

## A LYMPH NODAL CAPILLARY-CAVERNOUS HEMANGIOMA

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### ABSTRACT

*A capillary-cavernous hemangioma in an obturator lymph node was found incidentally in a 64 year-old woman who had undergone unilateral salpingo-oophorectomy and lymphadenectomy for an ovarian neoplasm. Vascular tumors of lymph nodes are briefly reviewed including eight previously described nodal capillary-cavernous hemangiomas. The association with other splanchnic hemangiomas is pointed out and the likelihood that the lesion is a hamartoma rather than a true neoplasm is addressed. Despite its rarity, this entity needs to be recognized by lymphologists who image lymph nodes by lymphangiography as well as by lymph nodal pathologists.*

A capillary hemangioma of a lymph node is a rare condition having been described only eight times previously (1-4). As pointed out by Chan et al (2), "since hemangiomas can occur in any organ, there is no reason why they cannot occur as primary tumors of lymph node". Perhaps the rarity of this entity is due to its being asymptomatic and therefore not examined, or lymph node attention is typically focused on coexistent disease such as cancer with metastasis rather than on inconspicuous findings or involutational change. We describe an example of an asymptomatic capillary-cavernous hemangioma of a lymph node incidentally found after excision for staging/treatment of an ovarian neoplasm.

