Pelvic Venous Incompetence and Leg Varicosities: Start From Above or Below

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Nothing to Disclose

Clinical Presentation

- Pelvic symptoms
  - Pain
  - When standing
  - Associated with intercourse
- Dysmenorrhea
- Vaginal discharge
- Irritable bladder
- LE symptoms
  - ‘HASTI’
  - Varicosities
  - Leg
  - Labial
  - Ulcers
  - Hematoma

Treatment Rational

- Treatment goal
  - Correct physiology/anatomy
  - Symptom resolution
- Pelvic venous reflux can be divided into two components
  - Superior
    - Renal vein to broad ligament
  - Inferior
    - Broad ligament to extremities
- Superior component typically responsible for pelvic symptoms
- Inferior component typically responsible for lower extremity symptoms

Treatment Strategy

- Treatment decision should be symptom driven
  - If symptoms confined to the pelvis then focus treatment on superior reflux component
  - If symptoms primarily involve the lower extremities then focus treatment on the lower reflux components
  - If symptoms persist or recur quickly after treatment of inferior component then consider gonadal vein embolization

Treating The Inferior Component

- If varicosities are not extensive then injection sclerotherapy should be first step
  - Ultrasound guidance
  - Foamed sclerosants
  - Multiple treatment sessions
- If varicosities are extensive or if injection sclerotherapy fails consider fluoroscopic guidance

Treating From Below

RT Gonadal vein
LT Gonadal vein
Round ligament vein
Labial varicosities
Pelvic Venous Incompetence  
Treating From Above  
- When pelvic symptoms predominate then treat with gonadal vein embolization  
- Jugular approach  
- It is important to use a sclerosant in addition to a mechanical closure device

Pelvic Vein Reflux  
Treatment Outcomes  
- Pelvic symptoms  
  - More than 12 cases series and one RCT demonstrate an average significant clinical improvement of 80%  
- Lower extremity symptoms  
  - Treating from above  
    - Casternmiller, et al. Phlebology 2013  
      - 88% reduction in vaginal varicosities  
      - 14% of LE varicosities disappeared without further treatment  
  - Treating from below with fluoroscopy  
    - 100% > 6 month clinical improvement in 83 patients  
    - Treatment of superior component needed in 4 patients

Pelvic Venous Incompetence  
Conclusions  
- If pelvic symptoms predominate then treat from above by embolizing the gonadal vein  
- If LE symptoms predominate then treat from below  
  - Injection sclerotherapy  
  - Fluoroscopic guided injections in patients that failed injection sclerotherapy  
- If after treating from below symptoms persist or recur then embolize the gonadal vein