Say Goodbye to Varicose Veins

Jie Mao, MD Interventional Radiology 720-608-7418



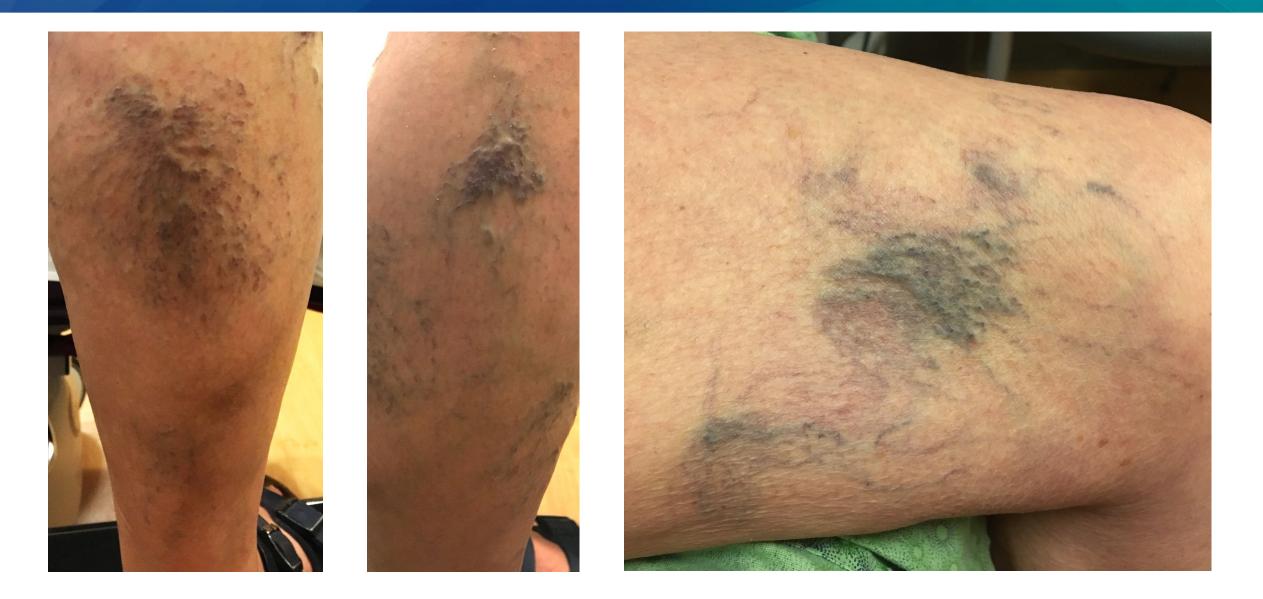
Varicose Veins





Telangiectasia





Spider Veins





Forms of "varicose veins"



- Ropey bulging veins
- Spider veins
- Telangiectasias
- No visible veins but symptoms

Varicose Veins: Epidemiology



- Affects 50.5% of women, 30.1% of men
- Incidence increases with age, obesity
- Combined congenital and environmental causes
- Not just cosmetic can be medically very dangerous
- Can have symptoms with no visible veins

