

## LYMPHANGIOMA OF THE SCALP

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### SUMMARY:

*Lymphangiomas are benign, congenital lesions that develop from sequestered lymphatic sacs. They usually occur in the neck and axilla. In this paper, we report a case of lymphangioma of the scalp on extremely rare location.*

### KEY WORDS:

*Lymphangioma, Scalp*

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### INTRODUCTION

Lymphangiomas are rare benign lesions which are characterized by proliferating lymph vessels (1). These congenital tumors develop from sequestered lymphatic sacs (10,14). Although lymphangioma is a benign tumor, its infiltrative character complicates removal and contributes to postoperative recurrence (1). The majority of lymphangiomas occur in the neck and the axilla. To our knowledge, this is the first report of a scalp lymphangioma.

### CASE REPORT:

A 16 year-old female patient was admitted to hospital with the chief complaint of right frontal subcutaneous swelling. This lesion was present at birth and has grown slowly since then. Her complaint was only cosmetic. At physical examination, there was a rubbery, painless mass, 4x3x2cm in size, under the scalp in the right frontal region (Fig.1). Neurological examination was within normal limits. The lesion was excised totally under general anesthesia. During the operation, minimal destruction was seen on the external table. Histopathological diagnosis revealed cavernous lymphangioma (Fig.2) (6). Follow up period of 4 years showed no signs of recurrence.

### DISCUSSION

Lymphangiomas are slowly enlarging, well circumscribed, soft, cystic tumors. They are accepted as congenital malformation/tumor like lesions or vascular hamartomas rather than neoplasm (3,15). About 75% of lymphangiomas occur in the neck and 20% in the axillary region (1,7,13,14). In a small number of cases other locations including the mediastinum, retroperitoneum, oral cavity, mesentery, bones and orbit have been reported ((2,4,7,8,11,13). The sexes are affected equally (7). Usually these tumors present as easily compressible, painless enlargements that transilluminate well (5,8). At birth 50% are present and 90% are evident by two years of age(1,4,13). Clinically, they may rarely bleed spontaneously (2). Although lymphangioma is a benign tumor, its infiltrative tendency enables it to grow along tissue planes (1). It is usually fluctuant, lobulated and not attached to the skin but fixed to the deep tissues. Lymphangiomas consist of endothelial-lined spaces supported by a thin connective tissue base. These lesions often contain a thin, clear or straw coloured fluid, unless infected (1,2). If the space is contaminated by blood cells, the lesions can easily be mistaken fo

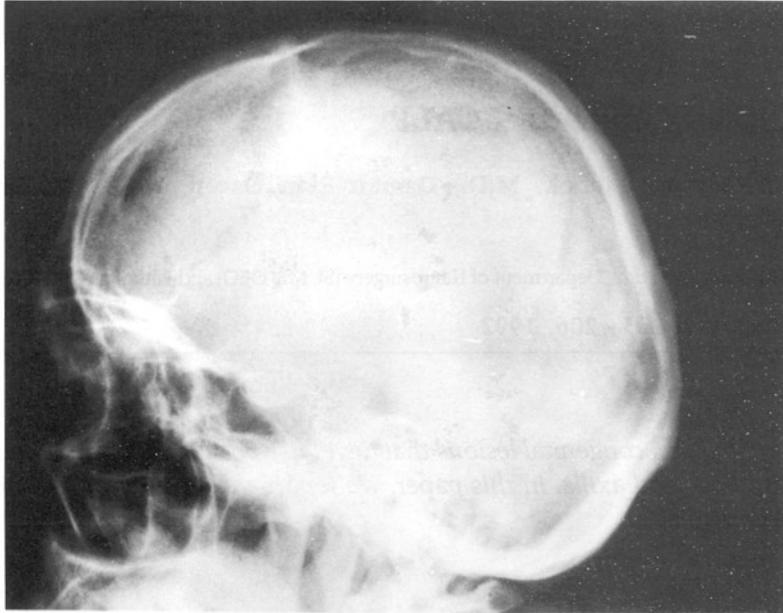


Fig. 1 : Lateral plain x-ray radiolucent area in the frontal region.

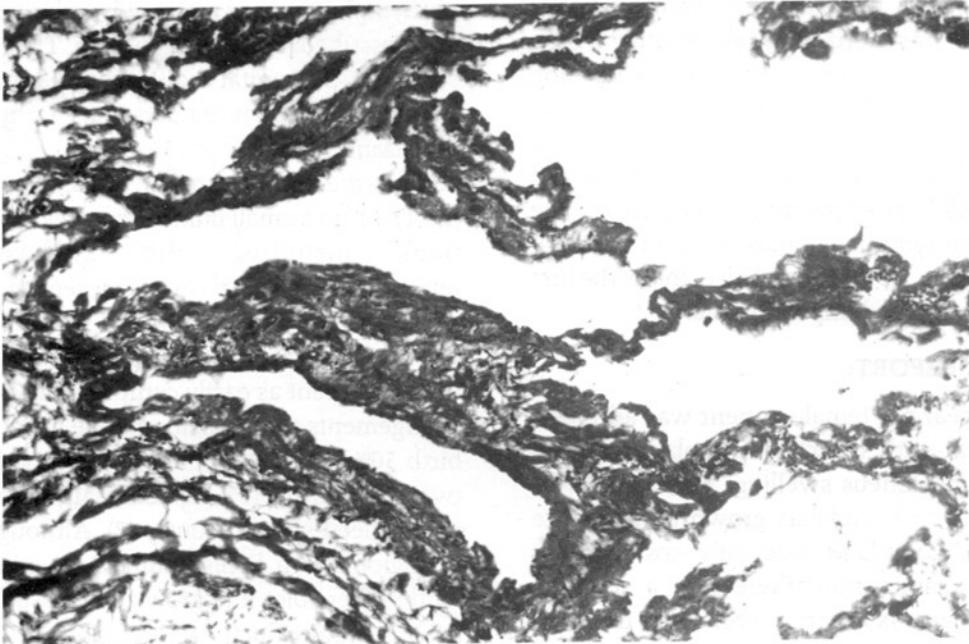


Fig. 2 : Irregularly shaped cystic spaces lined by a single layer of endothelium. Periendothelial connective tissue shows invariable collagen. (H.E., x30)

hemangioma. The mass may remain the same size or enlarge slowly but spontaneous remission is very rare (7,8). Histologically, lymphangiomas have been classified into three types: lymphangioma circumscriptum (papular angiokeratoma), classical lymphangioma circumscriptum (angiokeratoma circumscriptum) and cavernous lymphangioma (hygroma or cavernous hemangioma) (1,5,6,9,13). In the past, different kinds of therapy, such as aspiration and injection of sclerosing agents were applied to these tumors (4,8). Radiotherapy is unsatisfactory and is no longer used because of its failure to completely damage the tumor, but if total removal fails, radiation may be indicated (4,13).

Total surgical excision is the treatment of choice for lymphangiomas and offers the best chance of cure (1,4,5,7,8,12,13). Surgery is advised sooner rather than later, as excision is technically easier before the tumor has invaded normal tissue, further and before infection has occurred and causing fibrosis and scarring. Recurrence of lymphangioma following subtotal excision is generally said to occur within one year (4).

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