Venous Thrombophlebitis: When Is Anticoagulation Necessary And For How Long; Does Compression Help; What Follow-Up Is Indicated

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• No disclosures

Superficial Vein Thrombosis
• Compression
• Surgery
• Anticoagulation

Compression
• Traditionally recommended for 7-14 days
• Recommended in most reviews without reference
• Cochrane review 2013: insufficient evidence

Compression
• Randomised controlled trial
• 88 patients randomised to
  • 3 weeks of class II compression for 3 weeks
  • no compression
• All treated with prophylactic LMWH
• NSAIDS allowed but not prescribed
• Primary outcome: reduction of pain
• Secondary outcomes: analgesic consumption, D-dimer, thrombus length, erythema and QoL

Boehler et al, EJVES 2014

Compression
• Stockings associated with faster thrombus regression after 1 week
• No difference in pain, QoL analgesic consumption or any other variable
• Not powered to determine whether protects against VTE

Boehler et al, EJVES 2014
Role of surgery: when to disconnect/ablate the GSV?

- Most patients who have surgical treatment were also anticoagulated
- Surgery and anticoagulation are effective
- Surgery has higher complication rate (haematoma, seroma, infection etc)
- Insufficient data to conclude role for endothermal ablation

American College of Chest Physicians 2012

- For SVT > 5cm in length
- Prophylactic dose of fondaparinux or LMWH for 45 days (Grade 2B)

<table>
<thead>
<tr>
<th>Study</th>
<th>Number</th>
<th>Intervention</th>
<th>Duration of Treatment</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titon 1994</td>
<td>117</td>
<td>NSAID vs LMWH</td>
<td>6 days</td>
<td>No difference</td>
</tr>
<tr>
<td>Losano 2003</td>
<td>60</td>
<td>SFJ disconnection vs LMWH</td>
<td>3 weeks</td>
<td>No difference</td>
</tr>
<tr>
<td>STENOX 2003</td>
<td>416</td>
<td>LMWH vs NSAID vs placebo</td>
<td>2 weeks</td>
<td>No difference</td>
</tr>
<tr>
<td>VESALIO 2005</td>
<td>164</td>
<td>LMWH vs placebo</td>
<td>2 weeks</td>
<td>No difference</td>
</tr>
<tr>
<td>CALISTO 2010</td>
<td>3002</td>
<td>Fondaparinux 2.5mg vs placebo</td>
<td>46 days</td>
<td>Highly significant reduction in VTE</td>
</tr>
<tr>
<td>STEFLUX 2012</td>
<td>663</td>
<td>LMWH vs placebo</td>
<td>10-30 days</td>
<td>Reduction in VTE with longer duration LMWH</td>
</tr>
<tr>
<td>SURPRISE 2017</td>
<td>472</td>
<td>Rivaroxaban vs Fondaparinux 2.5 mg</td>
<td>45 days</td>
<td>Non-inferiority</td>
</tr>
</tbody>
</table>

STENOX study (n=427)

RCT, patients with acute SVT, 14 days Rx

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<tr>
<td>LMWH Enoxaparin 1.5 mg/kg (therapeutic dose)</td>
<td>110</td>
<td>14 days</td>
<td>4 DVT, 0 PE</td>
</tr>
<tr>
<td>LMWH Enoxaparin 40mg sc daily (prophylactic dose)</td>
<td>110</td>
<td>14 days</td>
<td>6 DVT, 2 PE</td>
</tr>
<tr>
<td>NSAID Tenoxicam 20mg po daily</td>
<td>99</td>
<td>14 days</td>
<td>4 DVT, 2 PE</td>
</tr>
<tr>
<td>Placebo (tablets and injections)</td>
<td>112</td>
<td>14 days</td>
<td>5 DVT, 0 PE</td>
</tr>
</tbody>
</table>

CALISTO trial, large RCT

3002 patients with SVT, 45 days Rx

Primary outcome: death/DVT/PE/SVT

88 of 1500, (5.9%) 13 of 1502, (0.9%)
In conclusion

- Compression of some benefit
- Limited role for surgery

- Anticoagulation very effective at reducing VTE complications of SVT
- NNT is very high
- Treatment duration required is quite long
- Better risk stratification may reduce unnecessary treatment