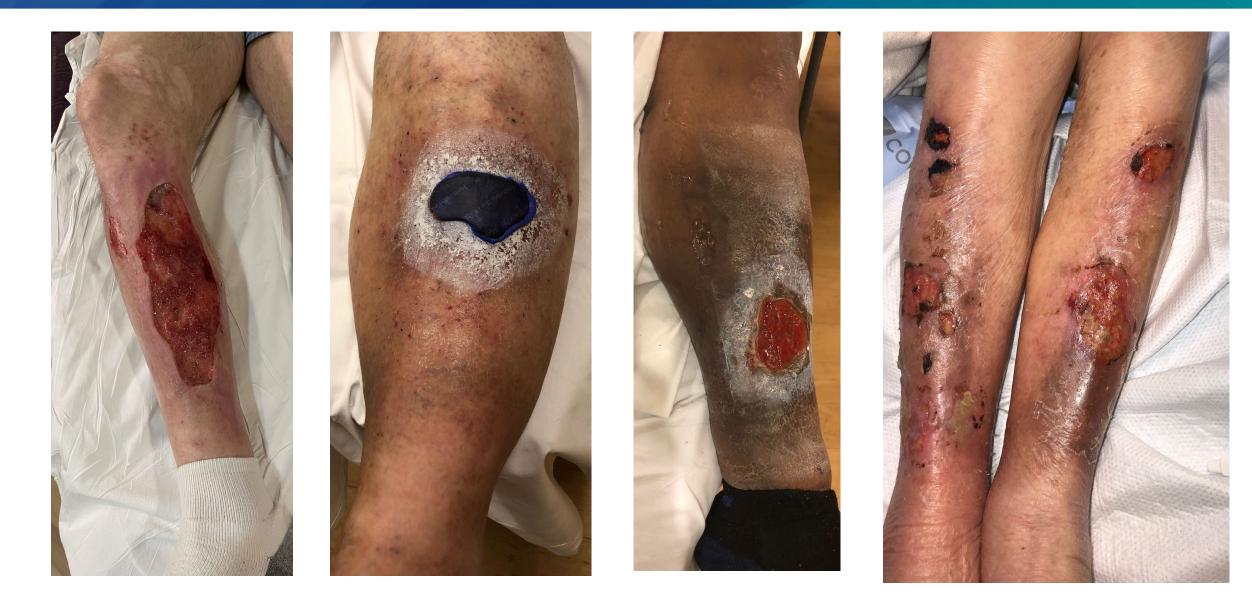
Varicose Veins: Symptoms



- HASTI: Heaviness, achiness, swelling, throbbing, itching
- Restlessness, cramps
- Venous stasis cellulitis or dermatitis: redness, hyperpigmentation; lipodermatosclerosis
- Venous stasis ulceration: scaling, non-healing or recurrent ulcers
- Usually worse at end of day, or with prolonged standing or increased activity

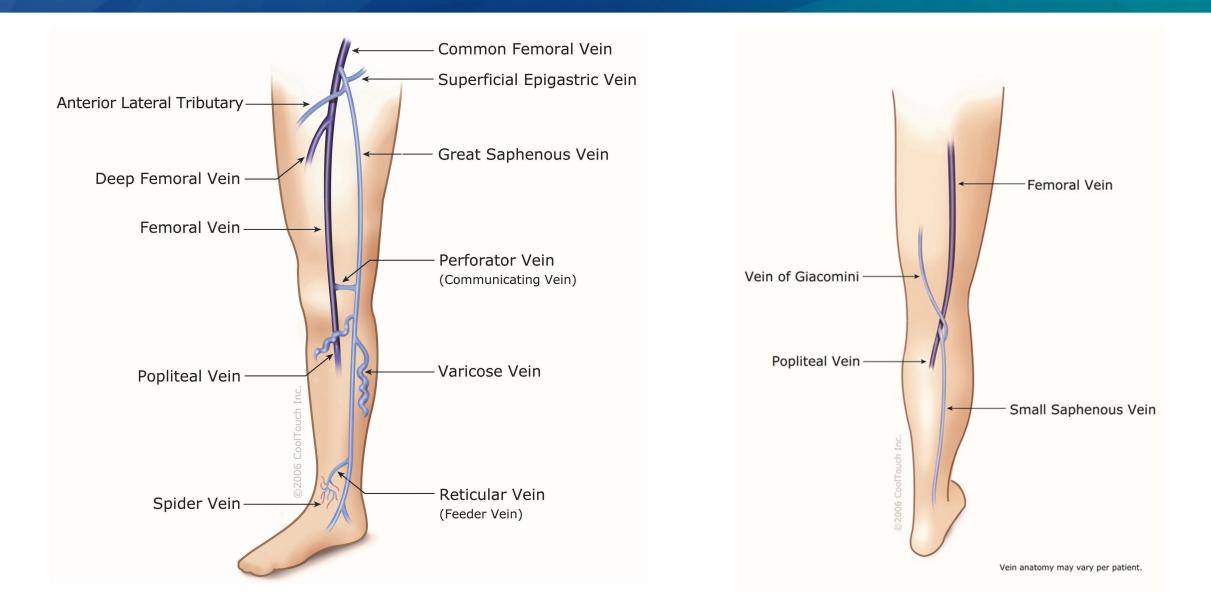
Venous Stasis Dermatitis, Lipodermatosclerosis, Ulceration





