

Before Your Ovarian Vein Embolization (Coiling ± Onyx)

What is this procedure?

You are scheduled for ovarian vein embolization, a minimally invasive procedure used to treat pelvic congestion syndrome — pelvic pain caused by enlarged, poorly draining veins around the uterus and ovaries.

Dr Werner-Gibbings will pass a thin catheter through a vein (usually in your groin) up to the affected ovarian and/or pelvic veins, then block them off using tiny metal coils and, if needed, a liquid embolic agent called Onyx.

Closing these veins redirects blood flow through healthy veins and relieves the pressure that is causing your symptoms.

How the Procedure Is Performed

Anaesthetic

- This procedure is usually performed under general anaesthetic, meaning you will be fully asleep throughout. Occasionally it can be done under local anaesthetic with light sedation instead, depending on your individual case and your anaesthetist's assessment.
- Your care team will confirm which type of anaesthetic is planned for you at your pre-admission appointment, and an anaesthetist will discuss this with you beforehand.
- If general anaesthetic is planned, the fasting instructions below are especially important for your safety.

Step by step

- A small needle is used to access a vein, usually in the groin, wrist, or arm, and a thin, flexible tube called a catheter is guided through the vein using real-time X-ray (fluoroscopy) to reach the affected pelvic veins.
- Contrast dye is injected through the catheter so the radiologist can map the veins and confirm exactly which ones are enlarged or refluxing (allowing blood to flow backwards).
- Once the target veins are identified, the radiologist deploys coils and/or Onyx (described below) to block them off.
- A final set of X-ray images confirms the veins are closed before the catheter is removed and firm pressure or a small closure device is used on the access site.
- The procedure itself usually takes 1–2 hours, though your total time in hospital will be longer to allow for preparation and recovery.

What are the coils?

- The coils are tiny, soft, spring-like devices made of platinum or a similar metal alloy, often finer than a human hair in places.
- They are delivered through the catheter in a straightened form and spring back into a coiled shape once released inside the vein, similar to how a spring wire naturally curls.
- Once in place, the coils slow and eventually stop blood flow through the vein by physically filling the space and triggering the body's natural clotting process around them, permanently sealing the vein.
- Coils typically have soft synthetic fibres attached, which encourage clot formation more quickly and effectively than metal alone.
- Coils are inert once placed — they are designed to stay in the body permanently and do not need to be removed. They are MRI-compatible and do not tend to cause issues with airport security or future imaging.

What is Onyx?

- Onyx is a liquid embolic agent — a specialised liquid that is injected through the catheter directly into the target vein or venous plexus.
- It is made of a polymer (ethylene vinyl alcohol copolymer) dissolved in a solvent, along with a small amount of tantalum powder that makes it visible under X-ray as it is injected.
- When it contacts blood, the solvent disperses and the polymer solidifies from the outside in, forming a soft, spongy, permanent cast that fills the vein and its smaller branches — useful for treating the fine, web-like network of veins (the pelvic venous plexus) that coils alone cannot always reach.
- Onyx is used selectively, in addition to coils, when there is a more extensive or diffuse pattern of varicose pelvic veins that would benefit from filling these smaller branches as well as the main vein.
- Like coils, Onyx is designed to remain permanently in place and is considered safe for long-term use in the body.

Before Your Procedure

Medications

- **Tell your care team about every medication and supplement you take, including blood thinners (warfarin, apixaban, rivaroxaban, clopidogrel, aspirin, fish oil).**
- You may be asked to stop certain blood thinners several days before the procedure — only do this if your doctor specifically instructs you to.
- Take your regular medications as usual with a small sip of water on the morning of the procedure unless told otherwise.
- Tell us if you have any allergies, especially to contrast dye, iodine, or shellfish.

Eating and Drinking

- Do not eat solid food for 6 hours before your procedure.
- You may drink clear fluids (water, black tea, apple juice) up to 2 hours beforehand.
- If you take regular medications, take them with a small sip of water as directed.

Pregnancy

- This procedure uses X-ray guidance, so it cannot be performed if you are pregnant. Please tell your care team immediately if there is any chance you could be pregnant.

On the Day

- Arrange for someone to drive you home — you cannot drive yourself after sedation.
- Wear loose, comfortable clothing and leave jewellery and valuables at home.
- Plan to be at the hospital or clinic for several hours, even though the procedure itself typically takes 1–2 hours.
- A nurse will place an IV line, and you will meet your anaesthetist before heading to theatre. If you are having a general anaesthetic, you will be fully asleep for the procedure and will wake up in the recovery area with no memory of it. If a local anaesthetic with sedation is used instead, you will usually be awake but drowsy and comfortable throughout.
- You will need to lie flat for a period after the procedure while the small puncture site (in your groin, wrist, or arm) heals, and while any remaining effects of the anaesthetic wear off.

What to Expect Afterwards

- Most patients go home the same day, though some stay overnight for observation.
- Mild pelvic cramping, groin discomfort, or bruising at the access site is common for a few days.
- Full details on recovery are provided in your separate post-procedure guide.