

Lymphangioliipoma: An Exceedingly Rare Tumor In The Scalp Of A Caucasian Male Patient

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Citation

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Abstract

Lymphangioliipoma is an exceedingly rare benign tumour of the soft tissue. So far it has been most frequently observed in the mesentery. In this article, we report a case of a lymphangioliipoma of the occipital scalp region in a 57 year old Caucasian male patient. The tumour was encapsulated and consisted of mature adipose tissue containing fibrous septa with prominent branching lymphatic vessels. To our knowledge this is the first report of a case of this rare variant of lipoma located in the head region.

INTRODUCTION

Lymphangioliipomas are exceedingly rare tumours first described by Schnabel in 1971[1]. They consist of adipose tissue and a peculiar lymphovascular component. Only few cases have been described in different locations. Here, we report a lymphangioliipoma of the head region.

CASE PRESENTATION

A 57 years old male Caucasian patient attended the surgery because he had noticed a slowly growing indolent mass in the occipital region of the scalp during the last months. Eleven months ago a lipoma had been excised in the same region. Reexamination of the formerly excised tumour revealed a usual lipoma without any peculiar vascular component (no figure shown). The newly recognized tumour was completely removed by excision without any complications.

On gross examination the tumour had a well-demarcated capsule and displayed a pale yellowish cut surface (Figure 1). Histologically, the tumour was surrounded by a thin fibrous pseudocapsule. The inner parts were composed of lobules consisting of mature adipocytes containing uniform nuclei. The fatty lobules were separated by relatively broad fibrous septa containing branching thin walled optically empty vessels (Figure 2A). The vessels lacked a lamina elastica interna and were lined by flat endothelial cells without atypia (Figure 2B). The endothelial cells showed expression of CD34 by means of immunohistochemistry (Figure 2C). An intense labeling of the endothelial layer was

observed in the immunohistochemical staining for D2-40 (Figure 2D). The morphological and immunohistochemical features of the vessels don't leave any room for doubt of the presence of a prominent lymphatic vessel component within the lipomatous tissue confirming the diagnosis of a lymphangioliipoma.

Figure 1

Figure 1. Gross pathology of the tumour displaying a pale yellowish cut surface.

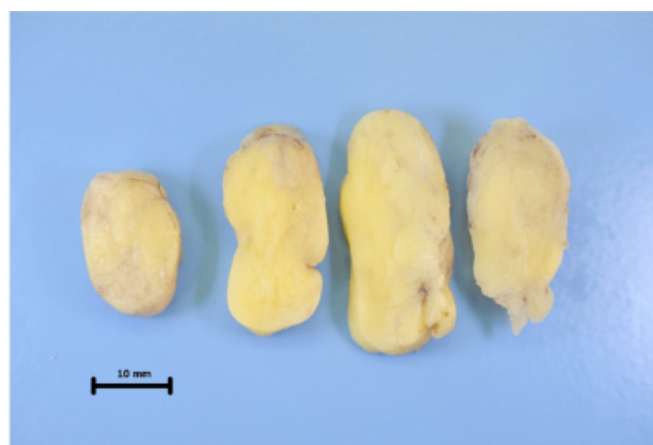
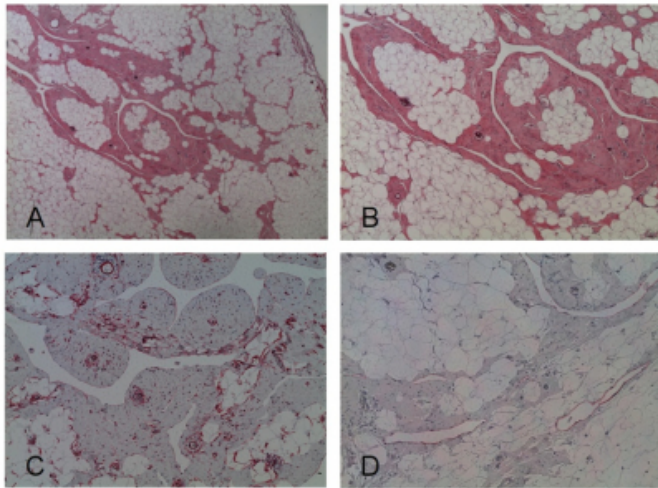


Figure 2

Figure 2. Microscopic images of lymphangioliipoma. (A) The tumour consists of fatty tissue and fibrous septa containing vessels (Hematoxylin & Eosin stain). (B) The vessels are lined by flat endothelial cells (Hematoxylin & Eosin stain). The endothelial cells are positive for CD34 (C) and D2-40 (D) in immunohistochemical stains.



DISCUSSION

So far 7 cases of lymphangioliipomas have been reported in the literature. Four of the tumours were located in the mesentery, one in the thoracic spine, one in the parotid gland and one in the deep soft tissue of the left upper leg [1-7]. The

tumours in the mesentery were encapsulated and contained cystically dilated lymphatic vessels as opposed to the non-dilated vessels in the case presented here [1-3,7]. The tumour in the extremity had ill defined borders as opposed to the presented tumour and the other tumours described so far [6]. Lymphangioliipomas therefore seem to vary in terms of location, degree of demarcation and the structure of the lymphatic vessels. One can speculate whether local factors may influence the definition of the borders of the tumour or the structure of its vessels, however, there are too few cases reported to establish hypotheses.

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