Sclerotherapy Basics

May 30, 2015—San Leandro, CA
Mark D. Forrestal, MD, FACPh
Arlington Heights, IL

No Conflicts

Mark D. Forrestal, MD, FACPh

• Definitions
  – Sclerosants—Liquid, foam, room air, CO2/O2, proprietary (Polidocanol injectable foam).
  – Visual sclerotherapy (VGS)
  – Duplex ultrasound guided or aided (UGS)
American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

- Patient Evaluation
  - History—FHx, HPI, past tx
  - Physical examination—Bilat LE's
    - Standing and recumbent
  - DUS study—LE's

Mark D. Forrestal, MD, FACPh

American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

- Full venous anatomic understanding
  - Know deep and superficial system—normal
  - Know common and uncommon patterns of venous insufficiency

Mark D. Forrestal, MD, FACPh

American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

- Full discussion
  - Physical examination findings
  - Treatment options
  - Short and long-term care
  - Risks
  - Potential expectations
  - Costs
  - Written treatment plan

Mark D. Forrestal, MD, FACPh
American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

• Know your sclerosants
  – “The best sclerosant is the one you know best.”

  Tournay

Mark D. Forrestal, MD, FACPh

American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

• Sclerotherapy procedural protocol
  • Inject large to small, feeder to skin telangiectasias
  • Monitor quantity of sclerosant per injection and per treatment.

Mark D. Forrestal, MD, FACPh

American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

• Magnification and lighting
  – Comfortable magnifiers
    • Loop, simple “cheater” glasses, surgical magnifiers for each eye
  – Transillumination
  – Ambient light
    • Florescent, LED

Mark D. Forrestal, MD, FACPh
Sclerotherapy Basics

- Individual patient comfort
  - Mechanical table if possible
  - Shorts for full leg exposure
  - Comfortable ambient temperature

Mark D. Forrestal, MD, FACPh

Sclerotherapy Basics

- Compression protocol
  - Know studies regarding post-sclerotherapy compression
  - Use consistent compression levels to evaluate outcomes
  - Avoid tape on skin

Mark D. Forrestal, MD, FACPh

Sclerotherapy Basics

- Activity and Travel protocol
  - Activation of calf-foot muscle pump
  - Ambulation-how much and long
  - Workout
  - Travel post-sclerotherapy-sun exposure

Mark D. Forrestal, MD, FACPh
American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

• Duplex ultrasound use as aid to sclerotherapy
  – Tributaries that measure 1-2 mm can be imaged with high frequency transducer
  – IP imaging related to skin telangiectasia
  – Corona phlebectasia
  – Foot telangiectasia

Mark D. Forrestal, MD, FACPh

American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

• Post sclerotherapy micro thrombectomy with 30G needle
  – Visible healing venulectasia and telangiectasia with 1 mm intravenous thrombus

Mark D. Forrestal, MD, FACPh

American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

• Incomplete or slow healing post-sclerotherapy
  – Suboptimal anatomic diagnosis of abnormal vein patterns
  – Physical exam
    • Reevaluation and DUS review of first 1 cm depth for feeder veins

Mark D. Forrestal, MD, FACPh
Incomplete or slow healing post-sclerotherapy

- “Can I get all of these veins treated this month?”
- Allow 4 weeks healing time

Post-sclerotherapy headache

- Hx of migraines
- Visual change

Systemic allergic reaction

- Minor—Urticaria—diphenhydramine (Benadryl)
- Major—anaphylaxis
  - Anxiety, itching, sneezing, coughing, angioedema, wheezing, hoarseness, GI complaints

Mark D. Forrestal, MD, FACPh
American College of Phlebology
Physician Sclerotherapy Course
Sclerotherapy Basics

• DUS evaluation


Mark D. Forrestal, MD, FACPh
• Syringe usage
  – Injection pressures greater in 3 cc vs. 5 cc, Goldman, 5th Edition, p. 183
  – Use pinkie for pressure control to reduce extravasation and necrosis

Mark D. Forrestal, MD, FACPh
• Conclusions
  – Cosmetic sclerotherapy is a safe, effective outpatient therapeutic modality for telangiectasia and venulectasia
  – Considered Gold Standard

Mark D. Forrestal, MD, FACPh
Thank you.