Venographic Techniques to Identify Pelvic Anatomy & Escape Points

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I Have No Disclosures Relevant To This Presentation

The Female Pelvic Circulation
Four Interconnected Venous Systems

Internal iliac tributaries

- The “gateway”
- Exactly analogous
- The deep veins of the pelvis
- The superficial veins of the leg

CoMmon iliac arterY
Internal iliac arterY
External iliac arterY
Superficial inguinal iliac vein
Superficial femoral vein
Deep femoral vein

Internal Iliac Vein Anatomy

Pelvic Escape Points

Kachlik D, Phlebology 2010

Atypical varices arising from pelvis

Pelvic Escape Points

Atypical varices arising from pelvis

Vulva
Perineum / Medial Thigh
Posterior Thigh
Primary Pelvic Reflux
2 Clinical Scenarios

**Atypical Varices (Without Pelvic Sx)**
- **Study From Below**
  - U/S-guided direct puncture venography
  - 23 gauge butterfly needle
  - Calibrated venography
  - Simultaneous foam sclerotherapy
    - 10 or 3% STS: 3 or extended
    - Follow with
      - Fluoroscopy
      -泡沫血栓

**Atypical Varices with Pelvic Pain**
- **Study From Above**
  - Right internal jugular approach preferred
  - Micropuncture access
  - Long 8 Fr sheath advanced to iliac confluence
  - Sequential selection of right and left internal iliac veins
  - Berenstein (8.5 – 11.5 mm) balloon occlusion venography
    - Initial placement below IIV confluence
    - Sequential tributary selection (obturator, pudendal, gluteal)
  - Sclerosant ± coils deployed through occlusion balloon

Conclusions
Pelvic Venography - Anatomy & Escape Points

- Understanding anatomy is critical to treatment of pelvic venous disorders
- Internal iliac vein formed by the confluence of
  - Obturator veins
  - Internal pudendal tributaries
  - Superior & inferior gluteal veins
- 4 escape point to the leg
  - Inguinal ("I" point)
  - Obturator ("O" point)
  - Pudendal ("P" point)
  - Gluteal ("G" point)
- Venographic & treatment techniques
  - Balloon occlusion venography
  - Direct puncture venography