Infra-popliteal Deep Veins

- Anterior Tibial, Posterior Tibial, Peroneal Veins
- Soleal sinuses \(\rightarrow\) Posterior Tibial or Peroneal vein
- Gastrocnemial veins \(\rightarrow\) Popliteal vein

- IDDVT - Isolated Distal Deep Vein Thrombosis
- ICMVT - Isolated Calf Muscle Vein Thrombosis
- DCVT - Deep Calf Vein Thrombosis
Whom to treat? How to treat? Why The Dilemma?

- Paucity of studies
- Sensitivity of DUS for diagnosis
- Natural history?
- Progression to proximal veins
- Incidence of Post Thrombotic Syndrome
- Incidence of Pulmonary Embolism
- Effect of treatment X Risk of anticoagulation
Paucity of Studies

- Conflicting results, Optimal treatment controversial
- Majority asymptomatic, non-occlusive
- Considered Harmless!
- Neglected area
- Screening - Impractical
- No difference in PE with proximal / distal DVT (5.8%)

IDDVT - Association

- Transient risk factors
  - Recent surgery
  - Recent trauma
  - Hospitalisation
  - Recent travel
  - Leg varicosities

- Infrequent Association
  - Previous VTE
  - Pregnancy
  - Peripartum
  - Malignancy
  - Thrombophilia
Diagnostic Dilemma!

- Majority asymptomatic
- Venography - Invasive, Impractical
- Doppler Ultrasonography - Sensitivity 70% for IDDVT, Specificity 95%
- Less sensitive than for proximal DVT
- Repeated DUS - Cost Benefit?
Natural History of IDDVT

- CALTHRO Study - Evolution of untreated IDDVT in symptomatic outpatients
- IDDVT diagnosed in 15% of high risk symptomatic patients
- 3% progressed to proximal DVT in 5 - 7 days
- 90% complete resolution without anticoagulation
- Compression stockings only
IDDVT - Sequelae

- Risk of recurrent DVT - Lower than proximal DVT
- Risk of Post Thrombotic Syndrome - 1.58%
- Risk of Pulmonary Embolism - 0 – 6.3%
- Conflicting results of studies due to limitations.
- Treatment with anticoagulation?
- Risk of bleeding with anticoagulation?
Treatment - Challenges

- Need to identify patients at higher risk for complications
- Different treatment approach for
  - Unprovoked / Secondary event
  - Deep veins / Calf muscle veins
- Different behavior of asymptomatic and symptomatic thrombi
- No difference in outcome with no treatment, 2 weeks LMWH, 6 weeks VKA.
Treatment - Recommendations

- Observe IDDVT. DUS - 2 weeks, 1 month, 3 months for resolution / progression. Modify treatment decision.
  (Ashish Anil Sule, Et al, Tan Tock Seng Hospital, Singapore.)

- Treat IDDVT with anticoagulants for 6 weeks / 12 weeks
  (ACCP Guidelines)

- Treat all diagnosed IDDVT with anticoagulation and compression after evaluating risk of anticoagulation. Duration 3 months at least. Newer anticoagulants.

- Unethical to withhold treatment after diagnosis
  (Gualtiero Palareti, How I treat isolated distal vein thrombosis, March20,2014: Blood: 123 (12))
The Dilemma Continues .......

Till We Know More .......
Thank You !