

This Medicines Information Leaflet is produced locally to optimise the use of medicines by encouraging prescribing that is safe, clinically appropriate and cost-effective to the NHS.

Management of superficial thrombophlebitis (excluding pregnancy and the puerperium)

Superficial thrombophlebitis (STP) is a term used to describe venous thrombosis, and the associated inflammation, of the superficial veins.

It is 6 times more common than deep vein thrombosis (DVT). Whilst once considered benign and self-limiting, more recent evidence has shown that:

- (i) STP within 3cm of the deep venous system of the thigh i.e. at the saphenofemoral junction (SFJ) has a much higher risk than previously recognised for development of DVT.
- (ii) Intermediate doses of anticoagulation provide better symptomatic relief for moderate risk STP patients than non-steroidal therapy (see below for risk stratification).

Risk of venous thromboembolism (VTE) in patients with STP

Reported rates for the development of DVT and pulmonary embolus (PE) in patients who initially present with STP that is greater than 5cm in length are reported to be 2.8% and 0.4% respectively. These figures come from the largest study to look at this risk where notably 90% of the cohort received some form of anticoagulation (low dose low molecular weight heparin (LMWH) or a vitamin K antagonist) for between 11 – 81 days.

Risk factors for the development of VTE after STP or extension/recurrence of a segment of STP include male gender, previous history of VTE, previous or active cancer and thrombophlebitis not associated with varicose veins. (Each risk factor confers a doubling of risk for VTE development).

Recurrent superficial thrombosis in different sites (migratory thrombophlebitis) should prompt consideration of a diagnosis of a paraneoplastic phenomenon, where the most likely underlying condition is pancreatic cancer.

How to manage patients presenting with lower limb STP

The most common presenting features for STP include a tender 'cord-like' vein, and pain, itching and erythema along the course of the affected vein. There are no scoring systems to aid diagnosis of STP. D-dimer is not useful in the diagnosis of isolated STP.

STP may be diagnosed on clinical grounds alone, however, ultrasound may also be used – particularly as it is becoming increasingly recognised that DVT may also be present. Between 20-25% of patients with STP have a concomitant DVT at the time of diagnostic ultrasound examination. A concomitant DVT is much more likely to be present if the STP involves the perforating veins or is within 3 cm of the SFJ.

Use the flow charts in Appendix 1 and 2 to guide STP management and select the most appropriate anticoagulant.

Treatment for STP

STP less than 5 cm in length and not within 3cm SFJ

Use oral or topical non-steroidal medications (NSAIDs) for symptomatic relief. If symptoms remain at 1 week or if there are progressive symptoms, consider re-scanning.

STP more than 5cm in length and not within 3cm SFJ

These patients may be managed with 45 days of one of the following treatments (if renal impairment see section below for dosing recommendations):

- Fondaparinux 2.5mg once daily
- Rivaroxaban 10mg once daily
- Prophylactic dose enoxaparin (weight adjusted)

Refer to appendix 1 and 2 for further information to help guide most suitable treatment option. Of note, fondaparinux is the preferred management option. If there is a strong patient preference for oral medication then rivaroxaban is the preferred choice (off-label but

supported by clinical trial data). The prescribing of enoxaparin in this setting is off-label.

Patients within this group in whom the treatments are likely to provide the most benefit include those with: above knee STP; active cancer; recent surgery; previous history of VTE and STP of the long saphenous vein.

Renal impairment:

The dose of fondaparinux should be reduced from 2.5mg once daily to 1.5mg once daily if the creatinine clearance (CrCl) is 20-50ml/min and is contraindicated if CrCl is less than 20ml/min. Rivaroxaban is contraindicated if the CrCl is below 15ml/min; consider use with caution if the CrCl is 15-29ml/min. Enoxaparin can be considered in the presence of renal impairment where fondaparinux and rivaroxaban are contraindicated. However, there is very limited data on risk of accumulation. When CrCl is less than 15ml/min, carefully consider risk/benefit of prescribing enoxaparin over topical NSAIDs and we recommend checking anti-Xa levels after 7 days if enoxaparin is prescribed*. This must be done in secondary care. The following doses of enoxaparin are recommended:

Weight (kg)	Dose (CrCl above 30ml/min)	Dose (CrCl 15-30ml/min)	Dose (CrCl less than 15ml/min)*
Less than 50	20mg once daily	20mg once daily	20mg once daily
50-100	40mg once daily	20mg once daily	20mg once daily
101-150	60mg once daily	40mg once daily	20mg once daily
More than 150	40mg twice daily	60mg once daily	20mg once daily

High risk STP:

If the STP is within 3cm of the Sapheno Femoral junction (SFJ), patients should be treated with 3 months of full dose anticoagulation, as [per the VTE guidance](#).

Therapeutic anticoagulation is not routinely offered to patients with STP within 3cm of the Sapheno Popliteal Junction (SPJ) due to lack of evidence of known benefit.

Additional management for all STP patients

Routine follow up at the thrombosis clinic is not required for isolated STP. However, those with high-risk superficial vein thrombosis i.e. superficial vein thrombosis within 3cm of SFJ accompanied by significant thrombotic risk factors, such as active malignancy, may require discussion with haematology to assess the appropriateness of extended anticoagulation therapy and the need for review.

