

Incidental Finding of Iliac Vein Compression Syndrome

Achado Incidental de Síndrome de Compressão da Veia Iliaca

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A 49-year-old woman presented with a progressive history of bilateral buttock and calf intermittent claudication, reaching a walking distance of 10 m. She was a smoker and had hypertension. She had no history of venous thrombosis, leg edema, varicose veins, or signs of chronic venous disease. Her femoral pulses were absent. Computed tomography angiography showed occlusion of the infrarenal aorta with recanalization of both iliac arteries. Interestingly, the right common iliac artery compressed the left common iliac vein, which was enlarged (Figure 1). Left-sided dilated pelvic collaterals were observed: uterine and gonadal veins (Figure 2). There was no compression on the left renal vein.

She underwent an aorto-bi-iliac bypass with Dacron without complications. The left common iliac vein was distended and was tightly compressed when it passed behind the right common iliac artery (Figure 3). As the patient had no venous symptoms, the vein was left undisturbed.

The postoperative course was uneventful, and the patient had no thrombotic events.

Iliac vein compression syndrome, also known as May-Thurner syndrome or Cockett syndrome, is a condition in which the left common iliac vein is compressed by the right common iliac artery against the vertebrae.¹ The compression causes intimal hyperplasia, inner webs, and spurs, which can lead to thrombosis.² Three clinical stages were described: I, asymptomatic; II, spurs without thrombosis; and III, thrombosis.³

The diagnosis requires the demonstration of a stenotic or occlusive venous segment on imaging. Computed tomography and magnetic resonance are helpful. Venography has been performed as the gold standard.⁴ Recently, intravenous ultrasound has shown improved sensitivity and is becoming widely used in diagnosis.^{5,6} Treatment is not recommended for asymptomatic patients. Symptomatic patients may benefit from self-expanding stents.¹



Figure 1 – Computed tomography angiography of coronal sections showing occlusion of the infrarenal aorta with recanalization of both iliac arteries. The right common iliac artery compressed the left common iliac vein, which was enlarged (black arrowhead).

Keywords

Iliac vein compression; syndrome, May-Thurner; Cockett; Asymptomatic Diseases.

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Figure 2 – Computed tomography angiography in coronal section showing left-sided dilated pelvic collaterals: uterine veins (white arrow) and gonadal vein (black arrow).

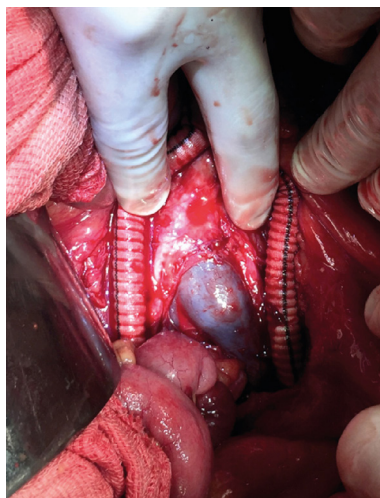


Figure 3 – Intraoperative image of aorto-bi-iliac bypass procedure. The left common iliac vein was distended and tightly compressed when it passed behind the right common iliac artery.

In our case, iliac vein compression was an incidental image finding confirmed during the procedure performed to treat another condition. Iliac vein compression is found in approximately 20% of patients without any venous symptom.³ The patient received no specific treatment other than routine thrombosis prophylaxis. She did not receive therapeutic anticoagulation.

This study is in concordance with the institutional ethics committee and required consents were obtained. The patient agreed to the publication of the case and images.

Authors' contribution

Conception and design: Dalio MB, Bohatch Júnior MS, Oliveira TF; Analysis and interpretation: Dalio MB,

Bohatch Júnior MS, Oliveira TF, Ribeiro MS, Joviliano EE; Data collection: Dalio MB, Bohatch Júnior MS, Oliveira TF; Writing the article: Dalio MB, Bohatch Júnior MS, Oliveira TF, Ribeiro MS, Joviliano EE; Critical revision of the article: Dalio MB, Bohatch Júnior MS, Oliveira TF, Ribeiro MS, Joviliano EE; Final approval of the article: Dalio MB, Bohatch Júnior MS, Oliveira TF, Ribeiro MS, Joviliano EE; Agreement to be accountable: Dalio MB, Bohatch Júnior MS, Oliveira TF, Ribeiro MS, Joviliano EE

Conflict of interest

The authors have declared that they have no conflict of interest.

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