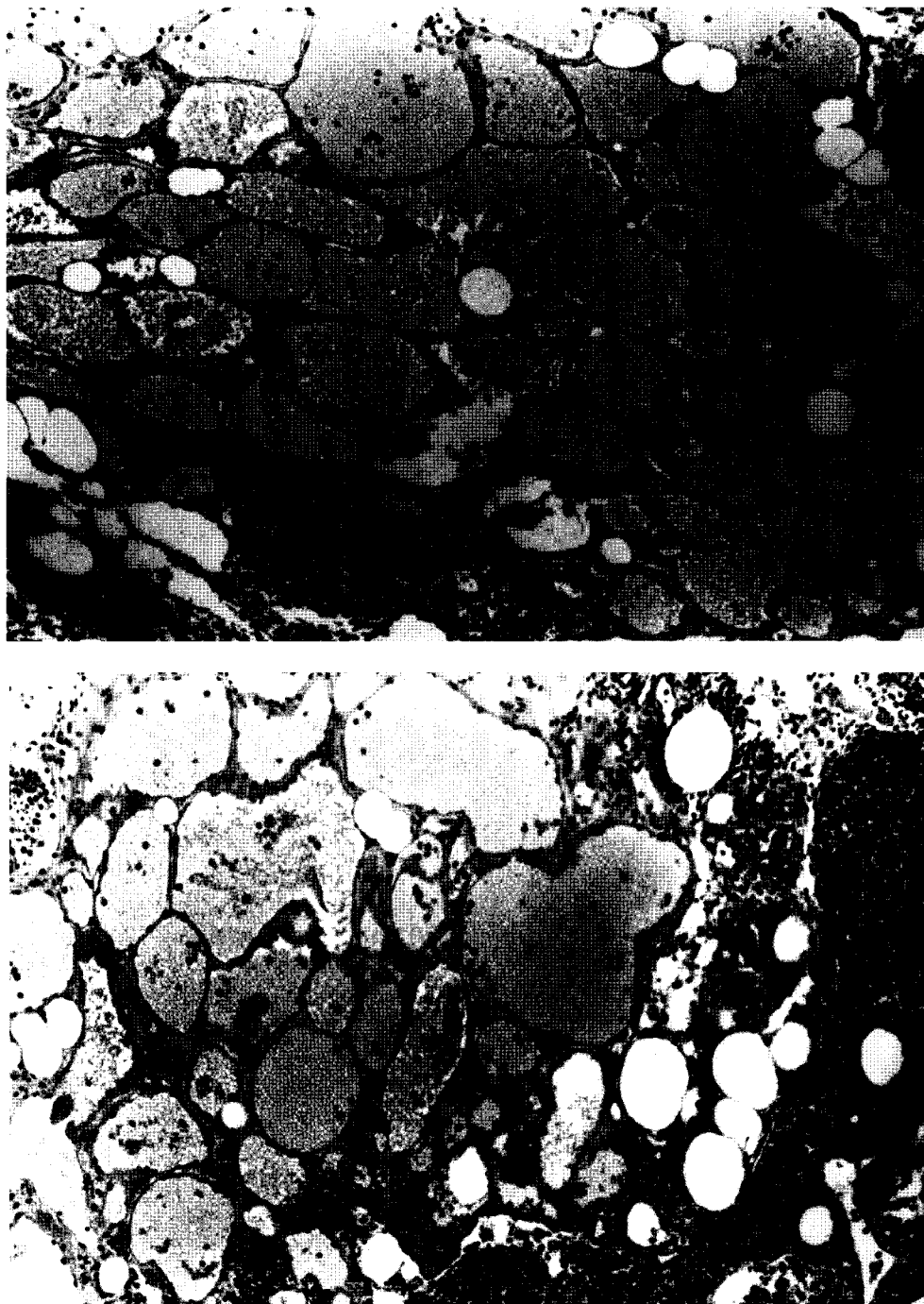
### CASE REPORT

A 64 year-old woman underwent unilateral salpingo-oophorectomy and regional lymphadenectomy for an ovarian neoplasm. The tissue was fixed in Carnoy solution and paraffin embedded for light microscopy. Tissue sections were stained with hematoxylin and eosin. The ovarian mass proved to be a papillary serous cystoadenocarcinoma with no tumor in 51 of excised lymph nodes (pT2b-G3-N0).

In an excised obturator lymph node, the histologic architecture was well preserved in the periphery with moderate sinus histiocytosis and sclerohyalinosis. In the hilar region, a well circumscribed lesion of 0.3 cm was detected composed of well-formed capillaries and cavernous spaces lined with flat endothelial cells interspersed by several adipose cells. The microvascular spaces were filled with red blood cells but without organized thrombi or nuclear atypia (*Fig. 1*). The appearance had the histologic features of a capillary-cavernous hemangioma. Other lymph nodes displayed involutational changes such as sclerohyalinosis, sinus histiocytosis and fatty metaplasia.

### COMMENT

Symmers (5) originally described proliferation of blood vessels in a lymph node as a reactive lymphadenitis with angiomatosis. Another term applied has been nodal



*Fig. 1. Top—Histopathology of a portion of an obturator lymph node. The lesion is well circumscribed and is composed of well-developed capillaries and cavernous spaces lined by flat endothelial cells consistent with "capillary-cavernous hemangioma." Compressed lymphatics and an occasional adipose cell are seen among the cavernous sinuses. H & E x 100. Bottom—The lymph node hilum displaying lymphatic elements and fibrous trabeculae. H & E x 100.*

angiomatosis (6) or hemangiomatoid lesion (7). In 1992, Chan et al (3), after a histologic review of 39 nodal vascular tumors, suggested five major classification groups: 1) hemangioma of capillary-cavernous, lobular capillary, or cellular type; 2) angiomyomatous hamartoma; 3) epithelioid vascular tumors; 4) polymorphous hemangioendothelioma; 5) lymphangioma (3). After careful review, we found only eight reports of nodal capillary-cavernous hemangioma. Most of these were incidental findings with no gross or obvious nodal changes. They occurred in various lymph nodes (1 in colon mesentery, 1 in the groin, 3 in the axilla, 1 parailiac and 2 supraclavicular). Our patient example was also discovered by chance and located in an obturator lymph node. Interspersed among the capillaries and cavernous spaces was adipose tissue as described by Chan et al (3).

On occasion, these nodal angiomatic lesions are associated with other vascular anomalies such as cavernous hemangioma of the liver, capillary hemangioma of a mesocolon lymph node (2), intestinal angiodysplasia, oral hemangiopericytoma and even vascular esophageal polyp (8).

Capillary hemangioma of a lymph node probably represents a hamartoma or anomalous embryonal development rather than a true neoplasm as supported by its occurrence with other splanchnic hemangiomas. Even if the condition is rare, it should be kept in mind particularly when interpreting lymphangiographic nodal images with abnormalities as in angiodysplastic syndromes.

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