However, excision may be incomplete in the giant and especially invasive forms of this tumor.

DESCRIPTION OF CASE:

We report the clinical observation of a 40-year-old patient with large posterior mediastinal schwannoma. This tumor was accidentally discovered during the realization of a chest X-ray in the context of a pneumopathy. A CT scan showed the presence of a mass extending from the vertex of the left hemithorax to the level of the 6th rib with compression of the left bronchial strain.

A first biopsy was in favor of a schawannoma . the immunohistochemical study shows a positivity of the tumor cells for the PS 100. The other markers tested were negative CK, CD34, AML and desmin

A left thoracotomy allowed a macroscopically complete excision of the entire tumor. The macroscopic examination finds a mass of 7 cm long axis fasciculated in section. Histological examination confirms the results of the biopsy. It consists of three elements, elongated spindle-shaped cells with non-nucleated undulating fused nuclei with clear intranuclear vacuoles, abundant and fibrillary cytoplasm poorly limited; intercellular fibers collagenic and reticulinic; and hyaline and mucoid material. These various elements meet in varying proportions and arrangements to distinguish two main aspects Antoni A and Antoni B. The final diagnosis was a mediastinal schwannoma with healthy resection margins.

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The postoperative clinical course was very good.

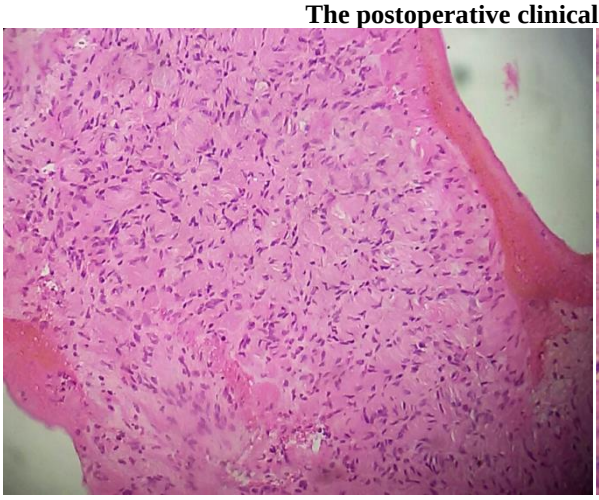

Figure 1:Biosy HEX20

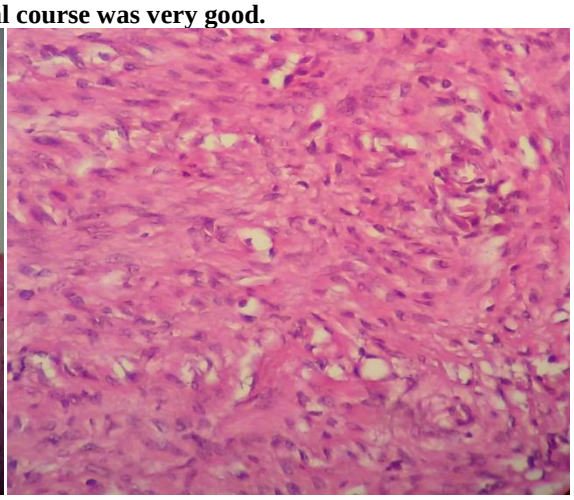

Figure 2:Biosy HEX40

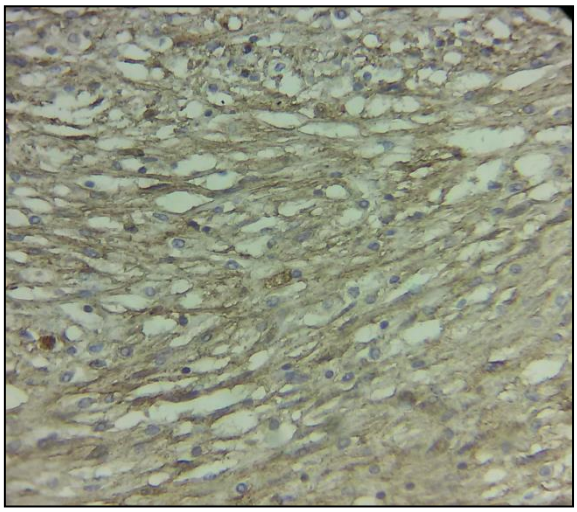

Figure 3:Biosy PS100X40

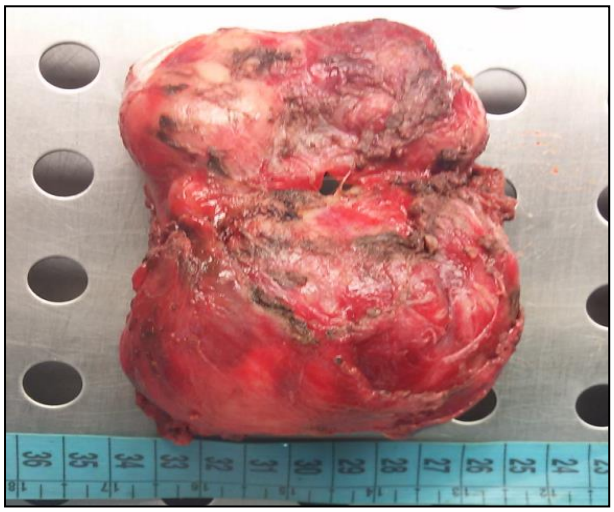

Fig 4: macroscopic apparence of resection specimen

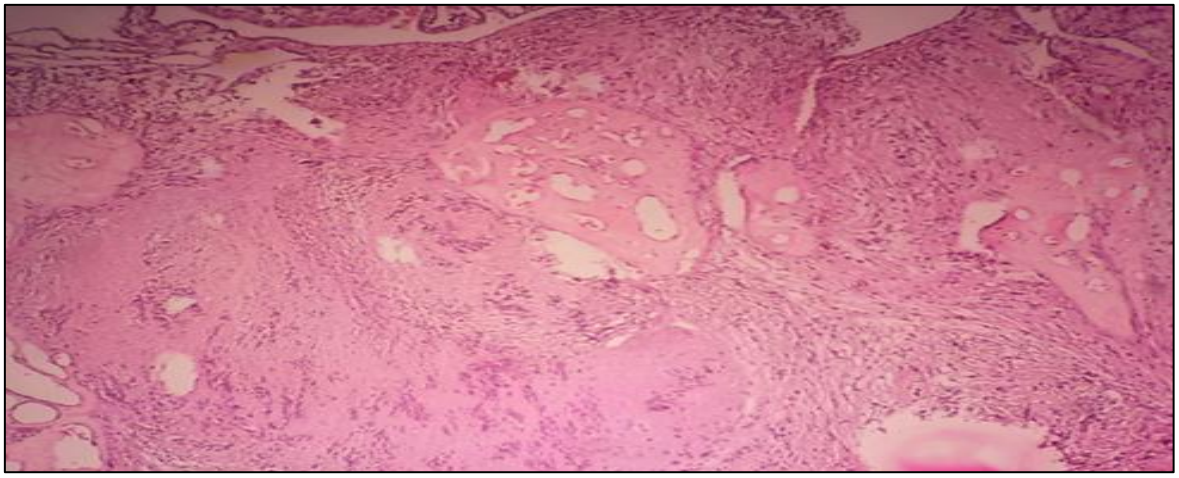

Figure 5: microscopic features of resection specimen HEX4

DISCUSSION:

Neurogenic tumors represent approximately 20% of all adult tumors and 35% of all pediatric mediastinal tumors and are the most common cause of a posterior mediastinal mass. Forty-five percent of schwannomas occur in the head and neck, with 9% occurring in the mediastinum. Schwannoma is the most common (about 50%) mediastinal neurogenic tumor.

