Acquired venous aneurysms

T. Paes FRCS, S. Andrews* MB and A. Wyatt* FRCS
Hillingdon Hospital, Hillingdon and *Brook General Hospital, Shooters Hill Road, London, UK

A case is reported of acquired venous aneurysms in the superficial forearm veins of an oarsman. The aetiology, presentation and complications are discussed.

Keywords: Venous aneurysm, athletic injury

Case report

A 29-year-old male oarsman presented with a 7-year history of two gradually enlarging swellings on the dorsum of his right forearm. They occasionally ached, especially during physical training, and had been variously diagnosed as ganglion cysts and lipomata.

On careful questioning it was noted that they enlarged during exercise and with the arm dependent, and disappeared with the arm elevated. He denied previous trauma to the area and associated their appearance with his rowing activities. Being a keen oarsman, he had rowed at least five times a week for the previous 10 years. This involves gripping the oar and performing a repeated flexion and extension at the wrist joint against a load, over 1000 times each outing. Physical examination revealed an otherwise extremely fit man with two soft fluctuant 2 × 3 cm and 3 × 4 cm swellings on the dorsum of his right forearm (Figure 1). The diagnosis of venous aneurysms was made. Venography was considered unnecessary.

At operation, under general anaesthesia, the tributary veins leading into the aneurysms were ligated and divided, and the aneurysms were excised. Histology revealed thin-walled venous aneurysms but with no specific histological features. He remains well and asymptomatic 4 months later.

Discussion

Venous aneurysms can be defined as abnormal saccular dilatations of veins characterized histologically by an increase in fibrous connective tissue in the vein wall. They were first described by Harris in 1928 and are rare. An extensive literature search reveals under 50 reported cases. The most common site is the popliteal vein, but saphenous, portal, splenic, superior vena caval, cephalic, facial, jugular, iliac, subclavian and renal vein aneurysms have been described. They may occur at any age (5 months to 75 years) and there appears to be an equal sex distribution. Several authors consider them to be congenital in origin, whilst others feel they are secondary to factors such as high venous pressure, blunt and penetrating injury, or stretch injury. Traumatic venous aneurysms are very rare. They have been reported after blunt injury in a hockey player, penetrating injury (dog bite) in a racquet player, and after orthopaedic procedures, intravenous cannulation, and in the venous limb of an arteriovenous fistula for haemodialysis.

In the case we describe, repeated stretch injury and increased venous pressure due to gripping are likely to have been causative factors.

Venous aneurysms may present directly as soft tissue swellings, or as a result of their complications. Popliteal venous aneurysms most commonly present after thromboembolism, but pulmonary emboli have not been reported from other sites. Unlike arterial aneurysms, rupture is rare and only two cases have been described. Surgical excision as described here is the usual treatment for venous aneurysms causing pain and cosmetic deformity, but excision should always be considered because of the potential complications.
Acquired venous aneurysms: T. Paes et al.

References
9 Dahl JR, Freed TA, Burke MF. Popliteal venous aneurysm with recurrent popliteal thromboemboli. JAMA 1976; 236: 2531–2

The Diploma Course in Sports Medicine
Final examination results

Dr Aris Barbadimos
Dr Mark Batt
Dr Phillip Bell
Dr Mavee Burke
Dr Ahmet Caglar
Dr Carole Castles
Dr Carl Clinton
Dr Jovan Djurovic
Dr Timothy Douglas-Riley
Dr Caroline Easterbrooke
Dr Adrienne Garner
Dr Peter Greenway
Dr Adeen Henry
Dr David Hughes
Dr Trevor Law
Dr John Lawn
Dr Gavin Lloyd
Dr Finn Mahler
Dr Ian McCurdie
Dr Roderick McLoughlin
Dr Jennie Oliver
Dr David Whittaker
Dr Danish Zaheer

Pass
Pass (with merit)
Pass (with merit)
Pass
Pass
Pass
Pass
Pass
Pass
Pass (with distinction)
Pass (with merit)
Pass (with merit)
Pass
Pass
Pass
Pass
Pass

Correction: Dr Joyce Woffindin passed the diploma with merit.

The Society of
Apothecaries of London

Diploma in
Sports Medicine
24 May and 5 June 1991

The following candidates have satisfied the Examiners

Fiona Jane Dry MB BS Lond, MRCPG
Simon Petrides MB BS Lond
Danish Zaheer MB BS Sind

D.H.C. Barrie
Registrar

London Hospital Medical College
MAXICARDS

150 Br J Sp Med 1991; 25(3)