ASSOCIATION OF VARICOSE VEINS OF LOWER EXTREMITIES WITH VARICOCELE AND HAEMORRHOIDS (A Case Report)

Maj RAJESH CHAUHAN*, Dr VIVEK KAPOOR+

MJAFI 1996; 52 : 59-60

KEY WORDS : Varicocele; Varicose veins; Haemorrhoids.

Introduction

Lower limbs are the commonest site for varicosity. Less common sites are the submucosa of the anal canal (haemorrhoids), the submucosa of the oesophagus (oesophageal varices), and the pampiniform plexus (varicocele) [1,2]. Rarely, they may also occur around an arterio-venous fistula [1].

Outcomes of the search for aetiopathogenesis have not been much rewarding. All that can be said of their development is that there is some intrinsic weakness in the walls of superficial veins and that heredity and hormonal influences play a subsidiary, albeit an important role. Congenitally absent or defective valves also are a recognized cause of varicose veins in early life [3-5].

In such instances sustained elevation of venous pressure, beyond 300mm Hg, may precipitate varicose veins, as is seen in cases of venous thrombosis and raised intra-abdominal pressure secondary to pregnancy, ascitis, intra-abdominal tumours, or straining for evacuation of bowel or bladder [2]. However, in most cases no clearly identifiable cause or a precipitating factor can be found [4,5]. Some of these causes are also implicated in cases of haemorrhoids and varicocele.

An intriguing case of a weight lifter who presented with varicose veins, varicocele, and haemorrhoids is reported.

Case Report

A 20-year-old tall, lanky and robust soldier presented with complaints of aching in both lower extremities, especially after

* Medical Officer, IATT, Botswana. +Senior Resident, SSG Medical College, Vadodara.

prolonged standing or exercise, for 6 months. He dated the onset of illness about 5 years ago, while undergoing a rigorous practice for the national weight lifting championship. A diagnosis of varicose veins of the lower extremities had then been entertained and the patient was offered sclerosing therapy. Following this, he remained asymptomatic till about 6 months back when, apart from painful legs, he also complained of intermittent painless bleeding per anus while straining for stools. On questioning it was revealed that such bleeding was occurring for the past one year.

The patient was subjected to a detailed clinical examination, during which presence of bilateral varicose veins in the lower extremities was confirmed. Brodie-Trendelenburg test demonstrated filling of the superficial veins even before removal of the tourniquet, and thereafter with its removal, a rapid retrograde filling was also noticed. A per rectal examination revealed second degree haemorrhoids at 3,7 and 11 o'clock positions. A left-sided varicocele was an incidental finding. Systemic examination was essentially normal.

An abdominal ultrasound done to exclude any mass lesions compressing the venous system was normal. Plain radiogram of abdomen was also taken for the same reason, which again was within normal limits. An ECG, radiogram of chest, blood examination, and urine analysis were also done, and found normal. Semen analysis was normal. Limited resources denied us the measurements of collagen and hexosamine content of the veins, and also the continuous wave Doppler studies on the patient.

A subfascial flush ligation of the perforators was done on both the lower extremities for the varicose veins. Haemorrhoids and varicocele also received the deserved surgical attention.

Discussion

Varicose veins of the legs and haemorrhoids often occur concurrently. An association of haemorrhoids and diverticulosis of the bowel is known, and the possibility of increased intra-abdominal pressure has been suspected as the aetiology [4].

The inferior vena cava and common iliac veins are always valveless. The iliac and common femoral veins do not contain more than one valve, and in 36% of subjects there is a total absence of valves on one or both sides [6]. Competent venous valves aid in efficient functioning of the venous pump by preventing reflux of blood from the deep to the superficial compartments, while the 'peripheral heart' empties during calf muscle contraction. Possibility of a genetically determined structural defect in the venous wall has also been suggested [4]. Individuals with varicose veins in the lower extremities have been found to have an increased venous distensibility and reduced amounts of col-

lagen and hexosamine in the wall of unaffected veins [4]. In such situations, a sustained elevation in the venous pressure may eventually lead to stretching of the wall and, finally, to incompetence of the valves and overdilatation of the veins.

In our patient, the onset of problems can be related to the increased intra-abdominal pressure consequent to his strenuous work-outs while practising for weight lifting. He may have been genetically predisposed [7], but had denied any positive history of similar illness in the family. The use of abdominal binders, and excessive straining seem to have precipitated the varicosities. Continuation of similar exercises aggravated the problem. We could not retrieve any convincing data from any published work regarding any association with weight lifting or similar sports. However, it seems very likely that, in this predisposed individual, the intermittently sustained increased intra-abdominal pressure precipitated this presentation.

Such patients derive good relief from a change in the life styles, and a timely corrective surgery. Avoidance of prolonged standing, periodic raising of the legs, use of elastic stockings, avoidance of constipation, and chronic cough will result in better outlook for these patients.

REFERENCES

1. Taylor S, Cotton L. Diseases of veins. In : A Short Textbook of Surgery. London : The English University Press, 1968 : 101-14.
2. Flye MW. Venous disorders. In : Textbook of Surgery. Sabiston DC, editors. Philadelphia : WB Saunders 1991 : 1490-501.
3. Kistner RL. Primary venous valve incompetence of the leg. Am J Surg 1980; 140 : 218-24.
4. Wyngaarden JB, Smith Jr LH. Varicose veins. In : Cecil Textbook of Medicine. Philadelphia : WB Saunders 1985 : 365.
5. Goldman MP, Weiss RA, Bergan JJ. Diagnosis and treatment of varicose veins : a review. J Am Acad Dermatol 1994; 31 : 393-413.
6. Eger SA, Casper SL. Etiology of varicose veins from an anatomic aspect, based on a dissection of thirty eight adult cadavers. JAMA 1943; 123 : 148.
7. Gundersen J, Hauge M. Hereditary factors in venous insufficiency. Angiology 1969; 2 : 346-55.