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How to Assess Illusory May–Thurner Syndrome by Ultrasound

We read with interest the excellent article by van Vuuren et al.,¹ who described an impressive prevalence of angiographic signs usually indicative of May–Turner syndrome (MTS) in healthy volunteers.

In our clinical practice we see the same on ultrasound, which in asymptomatic patients shows left iliac vein (LIV) compression (Fig. 1, left). In similar cases we increase the gravitational overload slightly and repeat the investigation with the patient in a semi-settled 45° position.² The presence of illusory MTS is followed by relief of the compression and flow recovery in the LIV (Fig. 1, right).

Nowadays, MTS is anecdotally reported as compression of the LIV by the right iliac artery. However, May and Thurner's original post-mortem examinations of 430 subjects showed a combination of intraluminal obstacles and LIV compression in about 20% of cases. They hypothesised that intraluminal obstacles, the true cause of venous obstruction, could be favoured by the compression.³ Their impressive photographs, corroborated by histology, show a variety of intraluminal defects, which today are classified as truncular venous malformations.⁴

We agree with the authors that it is mandatory to improve pre-operative diagnostics to arrive at the correct surgical indications.

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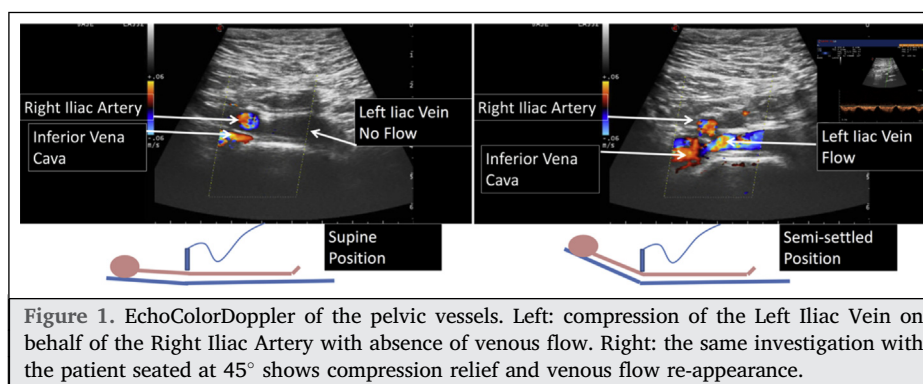


Figure 1. EchoColorDoppler of the pelvic vessels. Left: compression of the Left Iliac Vein on behalf of the Right Iliac Artery with absence of venous flow. Right: the same investigation with the patient seated at 45° shows compression relief and venous flow re-appearance.