

Kontralateral venöz dolaşımı bağlayan venöz kollateraller: Olgu sunumu

Venous collaterals connecting contralateral venous circulation: A case report

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Abstract:

Symptomatic pubic varicosities are rarely seen lesions in adults. These lesions may occur as a result of obstruction in proximal venous outflow in pelvis. Complete understanding of underlying pathologic process is mandatory before any intervention for these lesions. Unnecessary closure of these varicosities would also remove vital collateral circulation from the lower extremity in the chronic iliac vein occlusion. Herein, we present a female patient with pubic varicose veins which presented with crossover collaterals due to chronic deep vein thrombosis (DVT) on left lower extremity.

KeyWords: Varicose veins, Pubic, Venous Insufficiency

Öz

Semptomatik pubik varikoziteler erişkinlerde nadir görülen lezyonlardır. Bu lezyonlar pelvis proksimal venöz çıkış tıkanıklığı sonucu ortaya çıkabilir. Herhangi bir müdahale öncesinde lezyonların altta yatan patolojik sürecinin tam olarak anlaşılması gerekir. Bu varikozitelerin gereksiz kapatılması kronik ilial ven oklüzyonunda alt ekstremitede oluşacak hayati kollateral dolaşımı iptal edebilir. Bu yazıda, sol alt ekstremitede kronik derin ven trombozuna (DVT) bağlı nedeni çapraz kollateralleri olan ve pubik variköz dilatasyonlar ile presente olan kadın hasta sunuldu.

Anahtar sözcükler: Variköz venler, pubik, Venöz yetmezlik

Introduction

Symptomatic pubic varicosities are rarely seen lesions in adults. These lesions may occur as a result of obstruction in proximal venous outflow in pelvis. Complete understanding of underlying

pathologic process is mandatory before any intervention for these lesions. Unnecessary closure of these varicosities would also remove vital collateral circulation from the lower extremity in the chronic iliac vein occlusion (1). Herein, we present a

female patient with pubic varicose veins which serve as crossover collaterals due to chronic deep vein thrombosis (DVT) on left lower extremity.

Case Report

A thirty-four-years-old woman presented with swelling in pubic region. There was a history of DVT in left lower extremity and anticoagulant medication during her pregnancy ten year ago. Physical examination revealed pubic swelling beginning from left inguinal region extending to pubic region that become more visible on standing position and superficial varices around left knee region. The patient had no pain and there was no swelling on left leg. Venous ultrasonography examination of bilateral lower extremities showed normal phasic wave forms in external iliac, common femoral and femoral veins. There was some hypo echoic filling defects and intimal irregularity suggesting chronic thrombus in left femoral and popliteal veins. On Valsalva maneuver there was mild reflux on supine position but moderate reflux on standing. A varicose vein was originating from the left inferior epigastric vein extending towards pubic region and showing prominently dilatation and reflux on Valsalva maneuver. The distal ending of the vein was not visible on ultrasonography examination. Since normal Doppler wave form of proximal veins was detected, sclerotherapy of pubic venous varice was planned. Additionally, conventional venography was performed to detect the distal ending of the vein on pubic region and to exclude any thrombosis. Venography revealed total occlusion at the left common iliac vein origin. Left common femoral, femoral and popliteal veins were patent but there were minimal filling defects in both veins. The inferior epigastric and pubic veins were dilated and provided collateral flow via

suprapubic varicose veins to the right common femoral vein. Sclerotherapy of pubic varicose vein was abandoned. Since the patient was relatively asymptomatic, we did not attempt to recanalise the left common iliac vein. The patient was sent with recommendations for follow up, using compression stocking and medication.

Discussion

The normal venous wave form of lower extremity veins show phasicity on spectral Doppler analysis. Phasicity results from increasing and decreasing intrathoracic pressure secondary to respiration. This alteration of pressure is transmitted from the central to peripheral veins and shows a cyclic change in blood flow which can be detected by Doppler sonography. Loss of this phasicity means shading off monophasic waveform. Monophasic wave form in lower extremity veins occur when the transmission of pressure alteration to the vein is disrupted by external compression, proximal deep venous thrombosis or intrinsic narrowing of a more proximal vein (2). Also protection of phasicity indicates venous patency confirming the absence of thrombi or venous obstruction in the abdomen and pelvis indirectly.

