



Dr Mayo Theivendran

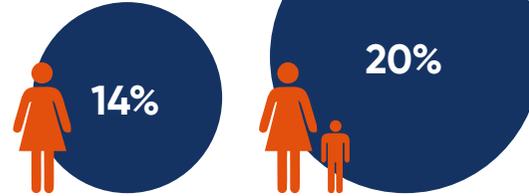
# Pelvic Congestion Syndrome

## A Patient Guide

## What is Pelvic Congestion Syndrome (PCS)?

PCS is essentially varicose veins in the pelvis. It is the cause of chronic pelvic pain in approximately 13 - 14 % of women <sup>1</sup>. Research has shown that 1 in every 7 women, and 1 in 5 women who have had children, have varicose veins that come from the pelvis. <sup>2,3,4</sup>

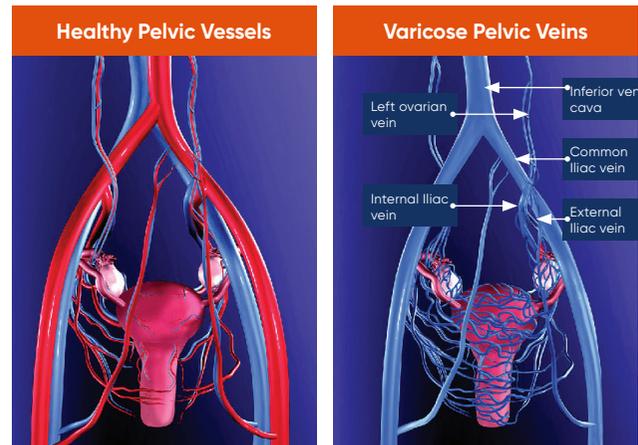
Probability of having varicose veins



Varicose veins are most commonly seen in the legs and are caused by valve malfunction (valves in the veins do not work properly and they do not stop blood from flowing backwards). Veins become less elastic, bulky and enlarged. When this happens to the pelvic veins, visible varicose veins emerge in the pelvic region and the pressure often causes severe pain and discomfort. The varicose veins in the pelvis surround the ovary and can also push on the bladder and rectum.

**There are three major vessels** involved in the venous drainage of the pelvis:

- The external iliac vein
- Internal iliac vein
- Ovarian vein



## What are the common symptoms of PCS?

Pain is the most common symptom. It usually appears on one side but can affect both sides, worsening while standing, lifting, when you are tired, during pregnancy and during or after sexual intercourse. Veins are also affected by the menstrual cycle and hormones and therefore pain may increase during menstruation.

### Common symptoms include<sup>5</sup>:

- Pelvic pain or aching around the pelvis and lower abdomen
- Atypical varicose veins, vulval varicosities or early recurrence of varicose veins after index treatment
- Dragging sensation or pain in the pelvis
- Feeling of fullness in the legs
- Worsening of stress incontinence
- Worsening of symptoms associated with irritable bowel or haemorrhoids



Symptoms usually improve by lying down

## How is PCS diagnosed?

Ultrasound and sometimes CT scan is used in order to examine your abdomen and pelvis and in particular your pelvic veins.

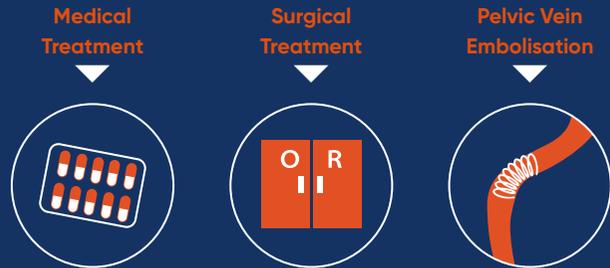
### Imaging for PCS

- **Ultrasound** - sonographer is looking to identify internal varicose veins associated with four main veins in your abdomen and pelvis. These are the right and left ovarian veins and the right and left internal iliac veins.
- **CT Venogram** - to define the anatomy in higher detail to plan for intervention if required by Dr Theivendran



## What are the treatment options for PCS?

Depending on the symptoms, medical therapy, surgical treatment or embolisation may be indicated.



### Medical Treatment

Medical therapy for PCS may include the use of analgetics to control and reduce the pain. Hormones like progesterone or birth control pills can be effective suppressing ovarian activity and thus leading to pain relief.

