

## What are the advantages of ovarian vein embolisation over surgery?

Embolisation is as effective as surgical ligation of ovarian vein but is much less invasive and less risky. It does not require incisions in the abdomen therefore allowing for faster recovery and less pain. No general anaesthetic is required. After embolisation you can resume normal activity in 1-2 days. Depending on the type of surgery, surgical recovery is longer than embolisation.

## How is ovarian vein embolisation performed?

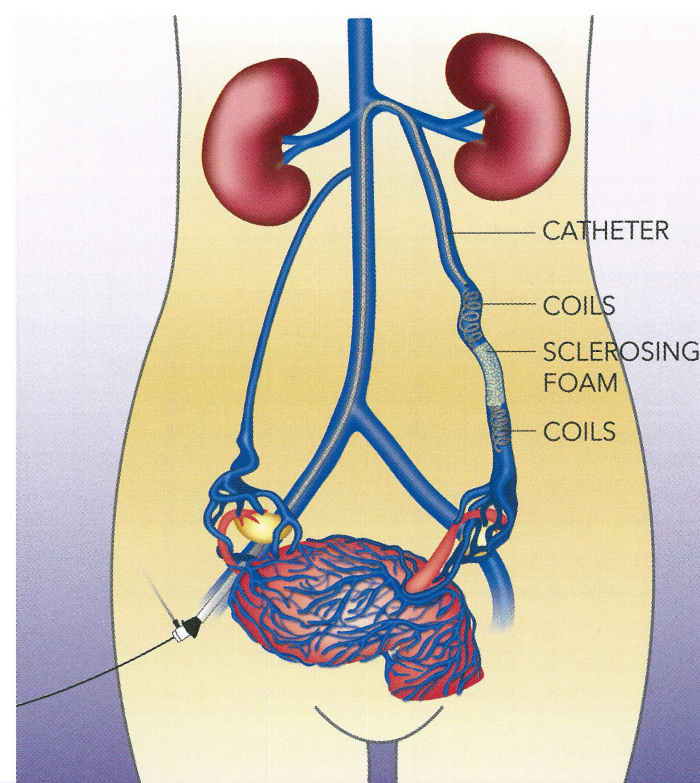
It is performed by an interventional radiologist in an angiography suite as an outpatient or day procedure. A light sedation is given and the skin entry site is numbed using local anaesthetic. Either the jugular or femoral vein is used for entry. A tiny nick is made in the skin and a catheter (thin hollow plastic tube) is inserted and positioned in the ovarian vein under X-ray guidance. Venogram is performed by injecting contrast (X-ray dye) to show the veins and the direction of blood flow. Once reflux is confirmed stainless steel or platinum coils are fed through the catheter to block the vein. A sclerosing agent (such as Fibroven Foam) is injected to secure long term blockage of the refluxing veins. The procedure takes about an hour but can be longer if additional refluxing veins are found in the pelvis that also need to be treated.

## What are the complications with embolisation?

Minor complications although uncommon may occur such as bruising at the entry site, backache and pelvic pain. Vessel injuries and allergies to drugs given during procedure are rare. Loss of coils in the lungs is extremely rare.

## What happens after the procedure?

You will need bed rest for 1-2 hours until the sedation is worn off. You need to arrange transport, as you are not allowed to drive for 24 hours after sedation. When you get home you should take it easy. Drink plenty of fluid. Some patients might experience back and pelvic pain after embolisation. This can be controlled with panadol and Nurofen. Normal activities can be resumed the following day. Strenuous exercise should be avoided for a few days. The dressing should be kept for two days and removed afterwards. You may shower as the dressing is waterproof. We would like to see you in a month for a follow-up consultation.



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## Pelvic Congestion Syndrome

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## Patient information

By Dr Eisen Liang

### What is Pelvic Congestion Syndrome (PCS)?

PCS is a cause of chronic pelvic pain in women. It is usually a dull ache deep in the pelvis that is worst after being in upright positions (sitting, standing, walking and running), or after activities involving Valsalva (weight lifting, singing). Women in certain professions are more likely to be affected, such as shopkeepers, teachers, gym instructors and singers. The pain might radiate to the back and down the thighs. The pain may worsen leading up to menstrual period. Lying down might provide some relief of the pain.

Some women may have pain during or after sexual intercourse and when there is a full bladder or bowel.

