Superficial Thrombophlebitis: A Wolf in Sheep's Clothing

It's not about catching sheep anymore, Doc. This is the real me.

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Disclosures

No financial disclosures
Objectives

• Discuss the diagnosis and management of superficial thrombophlebitis (SVT)

• Explain the connection between SVT & deep vein thrombosis (DVT)
What is Superficial Thrombophlebitis (SVT)?

- Thrombosis and inflammation of a superficial vein
- May occur anywhere in the body but leg is most common
  - GSV ~ 60-80%  SSV ~ 10-20%
- Often self-limiting
- Rarely presents with infection (septic thrombophlebitis)
- Presents as painful, erythema along the course of the vein
- Risk of DVT (6-40%) & symptomatic PE (2-13%)
- Treated with NSAIDS & warm compresses and compression
Risk Factors

- Varicose veins (~62%)
- Surgery
- Trauma (major trauma or leg injury)
- Pregnancy
- IV drug use
- Previous DVT
- IV/PICC/Central lines
- Untreated venous insufficiency/prior SVT
- Sclerotherapy
- High-dose estrogen therapy
- Hypercoaguable state
- Behcet’s disease
- Buerger’s disease

Primary efficacy outcome (DVT, PE, SVT) was 0.9% in fondaparinux group vs 5.9% placebo group

Rate of PE/DVT 85% lower in fondaparinux group

Major bleeding in one pt in each group
## Risk of DVT from SVT

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<td>Jorgensen 1993</td>
<td>44</td>
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<td>Chengelis 1996</td>
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<td>Decousus 2010</td>
<td>600</td>
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Management of Superficial Thrombophlebitis

- Obtain US if patient presents with SVT symptoms
- Anticoagulate for 4-6 weeks if:
  - SVT greater than 5 cm in length
  - SVT extends above the knee
- If US is borderline, NSAIDS + warm compresses + compression. Re-evaluate in 1 week.
  - SVT stable = continue current management
  - SVT progression = anticoagulation + compression
Case

- 34F with no PMH, avid runner, 3 weeks post partum presents with pain, swelling, “palpable cord” along the knee of left lower extremity on 10/20/2014

- Reported to ER in Dallas & ultrasound showed clot in the left greater saphenous vein (GSV) extending from the distal calf to just above the knee

- Dx: Superficial Thrombophlebitis (SVT)
Case

• Discharged from ED with warm compresses and NSAID regimen

• Patient presented to ER the next day with severe left leg pain and SOB. Repeat US and PE protocol CTA obtained
  • Propagation of occlusive clot into iliac veins, CFV, SFV and calf veins
  • CT angiogram chest revealed bilateral PE

• Initiated on Lovenox and referred for thrombolysis at a local Dallas hospital
  • Underwent venography and unsuccessful lysis
  • Informed by physicians that nothing further can be done, running days are over, wear stockings for life, anticoagulation for life
SVT with Progression to DVT/PE
May-Thurner Syndrome

May-Thurner syndrome
Narrowed left iliac vein (by pressure from right iliac artery)

Right common iliac artery
Left common iliac vein

Spine

© Stephan MI, M.D.
Venography and Lysis 1/12/15
May-Thurner Syndrome

- Patient had immediate improvement in left lower extremity pain
- Swelling has resolved
- Patient continues ASA therapy

6 weeks post procedure

5 days post procedure
Conclusions

• SVT has a reasonable risk of extending to DVT/PE

• Determine a management algorithm in your practice for SVT management

• Anticoagulation with compression stockings should be considered if SVT extends above the knee or is greater than 5 cm in length

• Consider treatment of superficial veins for recurrent SVT
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