Ovarian Vein, Hypogastric Vein Incompetence or Compression Syndrome: Coil, Stent, Both, Neither?

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Why Ovarian Vein incompetence?

- Anatomy studies suggest 13-15% without valves and 40-50% incompetent
- Related to stresses of Pregnancy
- Hormonal effects

The pelvic venous syndromes: Analysis of our experience with 57 patients

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4 Types of Pelvic Varices
1. Vulvar only- no PCS
2. Hypogastric only- internal pudendal, obturator, round ligament. Hemorrhoids and vulvar also seen
3. Gonadal Vein Insufficiency- lower extremity varicosities originate from pelvis; saphenous veins usually normal, maybe associated with hypogastric vein reflux
4. Meso-aortic compression of LRV

JVS 2002

Treatment and Classification of Varicose Veins of the Perineum** Scultetus et al JVS 2002;36:881-8

- 57 Patients- Mean number of pregnancies-3.1 (2-5)
- Classified into three groups
  - Group 1: Mild Symptoms
    - Small vulvar varices
    - Mild or no pelvic discomfort
  - Group 2: Moderate symptoms of pelvic discomfort
    - 3-5 mm varices
  - Incompetent gonadal veins
  - Group 3: Severe symptoms/lifestyle limiting
    - >5mm vulvar varices
    - 11 patients isolated hypogastric vein reflux
    - 12 patients with both hypogastric and gonadal vein reflux

Treatment of Pelvic Congestion Syndrome

- Wide variety of techniques and treated vessels reported
- Issues
  - Unilateral versus bilateral embolization
  - Embolization material(s)
  - Sclerosing agents
  - Glue
  - Coils
  - Combo
  - Potential need to treat the internal (hypogastric) iliac veins as well

Disclosures

- Nothing
Female with multiple prior interventions for lower extremity venous insufficiency referred for evaluation of possible pelvic congestion by her vascular surgeon after noticing pelvic varices.

Lower extremity discomfort as well as pelvic varices for ~ 10 years.
Venogram and Intervention
Recanalized tract pre-dilated to 8mm w/ 14mm x 80mm Smart Stent

Venogram and Intervention
14 x 60mm & 12 x 60mm bare metal self-expandable Smart Stent

Venogram and Intervention
Dilated to 14mm centrally & 10mm peripherally

Completion Venogram

52 year old female with chronic pelvic pain diagnosed with Pelvic Congestion syndrome with a History of left lower extremity DVT
Patient referred for ovarian vein embolization

Incapacitating Pelvic Congestion Syndrome in a Patient With a History of May–Thurner Syndrome and Left Ovarian Vein Embolization

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Conclusions:

- There are multiple causes of pelvic varices and congestion like symptoms
- Primary of PCS may be related to congenital absence of left ovarian valves leading to incompetence
- Significant ovarian vein incompetence may extend into hypogastric vein reflux
- Secondary PCS may be related secondary obstruction such as May Thurner syndrome, nutcracker syndrome, pelvic masses.
- Treating secondary cause likely most important
- Damage to vessels may be irreversible and subsequent pelvic vein embolization maybe necessary

Thank You!