Lower extremity venous insufficiency at groin region may be assessed by having the patient perform Valsalva maneuver. Proximal and distal compression is used to detect reflux for distal veins. Pressures generated by the Valsalva maneuver depend on the patient ability to cooperate on the rapidity and the force with which the maneuver is performed (3). Since Valsalva maneuver produce reflux only down to first competent valve, the maneuver is usually of value only for examining veins in the groin or proximal leg. Proximally positioned patent valve and obstruction may also prevent the transfer of pressure alteration even during properly made Valsalva maneuver(3).

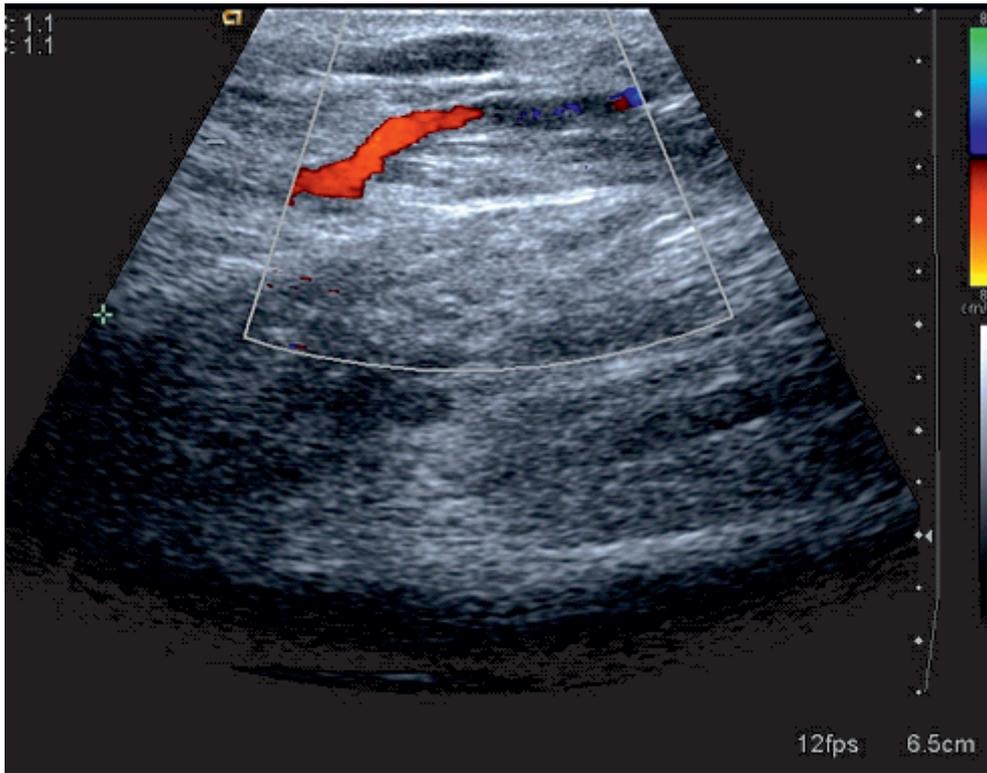
Up to 90% of patients with history of iliotibial DVT develop posttrombotic syndrome which presents swelling, pain, ulceration and venous claudication of the lower extremities in contrast to our case presented with only pubic swelling due to collateral vessels.

Venous drainage of the leg occurs via collateral vessels in patients with iliofemoral DVT causing extensive occlusion of common iliac vein. Visualization of the iliac veins by Doppler ultrasound can be difficult due to overlying pelvic organs and bowel gas. In addition, venous Doppler waveforms can display normal spontaneous flow, reflux on Valsalva maneuver and respiratory

phasicity as misleading to non-obstruction of proximal venous vessels similarly to our case. Diagnostic conventional venography enables direct evaluation of the degree of venous obstruction and collateral vessels (4).

In the setting of unilateral recanalized lower extremity DVT, direct imaging of the pelvic veins should be considered even if findings suggest lack of occlusion in proximal deep veins on Doppler ultrasound like respiratory phasicity and Valsalva response (4). Unnecessary closure of collateral veins may remove vital circulation from the lower extremity in the chronic iliac vein occlusion (1).

Figure 1: Color doppler ultrasound image of the crossover collateral.



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