

71. May-Thurner syndrome

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Q: "Can somebody please explain what May-Thurner syndrome is? I have had a clot (DVT = deep vein thrombosis) in my left leg and my doctor says it is due to May-Thurner syndrome".

A: Congenital narrowing of the left common iliac vein due to pressure from the overlying artery is called May-Thurner syndrome and can lead to deep vein thrombosis of the left leg.

The blood coming from the legs flows through the deep veins of the legs and the pelvis into the big abdominal vein and then to the heart (figure below). The normal anatomy is that the artery which runs to the right leg (= right common iliac artery) lies on top of the vein coming from the left leg (= left common iliac vein). This close proximity leads, in some people, to pressure of the artery onto the vein and to varying degrees of narrowing of the vein. This is referred to as "May Thurner syndrome". It is not a disease but a congenital anatomic variant. Mild and moderate degrees of narrowing are typically asymptomatic. More severe degrees can lead to obstruction of blood flow from the leg and thus to leg swelling and pain. The narrowed vein can also clot, resulting in left leg DVT.

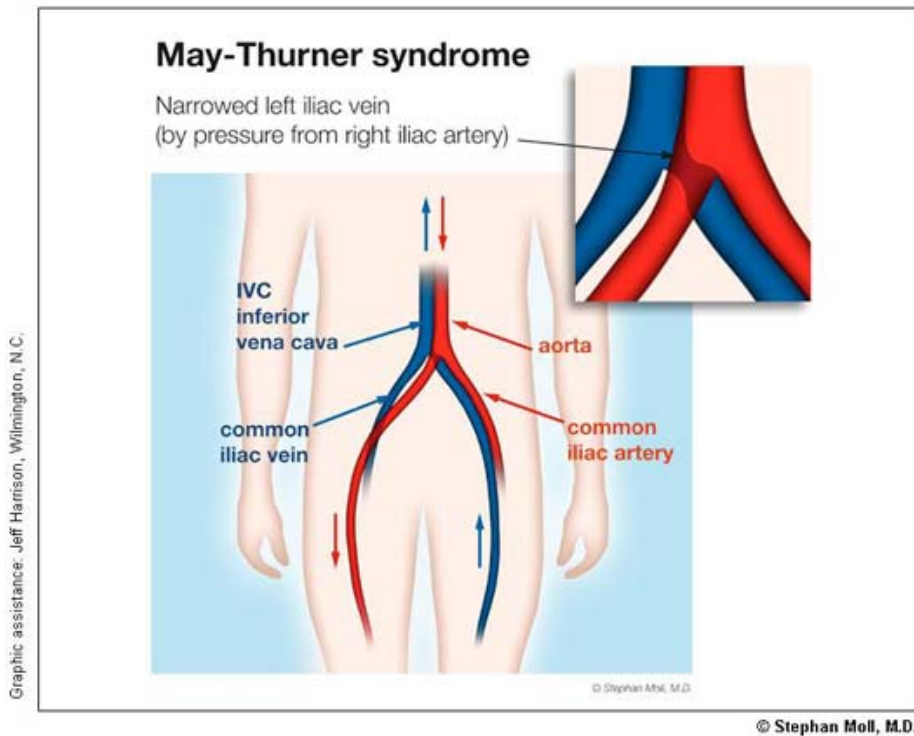
The syndrome is named after the authors R. May and J. Thurner, who first described this phenomenon in 1957. It has also been termed the iliac compression syndrome. It is probably the reason why more DVTs occur in the left than in the right leg.

Several surgical treatment strategies have been employed in the past:

1. venous bypass surgery of the narrowed area;
2. cutting of the iliac artery and repositioning of the artery behind the iliac vein;
3. construction of a tissue sling or flap to lift it off the iliac vein;

Since 1995 venous stents have been placed into the narrowed area, to pry them open (references 2-5). Unfortunately, there are no large studies that (a) investigate the long-term success of the procedure, i.e. how often the stents improve symptoms and remain patent, and (b) whether patients should remain on long-term (lifelong) coumadin (warfarin) or not. Stents appear beneficial at least in the short-term improvement of symptoms, within the first 1-2 years of stent placement (references 3 and 6).

Personal Comment: If a patient has a fair amount of leg pain and swelling and a localized narrowing in the left common iliac vein, i.e. has the May Turner syndrome, I typically recommend stent placement. Once a stent has been placed I recommend 3 months of warfarin, INR 2.0-3.0. Thereafter, a decision on coming off or staying on warfarin depends on the patient's risk factors for recurrent DVT, such as how many blood clots the patient has had previously, whether he/she has a strong clotting disorder, whether the patient has left-over clot in his/her legs and whether a D-dimer blood test is positive or negative. If the patient and I decide to discontinue warfarin, then I typically recommend long-term aspirin 81 mg per day, even though it is not known whether it is beneficial in keeping venous stents open.



References:

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