### Surgical treatment

Surgical treatment options are hysterectomy and ovarian vein ligation. Hysterectomy is performed to remove the uterus and cervix. In PCS treatment, the objective of organ removal is the suppression of ovarian activity. Nevertheless, efficacy is unclear and the treatment bears all risks of an open surgery.

### Pelvic Vein Embolisation

When PCS is diagnosed, embolisation is usually the indicated treatment. It is a minimally invasive, non-surgical treatment used to stop the abnormal blood flow causing the painful symptoms.

## Pelvic Vein Embolisation (PVE) Procedural Details

In general the PVE procedure is performed under sedation.

1. A small incision is made in the groin to insert a thin catheter into the femoral vein.
2. The catheter is guided to the pelvic vein using X-Ray guided venography.
3. **Metallic coils will be placed in the abnormal veins.** The coils act like small springs, causing blood to clot around them, subsequently blocking veins.
4. It may **be necessary to repeat embolisation** for other veins through the same opening and using the same catheter and microcatheter combination.

## Frequently asked questions (FAQS)

1

### Why do I need Pelvic Vein Embolisation (PVE)?

Embolisation is intended to close off the pathologic veins so that blood can no longer flow backwards. This will help to reduce pain and other symptoms by removing pressure of the bulging veins on surrounding pelvic organs and nerves.

2

### Who will be performing Pelvic Vein Embolisation and where will it happen?

The procedure is completed in an angiography suite by a qualified doctor.

3

### How long does the PVE procedure take and what happens after the treatment?

The procedure will take in general between 60 - 90 minutes but may take longer depending on how many veins require treating. After the treatment, you will have to stay in the recovery area for about 30 minutes, whilst nurses complete routine observations of your blood pressure and pulse. When discharged home, you should arrange for someone to collect you.

4

### Are there any side effects?

It is usual for patients to experience some pelvic cramps following the embolisation for a few days, but this will gradually improve after the first 24 hours and can usually be controlled with pain relief medication. Most patients will be fully recovered after 1 week.



A schematic diagram of an embolisation coil inside a Pelvic Vein

## Risk of treatment

- Back and or abdominal pain usually 2 days post surgery and limited to 5 days. This is managed with fluids and simple analgesia. This is the result of the pelvic veins blocking off and is called pelvic vein thrombophlebitis.
- Bruising to the groin access site which will resolve in 2 weeks
- Small 1/1000 risk of an allergy to the the dye used in the venogram to highlight the vessels
- Extreme rare reported cases where the embolization coils can deploy in the wrong place. In Dr Theivendran's hands he has never seen it. Modern coil deployment techniques essentially mitigates this risk.

## Contact details



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## Sydney & Central Coast locations

### North Shore Private Hospital

Suite 5, Level 5  
St Leonards NSW 2065  
Provider Number - 252959PB

### SAN Parkway Clinic

Suite 207, 172 Fox Valley Way  
Wahroonga NSW 2076  
Provider Number - 5316967H

### Gosford Private Consulting Suites

Suite 4, 12 Jarrett St  
North Gosford NSW 2250  
Provider Number - 531696BB

### Northern Beaches Hospital

Suite 8, Level 6  
Frenchs Forest NSW 2086  
Provider Number - 5316965J

## References

1. British Society of Interventional Radiology – Pelvic Venous Congestion Syndrome <http://www.bsir.org/patients/pelvic-venous-congestion-syndrome/> Date last accessed 01.02.2017
2. Marsh P, Holdstock J, Harrison C, Smith C, Price BA, Whiteley MS: Pelvic vein reflux in female patients with varicose veins: comparison of incidence between a specialist private vein clinic and the vascular department of a National Health Service District General Hospital. *Phlebology*. 2009 Jun;24(3):108-13. doi: 10.1258/phleb.2008.008041.
3. Whiteley AM, Taylor DC, Dos Santos SJ, Whiteley MS: Pelvic venous reflux is a major contributory cause of recurrent varicose veins in more than a quarter of women. *J Vasc Surg Venous Lymphat Disord*. 2014 Oct;2(4):411-5. doi: 10.1016/j.jvsv.2014.05.005. Epub 2014 Jun 24.
4. The Whiteley Clinic, London, UK
5. British Society of Interventional Radiology