Recurrent STP

The risk of recurrence of STP is 5-10% per year, and recurrence is most likely to occur at the same primary site, although there is a 4% risk of subsequent DVT/PE (as per the ICARO study). Surgical management of recurrent STP may be helpful in some cases and assessment by the vascular team for chronic venous insufficiency is recommended, with treatment as appropriate.

Upper limb thrombophlebitis

Thrombosis of the cephalic, antecubital and basilic veins are managed as STP. In most cases, upper limb STP can be managed with NSAIDs. If symptoms of STP worsen consider a repeat scan to exclude DVT. If upper limb STP is extensive or above the elbow, treatment with anticoagulation – as per 'STP more than 5cm and not within 3cm of the SFJ' section above, should be prescribed.

Safe prescribing points

- NSAIDs are given in this setting to treat symptoms only and they do not alter the natural history of the condition.
- Please remember to inform nursing staff with regard to any changes in prescriptions.

References

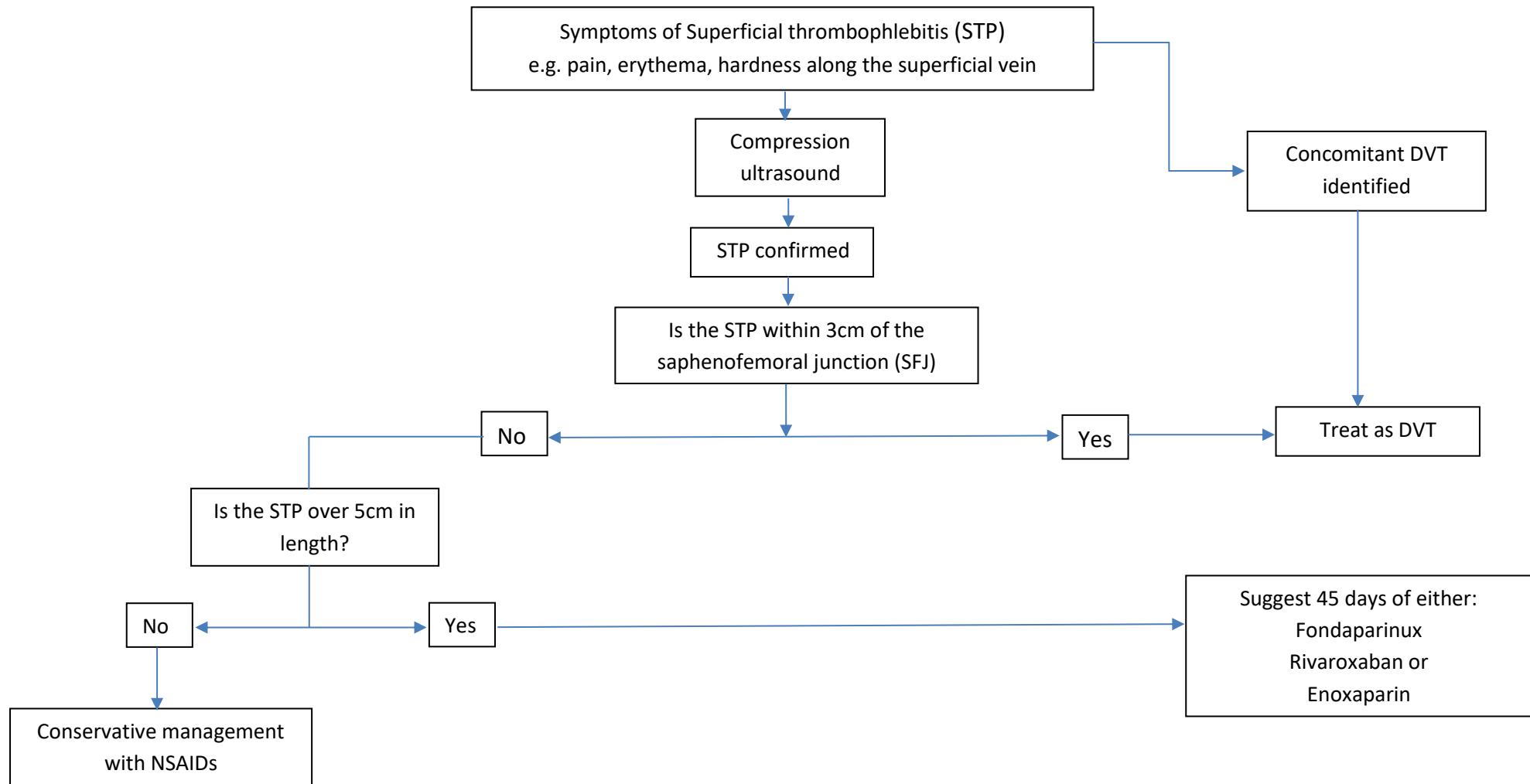
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Appendix 1: Algorithm to outline process for the identification and management of STP



Appendix 2: Algorithm to aid selection of suitable anticoagulant for patients with STP more than 5cm in length and not within 3cm of SFJ

