# Case report

# A rare case of angiodysplasia: penetration of inguinal lymph nodes by large superficial leg veins

# Report of five cases

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**Summary.** Five cases of veno-lymphatic angiodysplasia with penetration of one or several inguinal lymph nodes by the long saphenous vein, or one of its major branches, are reported. This malformation is usually detected during surgery for varicose veins with ligation of the long saphenous vein in the fossa ovalis. The significance of the anomaly is not clear, but in some cases it might be the reason for development of varicose veins.

**Key words:** Angiodysplasia – Veno-lymphatic malformations – Inguinal lymph nodes – Varicose veins – Aetiology

#### Introduction

Angiodysplasias comprising lymphatic and venous and/ or arterial vessels are not uncommon. They may occur as combined malformations in systemic angiodysplasia or as localised tumour-like malformations (haemangiolymphangioma). A previously undescribed type of combined angiodysplasia involving lymphatic and venous structures has been observed in five cases: the penetration of inguinal lymph nodes by one or several large superficial leg veins.

# Case reports

Case 1. A 63-year-old man. Operation for varicose veins. A large branch of the long saphenous vein penetrated an inguinal lymph node.

Case 2. A 37-year-old woman. Operation for varicose long saphenous veins. Penetration of several inguinal lymph nodes within the fossa ovalis by the ectatic saphenous vein was found.

Case 3. A 45-year-old man. Re-operation 3 years after ligation of the varicose long saphenous vein. Occurrence of a nodular tu-

mour in the left groin: an enlarged inguinal lymph node was penetrated by a large vein.

Case 4. A 52-year-old woman. Operation for varicose long saphenous veins with ectatic sapheno-femoral junction. The saphenous vein was penetrating into several inguinal lymph nodes.

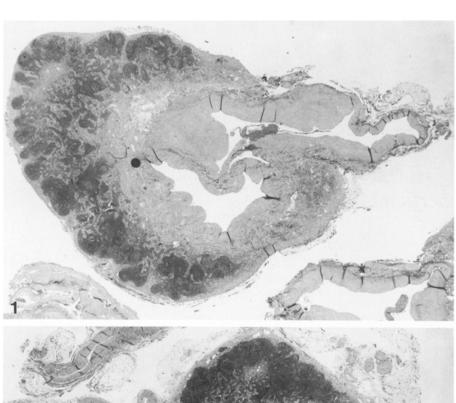
Case 5. A 39-year-old woman. Operation for varicose veins. The ectatic long saphenous vein in the fossa ovalis penetrated several lymph nodes.

Pathological findings. In all five cases a large vein is clearly penetrating one or several lymph nodes. The entire venous wall is surrounded by, and closely linked with, lymphatic tissue.

Microscopy. The biopsy material of all five cases consists of one or several well-developed inguinal lymph nodes with inconspicuous lymphatic tissue containing lymph follicles and occasional germinal centres. One or several superficial leg veins of typical structure (with longitudinal smooth muscle bundles in the adventitial layer) are situated in the centre of the lymph nodes. The venous wall is normal or ectatic with or without phlebosclerosis of the intimal and/or medial layer. Fresh or recanalised thrombotic occlusions are not detected.

#### Discussion

This type of veno-lymphatic angiodysplasia has not been mentioned in the literature (Belov et al. 1985, 1989; Malan and Puglionisi 1964, 1965; Schobinger 1977). The change may be detected during operation for varicose veins and may have no clinical significance. However, it might cause stenosis of the long saphenous vein or one of its major branches and thus contribute to the development of varicose veins. Theoretically it might also act as collateral circulation in patients with recurrent varicose veins after earlier ligation (case 3).



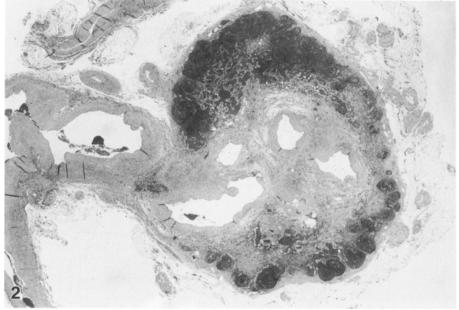


Fig. 1. Inguinal lymph node penetrated by a vein. Case 5. H & E,  $\times 9$ 

Fig. 2. Inguinal lymph node penetrated by a vein. Case 5. H & E,  $\times 8$ 

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