VEITH SYMPOSIUM
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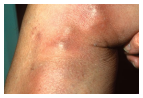
SVT Medical Management In 2024: Is There A Role For Surgical Intervention And When?



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Disclosures

I have the following potential conflicts of interest:

- Consulting / Conferences / Honoraria:
  - Medtronic
  - Cook Medical
  - Boston Scientific
  - BD
  - Gore Medical
- Research funding:
  - Medtronic
  - Gore Medical
  - Laboratoires Urgo

Introduction



Common problem

Important recent advances in understanding

Poorly covered topic in venous guidelines

Superficial vein thrombosis – POST study

ARTICLE | Annals of Internal Medicine

Superficial Venous Thrombosis and Venous Thromboembolism

A Large, Prospective Epidemiologic Study

Hervé Decousus, MD; Isabelle Quéré, MD; Emilie Presles, MD; François Becker, MD; Marie-Thérèse Barrellier, MD; Myriam Chanut, MD; Jean-Luc Gillet, MD; Hervé Guennegues, MD; Christine Leandri, MD; Patrick Mismetti, MD, PhD; Olivier Pichot, MD; and Alain Leizorovicz, MD, for the POST (Prospective Observational Superficial Thrombophlebitis) Study Group*

Ann Intern Med. 2010;152:218-224.

844 patients with SVT in primary and secondary care units in France

210 (24.9%) had DVT or symptomatic PE at presentation

Superficial vein thrombosis – POST study

Table 2. **Three-Month Incidence of Venous Thromboembolic Events in Patients With Isolated SVT at Inclusion**

Thromboembolic Event (*n* = 586)	Incidence (95% CI), *n* (%)*
Any	58 (10.2 [7.7–12.7])
Symptomatic†	46 (8.3 [6.0–10.6])
PE or DVT	18 (3.3 [1.8–4.8])
DVT	15 (2.8 [1.4–4.2])
Proximal	7
Distal	8
PE	3 (0.5 [0–1.2])
SVT	
Recurrence	10 (1.9 [0.7–3.0])
Extension	18 (3.3 [1.8–4.8])
Asymptomatic‡	12 (2.1 [0.9–3.2])

Patients with isolated SVT given anticoagulation for median 11 days

Follow-up to 3 months

10.2% risk of VTE

INSIGHTS SVT study

Varicose vein surgery after acute isolated superficial vein thrombosis in daily practice: INSIGHTS-SVT study

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ABSTRACT

Objective: The aim of this study was to assess the utilization of surgical interventions in patients diagnosed with superficial vein thrombosis (SVT) and its potential association with the occurrence of venous thromboembolism (VTE) and bleeding events.

Methods: INSIGHTS-SVT, a prospective, non-interventional, multicenter study in Germany, investigated the management and outcomes of patients with acute SVT who received conservative and/or invasive treatments at the discretion of the treating physician.

Results: Among the 872 patients with 12-month data, 697 had medical therapy only, and 215 patients underwent vascular surgery (70 within 3 months of SVT diagnosis, 136 between months 4 and 12, and nine had an intervention in both periods). The most commonly performed procedures included endovenous thermal ablation, ligation of the saphenofemoral or saphenopopliteal junction, and vein stripping. The primary outcome of symptomatic VTE was observed in 5.8% of conservatively treated patients and 6.3% of those who underwent surgical intervention. Additionally, the secondary outcome of recurrent or extended SVT was documented in 4.7% of conservatively treated patients and 5.3% of invasively treated patients. Bleeding events occurred in 1.4% of conservatively treated patients and 2.1% of surgically treated patients. These differences were statistically not significant. Furthermore, our analysis indicated a potential protective effect associated with surgical treatments, such as ligation of the saphenofemoral or saphenopopliteal junction, stripping and endovenous thermal ablation, concerning the endpoint of VTE for patients when applied after 3 months from the index SVT event.

Conclusions: In line with previous research, our study suggests that surgical interventions are not frequently employed in the management of SVT, although they may be warranted in select cases. Nevertheless, additional research is essential to gain a deeper understanding of the indications, criteria, and benefit of surgical interventions in the treatment of SVT. (J Vasc Surg Venous Lymphat Disord 2024;12:101971.)