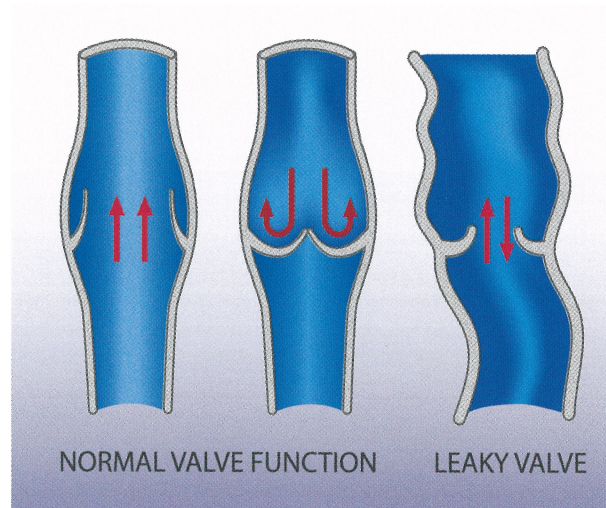
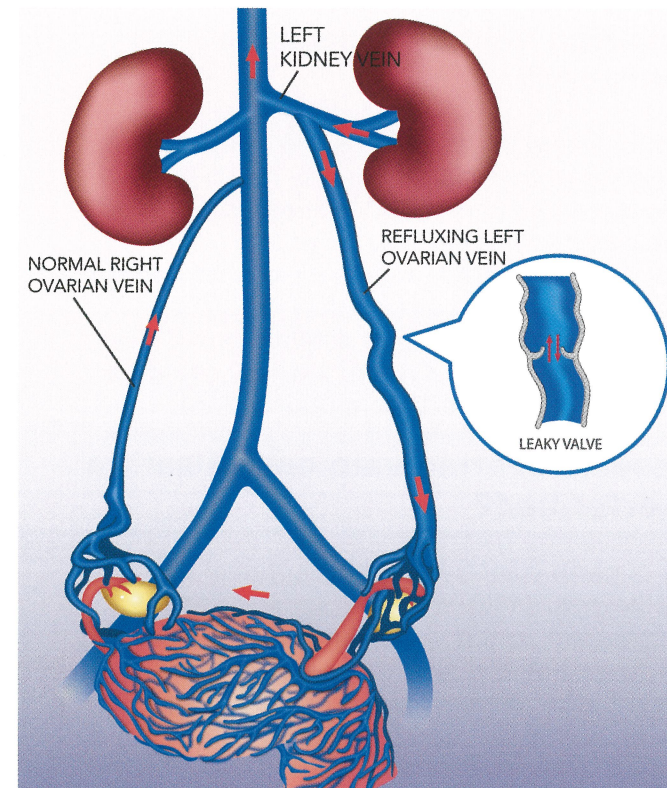
Women with PCS often had multiple pregnancies. Varicose veins may also be present in legs and genital region.

### What causes Pelvic Congestion Syndrome?

Normal venous valves ensure blood returns towards the heart in one direction. Defective or absent valves result in blood flowing in the reversed direction (reflux) causing congestion and raised venous pressure in the drainage area. Pooling of stagnant blood and stretching of veins produce pain.

### How is Pelvic Congestion Syndrome diagnosed?

PCS is an under-recognised and under-diagnosed cause of pelvic pain in women. Chronic pelvic pain can be caused by a variety of conditions. The diagnosis of PCS is often delayed when doctors were doing various tests to rule out more serious conditions such as infection, inflammation and cancer that might also cause pelvic pain. Depending on what other symptoms you might have, gynaecological examination, PAP smears and rectal examination might have been done by your doctor. Further investigations like colonoscopy and laparoscopy might also be done. In PCS, these tests are usually negative. Imaging like pelvic ultrasound and CT scan might have been reported as normal, unless signs of PCS were specifically looked for. Signs on imaging include dilated veins in the pelvis and dilated ovarian vein along your back. Doppler ultrasound might demonstrate reversed flow in veins. The definitive test is a catheter venogram that is often performed in the same setting with embolisation treatment (see below).



### How is Pelvic Congestion Syndrome treated?

Medical treatment for PCS has not been shown to be effective long term. Hysterectomy is associated with residual pain in 33% of patients and a 20% recurrence rate, therefore is not the right treatment for PCS.

Open or laparoscopic ligation (tying off) of ovarian vein is effective in 80% of patients but it is an invasive and difficult operation. Catheter embolisation involves blocking of the refluxing vein internally. It is minimally invasive and can be performed as a day procedure under local anaesthetic. Clinical improvement or resolution of symptoms is seen in 83% of patients.