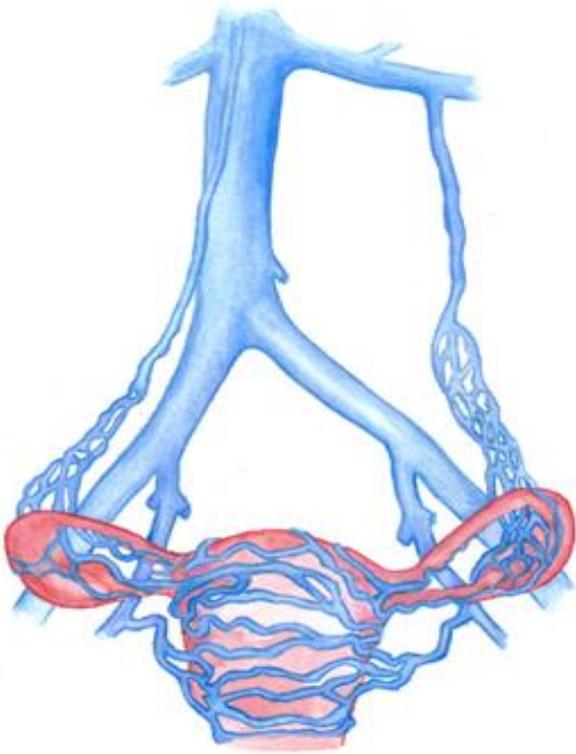


Pelvic Congestion Syndrome



It is estimated that one-third of women experience chronic pelvic pain in their lifetimes. Many of these women are told the problem is "all in their head," but recent advancements show the pain might be due to varicose veins in the pelvis, known as pelvic congestion syndrome (PCS). Many women with PCS spend years trying to get a diagnosis for their pain. Chronic pelvic pain accounts for 15% of outpatient gynecologic visits, and studies show 30% of patients with chronic pelvic pain have pelvic congestion syndrome as the sole cause of their pain, with an additional 15% having PCS along with another pelvic pathology. With varicose veins in the pelvis, similarly to those in the legs, the valves in the veins that return blood to the heart become weakened and don't close properly.

This causes blood to flow backward and pool, which in turn creates pressure and pain, and can affect the uterus, ovaries and vulva.



Up to 15% of women, generally between the ages of 20 and 50, have varicose veins in the pelvis, though not all experience symptoms. The diagnosis is often missed because women lie down for a pelvic exam, relieving pressure from the ovarian veins so they don't bulge with blood as they do while a woman is standing. Women with PCS are typically in their child-bearing years. Ovarian veins increase in size related to previous pregnancies, so PCS is unusual in women who have not been pregnant.

Risk Factors

- Child-bearing age (younger than 45 years old)
- Two or more pregnancies and hormonal increases
- Fullness of leg veins
- Polycystic ovaries
- Hormonal dysfunction

Symptoms

The chronic pain associated with PCS is usually dull and aching. It is usually felt as lower abdomen pain and lower back pain and often increases:

- Following intercourse
- During menstrual periods
- When tired or standing (worse at end of day)
- During pregnancy

Other symptoms include:

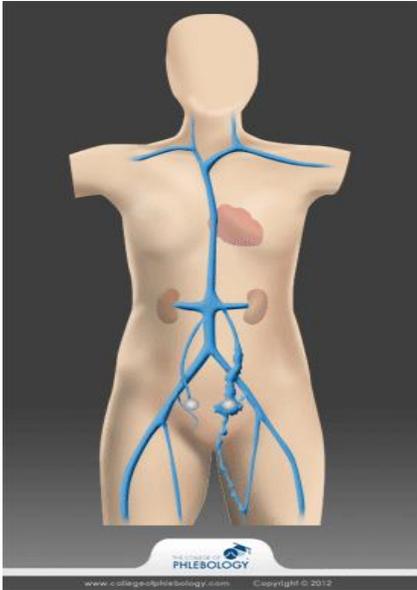
- Irritable bladder
- Abnormal menstrual bleeding
- Vaginal discharge
- Varicose veins on vulva, buttocks or thighs

Diagnosis

Once other abnormalities or inflammation have been ruled out by a thorough pelvic exam, PCS can be diagnosed through several minimally invasive procedures. An interventional radiologist can use the following imaging techniques to confirm pelvic varicose veins:

- **Pelvic venography:** Thought to be the most accurate method for diagnosis, a venogram uses contrast dye to make pelvic veins visible during an **X-ray**. To help accuracy of diagnosis, patients are examined on an incline, because the veins decrease in size when lying flat.
- **MRI:** An MRI looking at the pelvic blood vessels may be the best noninvasive test to diagnose pelvic congestion syndrome.

Treatment Options



Once PCS is diagnosed, an interventional radiologist can perform an embolization. During the outpatient procedure, the radiologist inserts a catheter into a vein in the groin and guides it to the affected vein using X-ray guidance. To seal the enlarged vein and relieve painful pressure, the doctor inserts tiny coils, often with a sclerosing agent (the same type of material used to treat varicose veins), to close the vein. After treatment, patients can return to normal activities immediately. In addition to being less expensive and less invasive than surgery, embolization offers a safe,

effective, minimally invasive treatment option that restores patients to normal. It successfully blocks abnormal blood flow in 95%-100% cases, and 85%-95% of women experience improvement in their symptoms after the procedure.

Although symptoms are improved, the veins are never normal, and in some cases other pelvic veins may require further treatment. Depending on the severity of a woman's symptoms, other treatments are available. Analgesics may be prescribed to reduce pain, and hormones such as birth control pills may be used to decrease a woman's hormone level and stop menstruation. Surgical options include hysterectomy with removal of ovaries and tying off or removing the veins.