

is a weak suggestion. Furthermore, as this evidence is extrapolated from current guidelines for the management of DVT and is therefore indirect, for the management of ARTE the level of evidence has been downgraded to C.

Further research is needed regarding the natural history of ARTE. More data is particularly needed regarding the value of anticoagulation vs serial follow-up and the duration of anticoagulation in treated patients. Given the uncertainty of the evidence, at present, duration of anticoagulation should be at the judgment of the clinician.

Evidence. The management of symptomatic DVT is generally guided by the Chest guidelines for *Antithrombotic Therapy for VTE Disease*²⁵³ and the reader is referred to that manuscript for the supporting evidence.

Unfortunately, the data regarding the management of ARTE are substantially less robust. The evidence regarding the treatment of ultrasound detected (most presumably asymptomatic) ARTE is derived from small case series and retrospective studies and is accordingly quite variable. One systematic review evaluated the management of ARTE detected by routine ultrasound screening in 24 studies for which the treatment was described.²³⁶ Among the 25 included studies, anticoagulation was the most common treatment for EHIT, with two studies reporting selective use of antiplatelet therapy and seven studies reporting observation only. Irrespective of treatment, there were no reports of propagation or embolization of EHIT II to IV once identified. The authors concluded that the natural history of EHIT is generally benign (Table XXIII).

12. Management of SVT in patients with varicose and nonvaricose veins

Guideline 12. Address the management of SVT in patients who have not recently undergone superficial venous interventions. The management of EHIT and other thrombotic complications of superficial venous interventions were presented in Guidelines 11.

12.1.1. For patients with SVT of the main saphenous trunks and tributaries above the knee >3 cm from the SFJ and ≥ 5 cm in length, whether or not associated with varicose veins, we recommend fondaparinux 2.5 mg subcutaneously daily for 45 days; alternatively, rivaroxaban 10 mg/d for 45 days may be appropriate for patients unwilling or unable to perform subcutaneous injections.

GUIDELINE. Grade of recommendation: 1 (strong), Quality of Evidence: A (high)

12.1.2. For patients with SVT of the main saphenous trunks ≤ 3 cm from the SFJ, treatment with full anticoagulation for a minimum of 6 weeks should be continued.

Consensus statement.

12.1.3 For patients with SVT of the main saphenous trunks we suggest against using prophylactic or

therapeutic dose low-molecular weight heparin (LMWH) and nonsteroid anti-inflammatory drugs (NSAIDs). While both have been found to reduce SVT pain and extension, they have failed to prevent VTE. If NSAIDs are used for treatment of short segment distal SVT, surveillance with DUS for VTE extension is recommended due to the high prevalence of concomitant DVT.

GUIDELINE. Grade of recommendation: 1 (strong), Quality of Evidence: A (high)

12.1.4. For selected patients with isolated thrombosis of varicose tributaries or limited involvement of the GSV, we suggest phlebectomy as a safe alternative.

GUIDELINE. Grade of recommendation: 2 (weak), Quality of Evidence: B (moderate)

12.1.5. In patients with saphenous thrombophlebitis, ablation should be performed once the inflammation has resolved if there is evidence of pathologic reflux on DUS.

Consensus statement.

Rationale. Despite recognition that superficial thrombophlebitis, also known as SVT, is more common than DVT, there is less awareness of its associated morbidity and little consensus on its management.²⁵⁴ While traditionally thought of as benign, recent studies have highlighted its association with DVT and PE if left untreated. Studies show that SVT may progress to DVT in 6% to 44% of patients; 20% to 33% may have asymptomatic PE; and 2% to 13% may have symptomatic PE. Superficial venous thrombosis involving the saphenous trunk has the greatest association with VTE.³⁴ Although the majority of SVT occurs in varicose veins, SVT in nonvaricose veins confers greater morbidity and few studies have stratified treatment based on this distinction.³⁴ Several therapies including surgery, compression stockings, and nonsteroidal anti-inflammatory drugs (NSAIDs) aim to reduce pain and inflammation, however, given the associated progression to VTE, anticoagulation is recommended. Of note, the application of warm compresses to the site of SVT has never been evaluated in any study.

Evidence. These recommendations are supported by two recent systematic reviews^{34,35} (Table XXIV). The 2018 Cochrane review included 33 studies involving 7296 patients with SVT of the legs.³⁴ Treatments evaluated included fondaparinux, rivaroxaban, LMWH, unfractionated heparin, NSAIDs, compression stockings, and topical, intramuscular, or intravenous treatment as well as surgical thrombectomy or ligation. A minority of studies compared treatment to placebo and most studies were small and of poor quality. Further, most studies excluded patients with SVT that was within 3 cm of the SFJ. The recommendations are primarily based on one large placebo controlled RCT of 3002 participants who received fondaparinux and demonstrated a significant reduction in symptomatic VTE, SVT extension, and SVT recurrence in comparison with placebo. Major