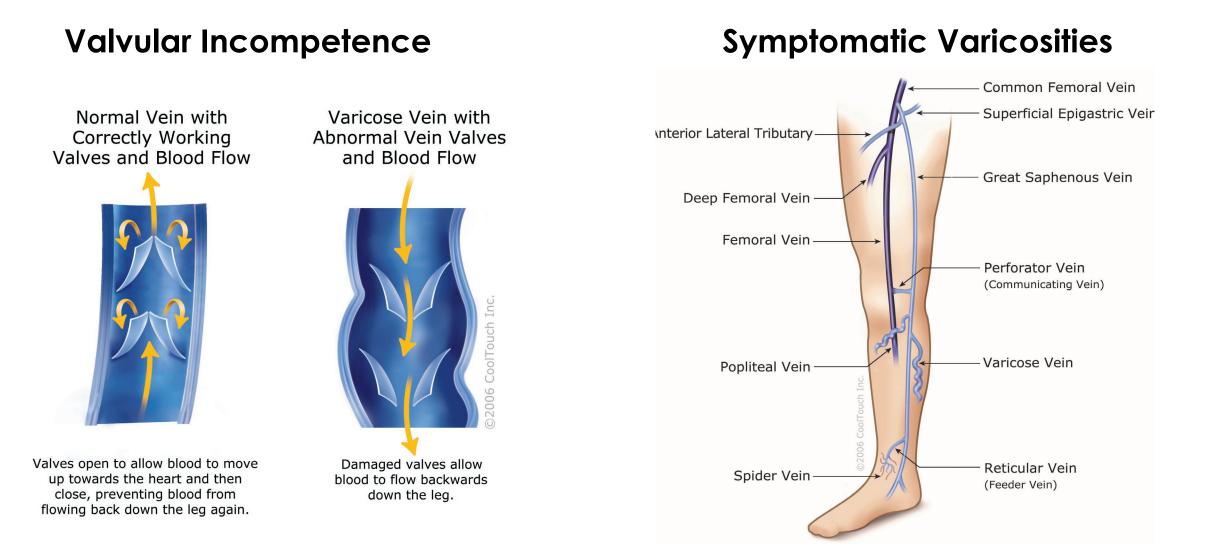
Vein Anatomy





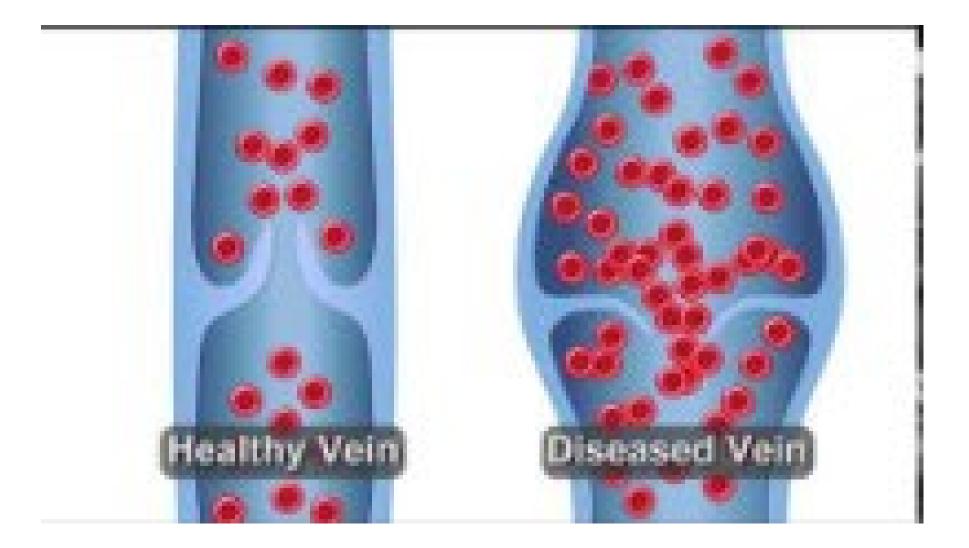
Venous Blood Flow





Valvular Physiology





Have You Heard This?



- "Live with it!" "Nothing can be done."
- "My mom had horrible varicose veins, but she didn't do anything about them."
- "My doctor says they are just cosmetic."
- "I've always had these symptoms, but never thought they might be due to veins."

Self Care Measures



- Exercise to improve circulation:
 - Bicycling and swimming
 - When sitting down, rotate feet at the ankles, extend legs, contract calf
 - High-impact exercises such as running may be uncomfortable
- Maintain a healthy weight

Self Care Measures

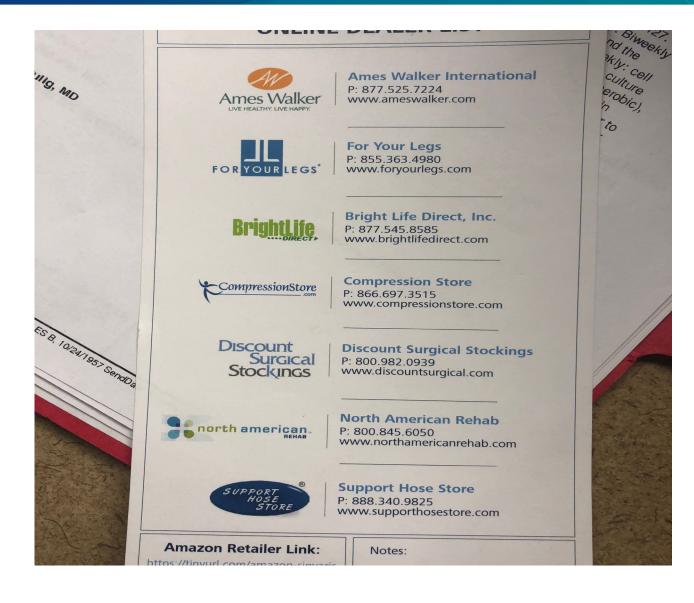


- Elevate legs
 - At or above heart level
 - Avoid crossing legs
 - When sitting, use foot rest
- Avoid long periods of sitting or standing
- Compression, Compression, Compression

Compression Stockings



 Minimum 20-30mmHg compression, 30-40mmHg if possible



Self Care Measures



- Draxe.com:
 - Essential oils:
 - cypress essential oil: 5 drops twice a day x few weeks
 - Anti-inflammatory diet: high in fiber, antioxidants, Mg++, diuretics, apple cider vinegar, witch hazel
 - Herbs: horse chestnut, bilberry, butcher's broom
- Homeopathicdoctor.com:
 - Hamamelis, pulsatilla, graphite, arnica

Traditionally Accepted Treatments



- Local wound care
- Foam or saline sclerotherapy
- Vein stripping or ligation
- Surgical phlebectomy

New, Minimally Invasive Treatments Boulder Community Health



- ClosureFast/EVLT/CTEV/VNUS
- Microfoam Sclerotherapy Microphlebectomy
- Non-Thermal Ablation (Varithena, VenaSeal)

Ultrasound: Key to Success



- Identifies locations of valvular incompetence
- Ultrasound and consultation appointment at the same time
- Ultrasound done personally by the operating physician

