Superficial Venous Thrombosis: Watch and Wait or Anticoagulate

*Kirsten **Ballantyne***[1]
*Daniel **Horner***[1,2,3]

daniel.horner@cmft.nhs.uk

Manchester EMergency & INtensive Care Research Group

[1] Central Manchester University Hospitals NHS Foundation Trust
[2] University of Manchester
[3] Manchester Metropolitan University

Objectives

Superficial Venous Thrombosis (SVT) has historically been considered a benign and self-limiting process. Treatment has been symptomatic However, there is growing evidence to suggest that untreated SVT may deteriorate and/or give rise to serious complications.

We performed a short cut systematic review aiming to find the highest level of evidence relevant to the clinical question.

Results

2330 articles were reviewed by title and abstract. 3 primary research studies and 1 evidence based Cochrane review formed the highest level of evidence. These studies are listed in the table of evidence below

Methods

A detailed summary of the search strategy and expanded discussion is available at www.bestbets.org

Conclusions

Treatment of SVT with therapeutic anticoagulation reduces the incidence of significant thromboembolism and clinical deterioration. The treatment is well tolerated and the risk of major bleeding and/or heparin induced thrombocytopenia is low.

Anticoagulation with either Fondaparinux or LMWH should be strongly considered in the Emergency Department. Suggested duration of treatment is 6 weeks.

Author / date	Patient Group	Study Level	Outcomes	Key Results	Weaknesses
Decousus *et al.* 2010	3002 patients with acute SVT randomised to 2.5mg fondaparinux or placebo for 45 days.	International, multi-centred, double-blind randomised controlled trial (level 1b)	Death, symptomatic PE, symptomatic DVT, symptomatic extension to the saphenofemoral junction or symptomatic recurrence.	Primary outcomes occurred in 13 of 1502 patients (0.9%) in the fondaparinux group and 88 of 1500 patients (5.9%) in the placebo group. Relative risk with fondaparinux, 0.15; 95%C.I. 0.08 to 0.26; p<0.001, NNT, 20.	Both hospitalised patients and outpatients included in analysis. High risk patients not included.
Vesalio Investigators Group, 2005	164 consecutive patients with SVT of the great saphenous vein were randomised to high or low dose nadroparin for 30 days.	Multi-centred double-blind randomised controlled trial (level 1b)	Asymptomatic or symptomatic extension of SVT, DVT or PE.	7 patients (8.6%; 95%CI 3.5 – 17.0) in the low dose group and 6 patients (7.2%; 95%CI 2.8 – 15.1) in the high dose group developed complications (p=0.74).	Discontinuation by steering committee due to slow recruitment. Significantly underpowered.
STENOX Group, 2003	436 patients randomised to receive low dose enoxaparin, high dose enoxaparin, oral tenoxicam or placebo for 8 to 12 days.	Double-blind, randomised controlled trial (level 1b)	Venous thromboembolism, SVT recurrence or SVT extension towards the saphenofemoral junction.	Incidence of VTE and SVT by day 12 was significantly reduced in all active treatment groups from 30.6% (34 of 111 patients) in the placebo group to 6.9% (7 of 102 patients) in the high dose enoxaparin group	Discontinuation by steering committee due to slow recruitment. Significantly underpowered.
Di Nisio et al, 2011	Over 5000 patients randomised to various anticoagulant regimes against placebo for confirmed DVT	Systematic review and Meta-analysis (level 1a)	Symptomatic extension to DVT, embolisation and PE or recurrence (symptomatic VTE).	Treatment dose Fondaprinux RR0.15 (95% CI 0.04-0.5) Treatment dose LMWH RR 0.4 (95% CI 0.22-0.72) Prophylactic dose LMWH RR 0.42 (95% CI 0.23 - 0.75)	Variable methodology of included studies. Heterogeneity of treatment regimens

References

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