Guideline in management for Varicose vein thrombosis

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Overview

- General considerations
  - Terminology
  - Historical background
  - Epidemiology
  - Diagnosis

- Guidelines

- Trials of surgical treatment
- Trials of endovenous ablation
Terminology

- Varicose vein thrombosis
- Superficial vein thrombosis (SVT) or Superficial thrombophlebitis
  - Non varicose
  - Varicose
- Most common sites
  - GSV and SSV
SVT

Past: Benign and self-limiting disease

Treatment options

- Topical NSAIDs
- Compression therapy
- NSAIDs
- Anticoagulant
- Surgery, ligation or stripping
Incidence of SVT

- 0.64% (in France)
- Diagnosis
  - Clinical presentation and ultrasound
- Higher than VTE = 6 times

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Epidemiology

SVT & VTE

- 884 pt w/ SVT
- SVT = length ≥ 5 cm, confirmed by US
- 210 pt (25%) → VTE at diagnosis
  - 198 pt → DVT
  - 33 pt → PE

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Epidemiology

- **SVT & VTE**
  - 600 pt w/ isolated SVT
    - Treated w/ various options
      - 90% → anticoagulant
      - 55% → NSAIDs
      - 98% → compression therapy
      - 10% → Surgery
  - F/U 3 months
    - 10.6% → VTE, SVT extension or recurrence

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Risk factors for SVT

- Same as VTE
  - Malignancy
  - Post-op
  - Increasing age
  - Obesity
  - Trauma

- Varicose vein
- Immobility
- Pregnancy
- Post-partum
- Use of HRT or OCP

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Risk factors for complications\textsuperscript{2,4}

- Length of SVT
- SVT close to SFJ
- Absence of varicose veins
- Previous history of DVT
- Male genders
- Previous cancer
- Immobility


Diagnosis

- Vein: pain, tender cord, itching, redness and swelling
- No clinical scoring systems
- Duplex US: confirm Dx of SVT and DVT
- Not routine w/ u thrombophilia
Guidelines for Treatment SVT
Guidelines for SVT

- The British Committee for Standards in Hematology, 2012
  - Patients w/ SVT and risk factors for extension, recurrence or progression should be offered treatment with prophylactic doses of LMWH for 30 d or fondaparinux for 30–45 d (1B).
  - Patients w/ SVT, ≤ 3 cm of SFJ should be considered for therapeutic anticoagulation (2B).
  - Other patients w/ SVT should be offered 8–12 d NSAIDs unless contraindicated (1A).
Guidelines for SVT

The American College of Chest Physicians, 2012

- Patients w/ SVT of the lower limb, ≥ 5 cm in length, we suggest the use of a prophylactic dose of fondaparinux or LMWH for 45 days over no anticoagulation (2B).
- Patients w/ SVT who are treated with anticoagulation, we suggest fondaparinux 2.5 mg daily over a prophylactic dose of LMWH (2C).
Suspected lower limb SVT (pain, erythema, warmth, hardness along course of superficial vein)

Compression ultrasonography

- **DVT**
  - Thrombus < 3 cm from SFJ
    - BCSH Grade 2B recommendation
    - Therapeutic anticoagulation as per local guidelines
  - Thrombus > 3 cm from SFJ and > 5 cm in length
    - ACCP Grade 2B recommendation
    - Fondaparinux 2.5 mg OD in preference to LMWH for 45 days

- **SVT**

- **No SVT/DVT**
  - End of pathway
  - Decision not to anticoagulate
  - Consider symptomatic treatment with NSAID
Role of surgery???
Superficial Thrombophlebitis of the Legs: A Randomized, Controlled, Follow-up Study

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PESCARA, ITALY and LONDON, ENGLAND
Superficial Thrombophlebitis of the Legs: A Randomized, Controlled, Follow-up Study

- 562 patients with VV thrombosis, w/o DVT
- Random, F/U 6 mo
  - A = Compression only
  - B = Compression + SFJ ligation
  - C = Compression + SFJ ligation + stripping
  - D = Compression + Heparin
  - E = Compression + LMWH
  - F = Compression + Warfarin
- **High SVT extension (p < 0.05)**
  - Compression only
  - Compression + SFJ ligation
- **Lowest SVT extension (NS)**
  - Compression + SFJ ligation + stripping
- **No difference of DVT among the treatment groups**
- **Highest total cost**
  - Compression + LMWH
- **Conclusion**
  - Need large RCTs for treatment options
Low-Molecular-Weight Heparin Versus Saphenofemoral Disconnection for the Treatment of Above-Knee Greater Saphenous Thrombophlebitis: A Prospective Study

Francisco S. Lozano, MD, PhD and Arturo Almazan, MD, PhD, Salamanca, Spain
84 patients with SVT, w/o DVT

Random, F/U 6 mo

- Compression + SFJ ligation
- Compression + LMWH

- Compression + SFJ ligation
  - 6.7% → wound infection
  - 3.3% → recurrence SVT
  - 6.7% → PE

- Compression + LMWH
  - 6.7% → minor bleeding
  - 10% → recurrence SVT
LMWH group: OPD cases

Conclusion

LMWH - treatment of choice
Role of endovenous ablation
Endovenous saphenous vein ablation in patients with acute isolated superficial-vein thrombosis

Wayne S Gradman
- **EVSA group**
  - Only 1 case = calf deep vein thrombosis

- **Compression + LMWH group**
  - No complication
  - 40% → come back to EVSA

- **Conclusion**
  - EVSA = Safe and good outcome, may be offered as initial treatment to patients/w SVT and saphenous reflux.
Take home messages

- VV thrombosis – No specific guideline
- SVT: clear evidence
  - Thrombus ≤ 3 cm of SFJ
    - Therapeutic anticoagulation
  - Thrombus ≥ 5 cm in length
    - Prophylactic anticoagulation
  - Rx as OPD case for lower cost
Take home messages

- Role of surgery and endovenous ablation: lack of strong evidence
  - VV thrombosis
    - Compression + SFJ ligation + stripping
    - Endovenous ablation

- Our guideline for high risk VV thrombosis
  - Start LMWH and schedule for VV surgery or endovenous ablation
THANK YOU