Venous Reflux



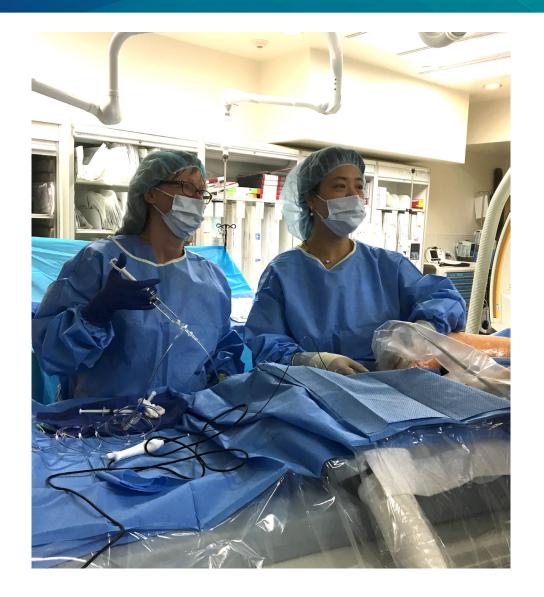
- Types of treatments needed are determined at time of consultation
- Insurance pre-authorization done prior to scheduling procedure
- IR staff will call when insurance approval received



Varicose Vein Procedures at BCH



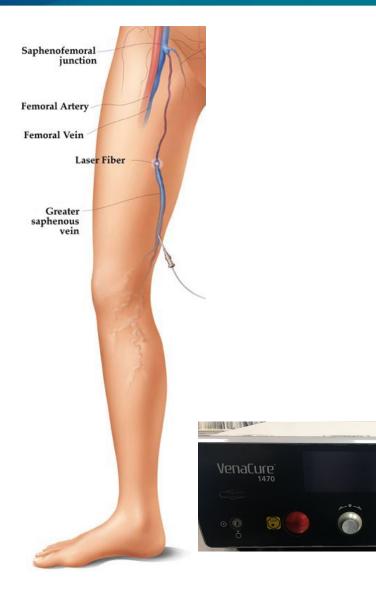
- Completely sterile environment
- IR staff and nurses assist MD
- Conscious sedation if needed



Laser Ablation

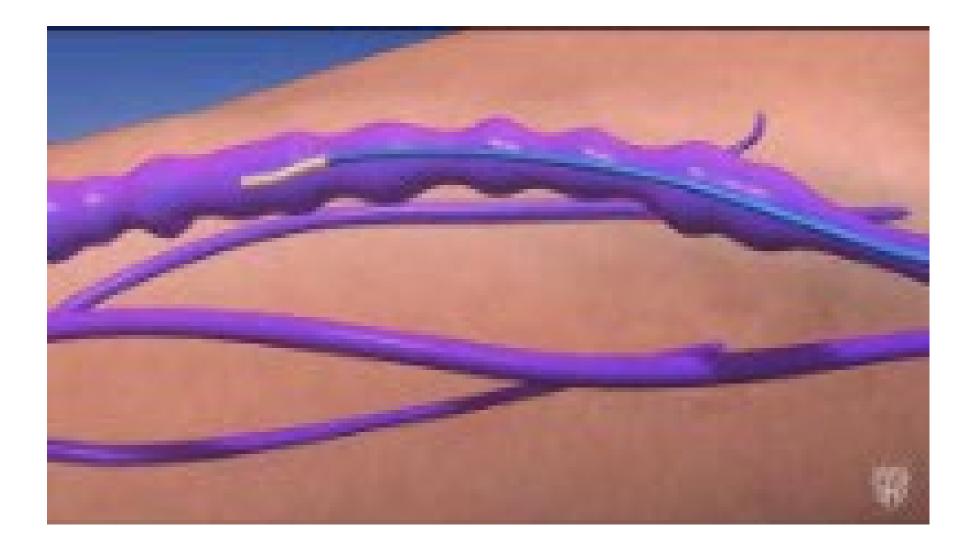


- Tumescent anesthesia delivered throughout treatment zone
- Laser ablation :
 - VenaCure EVLT system
 - 1470nm laser from AngioDynamics



Laser Ablation





Sclerotherapy



• Ultrasound guided intravascular injection of sclerosant.



