Venous Disease

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Financial Disclosures

None to disclose
Prevalence Venous Disease

- 2x more prevalent than CAD
- 5x more prevalent than PAD
Signs and Symptoms

- Pain
- Swelling
- Visible Changes
- Heaviness of Legs
- Restless Legs
- Leg Fatigue
Variable Appearance:
Risk Factors for Venous Disease and Venous Insufficiency

- Age
- Family History / Genetics
- Phlebitis
- DVT
- Obesity
- Standing/Inactivity
- Female
- Multiple pregnancies
Diagnosis Differentiation

- CHF
- Venous Insufficiency
- Drug Therapy
- DVT
- Lymphedema
Normal Vein Anatomy

- Common femoral vein
- Superficial circumflex
- Anterolateral thigh tributary
- Epigastric vein
- Pudendal vein
- Anterior thigh vein
- Posteromedial thigh tributary
- Greater saphenous vein
- Anterior branch
- Posterior branch
- Greater saphenous vein
- Dorsal arch

Greater saphenous vein (superficial) joining common femoral vein (deep) at the saphenofemoral junction.
Physiology of Venous Insufficiency

- Low pressure system
  - Elevated venous pressure
  - Dilation
  - Flow disturbance
  - Stagnant flow
  - Reflux
  - Superficial changes and symptoms
Venous Valve
Reflux Effect

- Healthy Vein Valves & Correct Blood Flow
- Damaged Vein Valve & Incorrect Blood Flow
Results of Prolonged Venous Insufficiency

- Vein Dilates
- Visible Varicosity
- Pain
- Swelling
- Ache
- Decreased Activity
- Ulceration
Clinical Classification of Venous Insufficiency

CEAP

- Class 0 – no visible or palpable signs
- Class 1 – Telangiectasia of reticular veins
- Class 2 – Varicose veins
- Class 3 - Edema
- Class 4 – Skin changes
- Class 5 – Healed venous ulceration
- Class 6 – Active venous ulceration
Diagnosis

- Venous Ultrasound
  - Bilateral evaluation
  - Evaluate for reflux >0.5 seconds
  - Exclude DVT as etiology
  - Evaluate degree of reflux
- Patient consultation and treatment plan
- Results to referring/primary PCP
Normal Augmentation
Venous Reflux
Insurance Requirements

- 3 months of compression therapy
- Recommend at least 15mmHg pressure
- Follow-up in 3 months with US
  - Assess for symptom control
  - Assess for reflux with repeat US
- Plan/Schedule for further treatment established at that follow-up
Three layer treatment:

Spider/Reticular Veins
Varicose Veins
Superficial Vein
Treatment of Venous Insufficiency

- Sclerotherapy
- Stab phlebectomy
- Ablation therapy
Sclerotherapy

- For <3mm superficial veins
- Considered cosmetic
- Multiple injections of Asclera
  - Induced sclerosis of spider veins
Stab Phlebectomy

- Indication for superficial varicosity >3mm
- Access along the pathway with removal
- Completed in clinic setting
- Insurance coverage with set requirements
- Often occurs along with or after ablation
  - Serves to complete treatment after underlying and contributing vein has been ablated
Venous Ablation

- Most commonly of the GSV or SSV
- Heat energy used to close the vein
- >90% closure rate at 5 years
- Very diseased vein not adequate conduit
- Multiple other functional veins to utilize
  - Deep system is confirmed as conduit
Superficial Veins of the leg

Vein Ablation

- Catheter in Vein
- Vein Heated
- Vein Closes

Great Saphenous Vein

Catheter entry point

Varicose Vein

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Complications of EVLT

- Minor Bruising/Induration – 51%
- Transient Tightness – 24%
- Hematoma – 2.3%
- Temporary Numbness – 3.8%
- Phlebitis – 7.4%
- DVT 0.8%

Post op compression and NSAID therapy reduces the incidence
Results of Endovascular Laser Therapy for Venous Insufficiency

- Persistent closure 90% at 5 years
- Symptom improvement in >90%
"Your spider veins are not the largest I have ever seen, but they are varicose."
Thank You

Questions?

Baptist Health Vein Center

501-202-4920 – Phone
Call to schedule
501-202-4925 – Fax
Fax face sheet with request to eval/treat

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