Schwannomas of the thoracic cavity are typically asymptomatic. The initial workup of a posterior mediastinal mass involves radiographic

evaluation, with the majority of asymptomatic masses discovered incidentally on posteroanterior (PA) and lateral radiographs

Since serologic markers are absent and characteristic imaging abnormalities are variable, tissue pathology and immunohistochemistry are required for a diagnosis. Schwannomas are composed of spindle cells with twisted nuclei, amphophilic cytoplasm, and rare mitoses. Patients with neurofibromatosis are likely to display a variant form called plexiform schwannoma. Another variant, the melanocytic schwannoma, has a pronounced brownish cytoplasmic pigment and malignant potential. The malignant schwannoma, the most dangerous variant, is a soft gray-pinkish tumor with central necrosis and microscopically consists of sheets of pleomorphic spindle cells with numerous mitotic figures and necrotic areas. Schwannomas are slow-growing, and malignant transformation of these tumors is rare.

Surgical resection is the primary treatment of choice in most neurogenic tumors, including schwannoma. As these are generally benign tumors, efforts should be directed towards a minimally invasive resection, even when they arise as synchronous lesions or an unusual location (Negri, G. et al 2013; Marchevsky, A. M. 1999, February; Amin, R., & Waibel, B. H. 2015).

CONCLUSION

Mediastinal schwannoma is a lesion not so common in daily practice for the pathologist. Although it is usually benign, malignant transformations have been documented. The pathologist must be careful to identify them on a biopsy before proceeding to the surgical procedure.

REFERENCES

1. Negri, G., Bandiera, A., Carretta, A., Puglisi, A., Mandelli, C., Ciriaco, P., & Zannini, P. (2013). Unusual presentation of mediastinal neurogenic tumours. *Case reports in surgery*, *2013*
2. Marchevsky, A. M. (1999, February). Mediastinal tumors of peripheral nervous system origin. In *Seminars in diagnostic pathology* (Vol. 16, No. 1, pp. 65-78).
3. Amin, R., & Waibel, B. H. (2015). An unusual presentation of a posterior mediastinal schwannoma associated with traumatic hemothorax. *Case reports in surgery*, *2015*.