What about those ropes?







Microphlebectomy













Outcomes



- Resolution of ropey varicosities
- Minimal scar or discoloration
- Elimination of medical risks

























<u>September</u>



December



Telangiectasia/Spiders







Spider Vein Injections







Sclerotherapy injections





Spiders and Telangiectasias

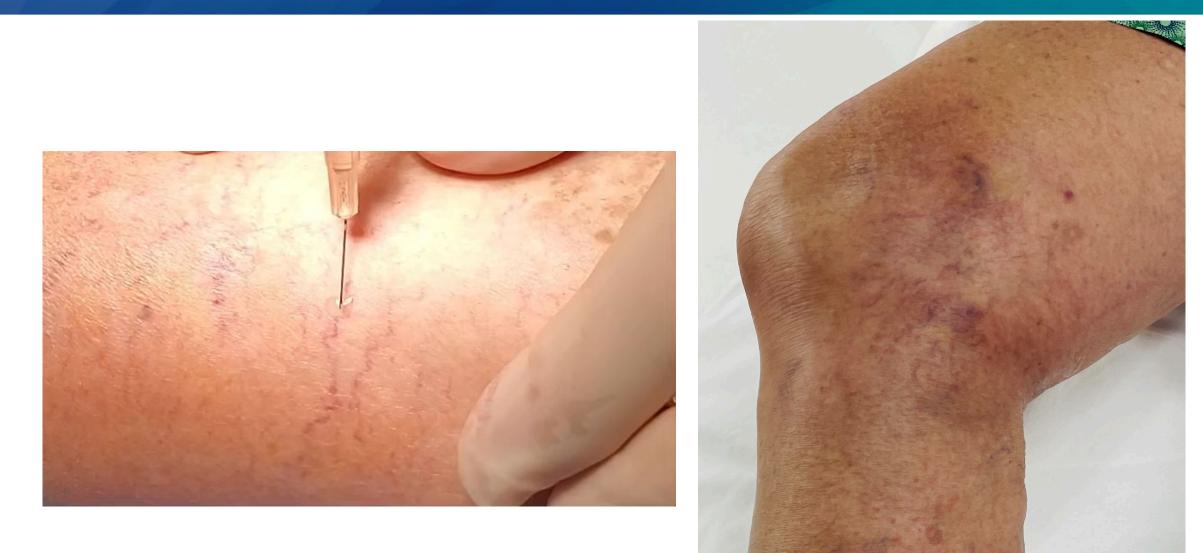






Spiders and Telangiectasias

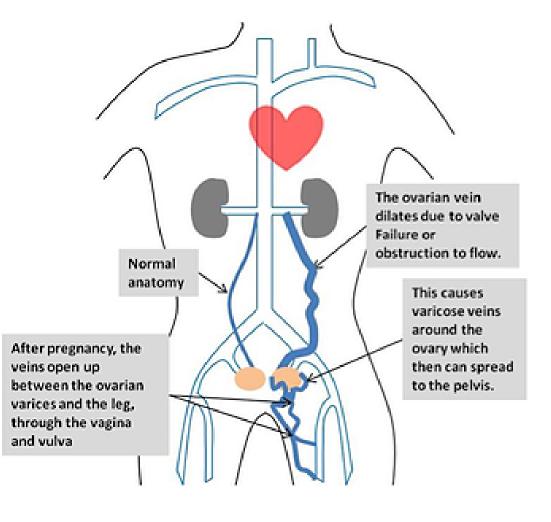




What Else?



 Gonadal Vein Insufficiency: Pelvic Congestion Syndrome





Thank You!

Questions?

Say Goodbye to Varicose Veins

Jie Mao, MD Interventional Radiology 720-608-7418

