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Pelvic Venous Congestion or Hypertension Syndrome

Pelvic venous congestion syndrome (PVCS) is a cause of chronic pelvic pain and is a secondary cause of leg varicose veins in approximately 13 – 40% of women. Pelvic congestion syndrome is a condition often caused by the dilatation of the ovarian or other pelvic veins, like varicose veins but in the pelvis. In almost all cases the treatment of PVCS is very simple.

Varicose veins are most commonly seen in the legs. They occur due to a failure of valves in the leg veins this causes the blood to pool, producing enlarged, bulging, and dilated veins. This is also what happens to the pelvic veins in PVCS. This pressure can cause a number of abdominal or pelvic complaints but can also be a cause of lower limb varicose veins and swelling, through the indirect pressurization of leg veins. In men PVCS through the malfunctioning of a testicular or gonadal vein can cause dilated veins in the testicles (varicocele), testicular discomfort, infertility and varicose veins. This is treated in a similar fashion to PVCS.

Another associated condition is May-Thurner Syndrome. This condition can cause PVCS but can more commonly cause left leg swelling and possibly deep vein thrombosis (DVT). This is caused by compression of your left iliac vein by your iliac artery causing blood to pool in your leg. Whilst a minimal degree of compression is present in all of us, in rare cases the compression is severe and needs treatment.

Causes of PVCS.

The cause of the dilated ovarian/pelvic veins in PVCS is poorly understood. PVCS most commonly occurs in women who have had children. During pregnancy the ovarian vein can be compressed by the enlarging womb or enlarged because of the increased blood flow. This is thought to affect the valves in the vein causing poor pelvic drainage and pooling of blood in the pelvic veins.

There are other causes that may produce obstruction to the ovarian and pelvic veins leading to PVCS, which are much less common. It can also occur spontaneously or is associated with an aberrant venous anatomy. PVCS may also be associated with polycystic ovaries. The absence of the vein valves due to abnormal development may also be a contributing factor. This accounts for PVCS in young patients without children.

Diagnosis and Definitive Test (Abdominal Venogram).

Although ultrasound, CT and MRI imaging may be initially used, PCVS is notoriously difficult to diagnose on imaging and in many cases is not clearly identified. This is not a failure of the test but is a reflection of the challenging and difficult assessment of the presence and function of these veins. Even if the imaging dies not clearly show evidence of PVCS, if Mr Ponosh suspects its presence from his vast clinical experience, or imaging suggests a pelvic source of your veins, he may recommend an **Abdominal Venogram.**

This is a low risk minimally invasive procedure usually conducted as a day-case in hospital under a local anaesthetic and light sedation so is essentially pain free. In a specialized x-ray room, a small needle is placed in your groin and under x-ray guided imaging and through the injection of contrast dye, the nature of your abdominal veins and any evidence of PVCS is identified. This may appear as varicose veins in your pelvis, dilated ovarian or pelvic veins or in some cases compression of other draining veins. You will be asked to hold your breath several times and occasionally a special CT scan may be taken during your procedure (Dyna CT) for a very detailed assessment.

If PVCS is confirmed, usually through the identification of a dilated ovarian vein, Mr Ponosh will proceed to definitively treat this during the same procedure. The malfunctioning vein is entered with a fine wire and tube (1mm) and the vein is permanently blocked off with tiny coils which cause the vein to block off in a controlled and planned fashion. This is known as “coil embolization”. The treatment of these dilated veins stops the blood pooling in the pelvis and stops the venous congestion and hypertension that causes your symptoms.

The venogram takes approximately 20 minutes and if found, the “coil embolization” takes an additional 10-20 minutes. The benefit of the procedure is that it is definitive. It is the only way of without a doubt confirming or excluding PVCS and treating it in the same procedure. In rare instances where PVCS is not found, this is still of significant clinical benefit as it excludes the condition. In cases of May-Thurner Syndrome, a venogram is also undertaken but if found, it is usually treated with a balloon venoplasty (stretching the vein) or placing a stent to permanently treat the narrowing.

Concluding the procedure, some gentle pressure is applied to your groin. You rest in bed for a few hours and in almost all instances are discharged later that same day. If iliac stenting has taken place, you will be admitted overnight.

Possible complications and side effects.

An angiogram/angioplasty is a very safe low-risk procedure. Mr Ponosh has decided and discussed with you that although there are risks inherent to every procedure, the benefits to you dramatically outweigh them and the angiogram is the best treatment for you.

Bleeding: As the operation is performed on blood vessels a small amount of bleeding can sometimes occur. This is often easily treated with some pressure, but it is common to have some bruising to the area after the procedure. You may also develop a small lump which will resolve by itself. Serious bleeding is uncommon but may require an addition procedure.

False Aneurysm: Very rarely a lump may occur which is in flow with the artery. As we use ultrasound guidance to access your groin vein, injury to the artery is extremely rare.

Pain and Discomfort: This is usually minimal during the procedure and after. Occasionally you can get some bruising and discomfort to the groin in the following days, but this is minor. In rare cases the bruising can last for several weeks.

Contrast/Dye Reaction: Very rare. If you have a known allergy, please advise the rooms prior to your procedure.

Kidney Damage: The dye used is excreted via the kidneys, which in most patients is completely normal. However, especially in patients with poor kidney function, the dye can lead to deterioration in the kidney function. Angiograms are used in patients with kidney disease often and safely, but additional precautions are required.

Damaged Blood Vessels: Usually these problems can be dealt with at the time of the procedure, but in rare cases, repair is necessary.

Equipment Failure: It is theoretically possible for a catheter, wire, or device to break and leave fragment inside the body.

Failure of Technique: Occasionally it is not possible to perform the planned procedure, or the procedure does not show the desired result. In very rare circumstances a failed procedure can actually make blood flow worse. Catastrophic outcomes are very rare.

Anaesthetic Risks: Are very low and will be discussed with you by our specialist anaesthetists.

Interventional Follow-Up (Iliac Stenting): All endovascular interventions including stents and venoplasty have a small risk of re-narrowing (stenosis) or blockage (occlusion) with time. Modern techniques and equipment have shown to have excellent long-term outcomes but due to the nature of your initial vascular disease, vascular risk factors and the nature of your intervention, issues can arise with your treatment in the short, mid, or long term. This is a universally accepted and appreciated result of endovascular intervention. Whist in many cases is cannot be avoided, taking medications suggested by Mr Ponosh can also reduce the risk. This thus requires long-term review with Mr Ponosh and his team. In most cases, re-narrowing can be treated with repeat endovascular treatments with good outcomes. In extremely rare cases, complications may require open surgery or lead to catastrophic outcomes.

Following your procedure.

Following the procedure, bed rest is required for a short time and most people leave the hospital within 6 hours of the procedure. You will need someone to drive you home and stay with you the first night after the procedure.

Once discharged, you are able to resume your normal activities within the first 24 – 48 hours. The best advice is not to over-exert yourself and avoid heavy lifting or strenuous gym work for 5 – 7 days. You are not allowed to drive for 24 hours after your procedure.

Pain following the procedure is usually minimal. A dull ache in the groin is not uncommon. Some people may develop an aching back or loin pain, similar to period pain for a few days following the procedure as the embolized veins completely block off. This resolves rapidly and is well controlled with regular paracetamol. In rare cases it can persist for 1-2 weeks.

For further information please follow the link or scan the QR code below:

What we do: Click on - Pelvic Venous Congestion or Hypertension Syndrome & What is an Angiogram or Venogram.
https://ponoshvascular.com.au/what-we-do/