

Evidence Discussion (PVD 13.1-13.4)

Chronic limb swelling due to chronic deep venous thrombosis (DVT)/ May-Thurner syndrome, post-thrombotic syndrome and pelvic congestion syndrome

For patients with isolated left leg edema, or left leg edema greater than right leg, duplex ultrasound of the extremity should be performed to assess for DVT. If femoral DVT is identified, duplex ultrasound of the pelvis should be performed to assess for ilio caval DVT or evidence of a mass that may be causing compression of the iliac vein or IVC.

In patients with acute iliofemoral DVT, advanced imaging with either CTV or MRV of the abdomen and or pelvis is indicated for cases of iliofemoral DVT identified on ultrasound for treatment planning, or cases where iliofemoral DVT or stenosis is suspected but pelvic ultrasound is indeterminate or limited due to body habitus or overlying bowel gas obscuring the iliac vein.

Advanced imaging with CTV or MRV of the abdomen and/or pelvis is indicated in patients without acute DVT but a prior history of left iliac DVT or leg edema, varicosities or venous stasis disease in the absence of underlying venous insufficiency or following treatment of superficial venous insufficiency to assess for iliac vein compression. Post-Thrombotic syndrome due to prior DVT and subsequent deep venous insufficiency may lead to recurrent or chronic lower extremity edema. Management is compression therapy and advanced imaging is only indicated for assessment of symptoms consistent with new iliofemoral DVT or for preoperative planning for identified iliac vein stenosis.

Advanced imaging with CTV or MRV is indicated in patients with recurrent symptoms and a history of ilio caval stenting for iliac vein DVT, or compression.

Pelvic congestion syndrome may be a cause of chronic pelvic pain or post-coital discomfort. Initial imaging is pelvic or transvaginal ultrasound to assess for other sources of pelvic pain. Advanced imaging such as CTV or MRV of the abdomen and pelvis is indicated if ultrasound is inconclusive or non-diagnostic or for treatment planning.

References

1. Poyyamoli S, Mehta P, Cherian M, Anand RR, Patil SB, Kalva S, Salazar G. May-Thurner syndrome. *Cardiovasc Diagn Ther*. 2021 Oct;11(5):1104-1111. doi: 10.21037/cdt.2020.03.07. PMID: 34815961; PMCID: PMC8569277.
2. Vedantham S, Kahn SR, Goldhaber SZ, Comerota AJ, et al. Endovascular therapy for advanced postthrombotic syndrome: Proceedings from a multidisciplinary consensus panel. *Vasc Med*. 2016 Aug;21(4):400- 7.