Prospective observational study including 872 patients in Germany

197 (22.5%) underwent invasive procedure

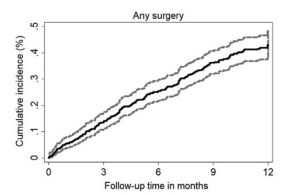
817/872 (93.4%) received anticoagulation

INSIGHTS SVT study

Only 5 patients underwent acute junction ligation

Majority of procedures were superficial venous interventions

136/197 (64.5%) of interventions were after 3 months



Other studies

REVIEW VENOUS DISEASE
International Angiology 2024 Nov 04
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Current evidence on the effectiveness and safety of oral anticoagulants in superficial venous thrombosis: a systematic review and meta-analysis

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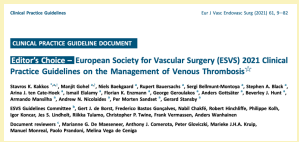
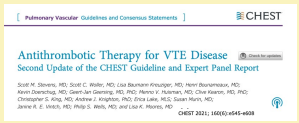
PDF Supplementary Materials

INTRODUCTION: Previous studies suggest fondaparinux as an effective regimen for superficial venous thrombosis (SVT), but the inconvenience of prolonged parenteral injections has prompted investigations into oral anticoagulants (OACs). This study aims to evaluate the current evidence on the effectiveness and safety of OACs in the treatment of SVT.
EVIDENCE ACQUISITION: Following the PRISMA 2020 guidelines, we conducted a systematic review and meta-analysis registered in PROSPERO (CRD42024535625). A comprehensive literature search was performed across multiple databases up to April 2024. Studies were included if they involved adult patients diagnosed with SVT, treated with OACs, and reported relevant efficacy and safety outcomes. Both randomized controlled trials (RCTs) and observational studies were considered. Data extraction and risk of bias assessments were independently performed by two authors.
EVIDENCE SYNTHESIS: The search identified 1531 studies, with six studies (three RCTs and three prospective cohort studies) meeting inclusion criteria. Meta-analysis for Rivaroxaban-treated group showed DVT occurrence was 1.30% (95% CI: 0.17-3.07%), SVT extension was 0.32% (95% CI: 0.00-1.58%), SVT recurrence was 0.75% (95% CI: 0.00-3.30%), clinically relevant non-major bleeding was 1.95% (95% CI: 0.46-4.11%), minor bleeding was 5.68% (95% CI: 3.02-9.01%). These estimates were for patients treated with rivaroxaban 10-20 mg once daily over 42 days to 37 months. No major bleeding was reported with rivaroxaban 10 mg once daily.
CONCLUSIONS: This systematic review and meta-analysis demonstrate that OACs, especially rivaroxaban, are effective and safe for the treatment of SVT. They offer a convenient alternative to parenteral anticoagulants, potentially improving patient compliance and outcomes. However, further large-scale studies are warranted to confirm these findings.

Published guidelines


Clinical Practice Guidelines
Eur J Vasc Endovasc Surg (2021) 61, 9–82
CLINICAL PRACTICE GUIDELINE DOCUMENT
Editor's Choice – European Society for Vascular Surgery (ESVS) 2021 Clinical Practice Guidelines on the Management of Venous Thrombosis☆


Pulmonary Vascular Guidelines and Consensus Statements
CHEST
Antithrombotic Therapy for VTE Disease
Second Update of the CHEST Guideline and Expert Panel Report
CHEST 2021; 160(6):e545-e608

Specific and extensive chapter on management of SVT

A few recommendations, focused on anticoagulation

Other important considerations

Most studies have not included SVT close to the saphenofemoral or saphenopopliteal junctions

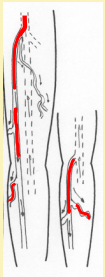
The follow-up period is usually short (long-term outcomes are unclear)

Vast majority of cases occur in patients with varicose veins

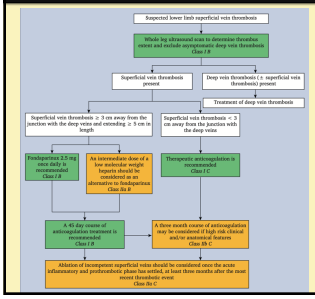
Consider thrombophilia / malignancy / other diagnosis (such as Buerger's disease) if no varicose veins

Superficial vein thrombosis

- SVT is not a benign pathology
  - Significant risk of VTE at presentation
  - Ongoing risk of VTE
- Several types:
  - In varicosities / short segment of truncal vein
  - In truncal vein (>5cm), but away from junction
  - In truncal vein <3cm from junction
  - Extending into deep vein



ESVS Venous Thrombosis guidelines 2021



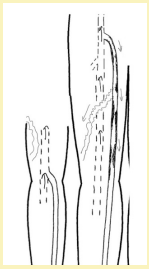
Exclude concomitant DVT and evaluate anatomical position / extent of SVT

High risk: treatment dose for 3 months

Intermediate risk: low dose prophylaxis 6 weeks

Ablate reflux once acute phase settled

Superficial venous ablation



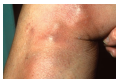
Very common to see recanalized, scarred, incompetent saphenous vein after SVT

High risk of recurrent VTE

Reasonable to ablate superficial venous reflux

May be challenging and remember VTE prophylaxis

Conclusions



Superficial vein thrombosis is not a benign entity and more aggressive diagnosis and treatment is needed

Acute surgical intervention is very rarely needed (anticoagulation is very safe and effective)

Vast majority of surgical interventions are for residual superficial reflux and probably best performed out of the acute phase