

## Superficial Thrombophlebitis

Traditional treatment for superficial thrombophlebitis (SVT) has been symptomatic and largely consisted of NSAIDs, heat and compression. As our knowledge and understanding of venous disorders has increased, traditional treatment for SVT has also changed. Studies have shown the incidence of DVT in patients with SVT to be 6-40% depending on the study and patient risk factors. Similarly, symptomatic PE rates have been reported to occur in 2-13% of patients with asymptomatic PE in up to a third of SVT patients on lung scans.<sup>1</sup> Given this knowledge, current treatment goals are not just symptom relief but also, prevention of progression to DVT. The most recent Chest guidelines suggests the use of a prophylactic dose of fondaparinux or LMWH for 45 days over no anticoagulation in patients with superficial vein thrombosis of the lower limb of at least 5cm in length(2B).<sup>2</sup>

SVT has been reported to occur in approximately 125,000 people yearly in the US. Varicose veins are the most common predisposing factor for SVT but there are many other potential predisposing factors including immobilization, trauma, hypercoagulable states, hormonal therapy, malignancy and auto immune disorders. Risk factors for concurrent DVT with SVT are cancer, inpatient status, SVT in the absence of varicose veins, age greater than 75 and prior history of DVT. Despite the prevalence of SVT, there is much variation in the treatment patterns as was evidenced by a study in the most recent issue of Phlebology.<sup>3</sup>

Malignancy can be found in 13-18% of patients with SVT and SVT in non-varicose veins should prompt further investigation if there are no other predisposing risk factors for thrombosis.<sup>1</sup> Similarly, migratory SVT (Trousseau's sign) can be a sign of occult malignancy and thus warrants further workup.

I will typically advise a duplex ultrasound in the setting of SVT. Not only will this document the location and extent of SVT, it will also document any venous reflux which may guide future treatment of the superficial varicosities which are a controllable risk factor for SVT and DVT. Studies have shown that not only anticoagulation but even NSAIDs reduce the progression of SVT to DVT over placebo alone.<sup>1</sup> If the SVT is distal, confined to varicosities and less than 5cm in a patient without other significant risk factors I typically recommend compression, NSAIDs, ice and frequent ambulation. If the thrombus involves the truncal veins (GSV, SSV), is over 5cm in length or is within 5cm of the Sapheno-Femoral or Sapheno-popliteal junction (SFJ or SPJ) then I will typically recommend anticoagulation for 45 days in concordance with the CHEST guidelines. While studies have been done with both low molecular weight heparin (LMWH) and fondaparinux, no studies exist to date on the

newer oral anticoagulants. Only one study has been done looking at the use of Coumadin and it showed no significant difference in DVT rates at three months.<sup>4</sup> Cost and compliance are concerns with both LMWH and fondaparinux. As the fondaparinux is a factor Xa inhibitor, it would make logical sense that other oral Xa inhibitors would have similar results at prophylactic doses but studies to support this have yet to be completed.

#### References:

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