

Superficial Venous Treatments-

Lack of Symptom Improvement: Why?

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Disclosures

- Becton Dickinson- Consultant, faculty, research
- Venclose, Inc.- Former Chief Medical Officer
- Medtronic- Advisory Board, consultant, faculty
- Immertec- Advisory Board
- Solvein-Advisory Board

CVI Symptoms

HASTI:

- Heaviness
- Aching
- Swelling
- Throbbing
- Itching
- Leg Tiredness and Fatigue
- Burning
- Numbness
- Stinging
- Tingling
- "Ants Crawling"
- Restless Legs (RLS)
- Nocturnal Cramping
- Venous Claudication

History and Physical

- Identify comorbidities and past medical/surgical problems
 - Consider cardiac, liver, renal, arthritic and neuropathic contributors
 - Assess if deep venous hx. or symptoms
- Identify patient's goals of therapy
- Set expectations on symptom improvement
 - Never promise edema, numbness, RLS or joint pain will resolve

JVS-VL Venous and Lymphatic Disorders **SVS** Society for Vascular Surgery

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Factors associated with lack of clinical improvement after vein ablation in the vascular quality initiative

Paulo Pinto Rodrigues, MD, FRCR, EB - Michael Fessler, MD - Andrea Ohi, MD - Nicholas H. Osborne, MD - Scott T. Robinson, MD - Benjamin N. Jacobs, MD - Faisal Aziz, MD - Kharrif P. Nguyen, MD - Adam M. Gewertz, MD - Linael E. Rodriguez, MD - Eli Falgout, MD - Ulric Sackelns, MD - Cassius Jyoti Diksha Choudh, MD on behalf of the Research Committee of the American Venous Forum. Show less

3544 pts in VQI Registry
- 2607 pts VCSS scores at follow up VVSymQ
- 420 (16.1%) lack of clinical improvement based on VCSS change

Associated factors:

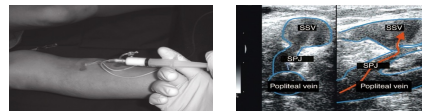
- Lower CEAP class (C2 vs C4)
- Lack of compression hose prior to intervention
- Age
- African American
- Obesity

Vein diameters- not a factor

Reason #1 for Lack of Symptom Improvement

Unsuccessful closure of truncal, accessory, perforator or tributary veins


- Poor technique
- Modality failure- Thermal or NTNT
- Unusual anatomy- ie. Markedly aneurysmal veins



Reason #2 for Lack of Symptom Improvement

Suboptimal or incomplete treatment


- GSV not treated distal enough (thigh only)— access location
- Not all pathologic veins were treated
 - AAGSV, PAGSV, duplicated GSVs
 - GSVs but not SSVs "70-80% better"
 - Refluxing tributaries
 - Incompetent Perforator Veins (IPV)- Especially for VLUs (C5-6)
 - Some CEAP 4 with focal pain at site of IPVs
- Some IPVs lead to symptomatic varicose veins in thigh or lower leg



Reason #3 for Lack of Symptom Improvement

Leg symptoms are not due to venous disease

- Neuropathic or Radicular pain/numbness
- Orthopedic or discogenic athropathy
- Edema due to other causes-
 - Heart failure, pulm. HTN, liver, renal, pelvic reflux, deep venous obstruction, PTS, lymphedema, lipidema
- Myofascial pain or inflammation



Reason #4 for Lack of Symptom Improvement

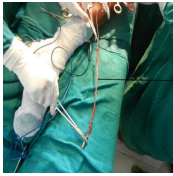
Poor vein duplex ultrasound mapping study

- Negative study
 - Did not find pathology in non treated veins: False negatives
 - Poor technique to elicit reflux
 - Patient factors- wore CH just before exam, dehydrated, or massive edema
 - Did not look for pertinent pathology- only assessed GSV-SSVs
 - Vascular techs should ask pt. to describe sx and point to pain during mapping DUS

Reason #5 for Lack of Symptom Improvement

Recanalization of treated veins or neovascularization


- Fairly common after surgical stripping
- Rare for thermal techniques



Reason #6 for Lack of Symptom Improvement

New or unrecognized sources of incompetence

- AAGSV/PAGSV/lateral venous plexus
- SSV
- IPVs and tributaries
- Deep venous reflux
- Deep venous obstruction:
 - NIVL
 - Thrombotic
 - External compression (tumors, etc)
- Pelvic vein incompetence



Conclusions

- Variety of reasons for lack of symptom improvement after vein treatments
- Thorough history, physical and vein DUS mapping study will minimize failures and suboptimal symptomatic responses
- Set realistic expectations with patients for outcomes with therapies
- Reassess underlying pathology and treat appropriately to improve patient satisfaction