What Is It?

- "Chronic Pelvic Pain arising from dilated and refluxing incompetent pelvic veins. This is often described as a constant dull ache, often aggravated by standing.

- There are no uniform, generally accepted clinical criteria for the diagnosis of PCS.
Who Gets It?

Multiparous women of reproductive age, suggesting both mechanical and hormonal mechanisms.

Etiology?

Largely unclear.

May or may not be related to venous dysfunction elsewhere.
Varicose veins arising from leg veins

Tendon

Varicose veins arising from vulva and ovarian vein reflux

www.vulval-varicose-veins.co.uk

Gluteal Varicosity, Originating in vulvar varicosity
How Is The Diagnosis Made?

MR
Abdominal US
TransVaginal US
CT
Catheter Venogram

MRI
TransVaginal US

CT
Therapy

Hormonal → Hysterectomy → Pelvic vein ligation/transposition → Pelvic vein embolization

Interventional Therapy

- Kim HS, Malhotra AD, Rowe PC, Lee JM, Venbrux AC
- Embolotherapy for Pelvic Congestion Syndrome
- Average follow up of 48 months
- 83% of patients with resolution of substantial improvement in symptoms
- KEY: Address all refluxing components at the time of venography
In 2017, open surgery for PCS is a thing of the past

Morbidity, expense, blood loss and recovery are much reduced by endovascular techniques

Embolization can take several forms....

Embolotherapy Techniques

1 Coils
2 Glue
3 Foam
Deployment
Venous Coils

Embolization Case
Contrast is seen refluxing down the left ovarian vein and around the region of the ovary.
Male PCS?

Nutcracker Syndrome
Compression of L RV, leading to GV hypertension and large varices

Left flank pain, hematuria

NO medical therapy

Intervention is the preferred method of management
Diagnosis

- CT Venogram
- Abdominal CT
- MRI/A

Nutcracker Endovascular Therapy
Issues

- Conceptually simple (very good)
- Quick, outpatient therapy (good)
- Unknown long term outcomes (maybe bad)
- Known consequences of stent compression (possibly bad)
- Potential for stent embolization to heart (that’s really bad)

An Alternative?
Venous and Endovenous Techniques

Left ovarian to left external iliac vein transposition for the treatment of nutcracker syndrome

- John V. White, MD
- Connie Ryjewski, APN, CNS
- Richard N. Messersmith, MD
- Lewis B. Schwartz, MD
An Alternative?

Iliac Vein Transposition

- Long term results are not yet known, but similar operations performed elsewhere have excellent long term outcomes.

- ...and no intravascular metal...

- ...being compressed extrinsically
Vamos a Ver

(We’ll See)

Internal Iliac Vein Incompetence?
Bibliography

