What is pelvic pain?

What causes pelvic pain?

Where are the gonadal veins?

How do veins “break”?

Who has pelvic pain?

Who treats broken veins?
Pelvic Venous Insufficiency

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Pelvic Venous Insufficiency

Understand the Anatomy
Understand the Pathophysiology
Understand the Imaging
Understand the Treatment
Definitions

Gonadal Venous Insufficiency
Incompetent venous valves leading to reflux

Chronic Pelvic Pain
Non-Cyclic Pain > 6 Months
Accounts for up to 40% of all Gyn visits
Anatomy
Clinical Vignette

29 year old female with chronic pelvic pain
- No significant past medical history
- Pain increased with standing for long periods
- Pain is severe following intercourse
- Mild urinary urgency
Clinical Vignette

26 year old female with chronic pelvic pain

- No significant past medical history
- Pain increased with standing for long periods
- Pain is moderate following intercourse, worsened with standing
- Multiple stools per day
Epidemiology

10% of females will have “reflux” physiology (PVI) *

Up to 59% with PVI will have symptomatology

Variable “penetrance” likely due to overlapping Sx

Multiparous > Nulliparous

* Belenky et al. Ovarian Varices in Healthy Female Kidney Donors AJR:179, 9/2002
Gonadal (Ovarian) Vein Valve Failure
Prior ovarian vein thrombosis
Increased exposure to hormones
Dilatation of the vein 2/2 gravid state
Nutcracker syndrome
Retro-aortic left renal vein
(Patho) Physiology

Gonadal (Ovarian) Vein Valve Failure

Venous Reflux Into Pelvic Varices

Pelvic Venous Cross-Filling

Inability to Re-Circulate Venous Blood From Pelvis
Diagnosis

History and Physical Examination

Visual Analog Scale

Ultrasound

CT

MRI – With Contrast

Diagnostic Venography
Ultrasound
CT
MRI
Digital Subtraction Venography
Digital Subtraction Venography
Digital Subtraction Venography
Treatment - Options

- No treatment
- Hormone Modulation
- Pelvic Varix Transcatheter Sclerosant Therapy
- Gonadal Vein Coil Embolization
- Direct Stick Perineal / Vulvar Sclerosant Therapy
- Retroperitoneal Dissection / Vein Ligation
- Hysterectomy
Treatment – Procedure

Pre-treatment: Abx, Antiemetic, Steroids

Procedural: Sedative/Hypnotic, Pain Relief

Post Procedural: Steroids, Abx, Antiemetic

Good Technique = Complication Prevention
Treatment
Outcomes

Technical Success: Nears 100%

Symptomatic Relief: > 80%

No Significant change: 13%

Worsened Symptoms: 4%
References

Thank You

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