

VENOGRAM OVERVIEW

WHAT IS A VENOGRAM?

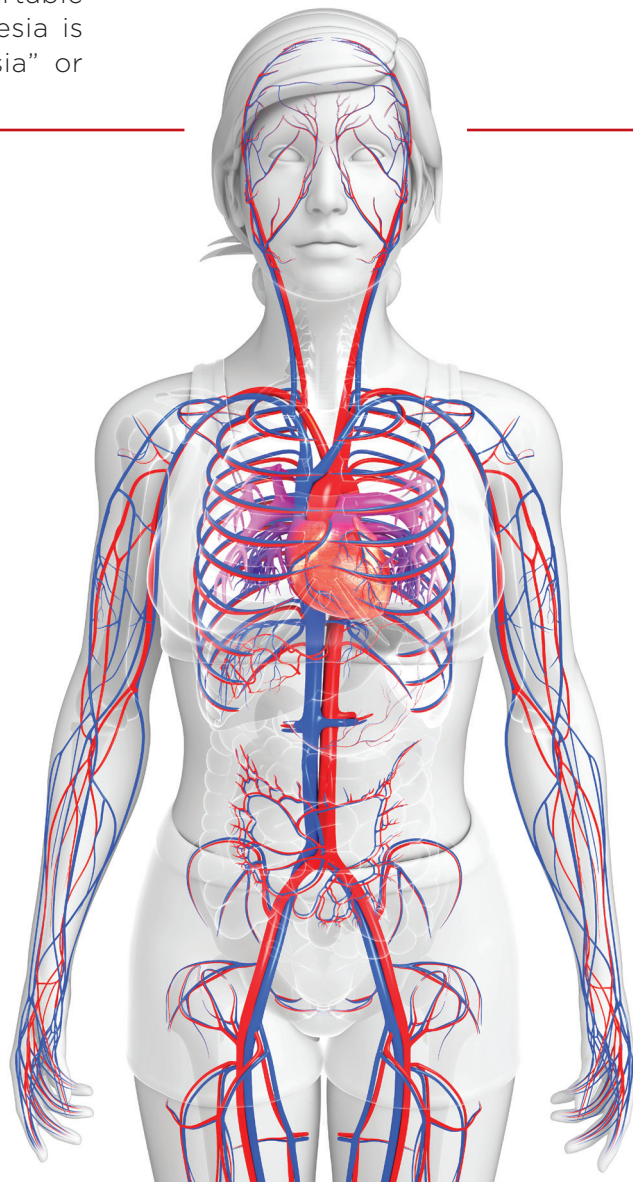
A Venogram is an X-ray of the veins. It uses contrast dye and an X-ray camera (fluoroscopy) to visualize the veins. The veins are not visible under fluoroscopy without the use of the contrast dye. The dye is injected through a soft, flexible catheter that is guided from a vein in the groin and moved to the appropriate site by navigating through the vascular system. Once the catheter is in the right position, a dye is injected into the veins. X-ray is then taken at the precise time the dye flows through the veins. Images of the veins are then generated to identify abnormal blood flow patterns. You may experience a warm sensation in the abdominal and pelvic region when the dye is injected.

During the venogram procedure you will be given medicine through your IV to keep you comfortable but you will be awake. This type of anesthesia is frequently referred to as “twilight anesthesia” or

“conscious sedation”. Local anesthetic is usually given in the groin area where a needle will be inserted. A stinging sensation may be felt with the injection of local anesthesia. The catheter is threaded through this needle. A warm feeling may be felt when the injected dye spreads through the veins. You will be asked to stay still and not move so that the images that will be taken are clear. Afterwards, the catheter is removed and the area where the catheter was removed is pressed firmly for about 15 minutes to prevent bleeding. The venogram usually takes about an hour. The recovery time is typically 2-4 hours. Expect your total time in the office to take 4-6 hours. The dye is passed through the kidneys. There will be no noticeable change in the color or odor of your urine.

WHY DO WE PERFORM VENOGRAMS?

- Assess the status of a vein or system of veins
- Find blood clots within the veins
- Assess varicose veins before surgery
- Find a vein in good condition for a bypass procedure or dialysis access.
- Helps to place an IV or a medical device, such as a stent, in a vein



GENERAL RISKS AND BENEFITS OF ENDOVASCULAR PROCEDURES

At the Vascular Institute we pride ourselves in providing minimally invasive endovascular procedures to our patients. Our physicians and clinical staff are highly trained and efficient in delivering expert care in this field. There are general risks and benefits to all of these procedures.

WHAT ARE THE BENEFITS?

- Minimally invasive: Minimally invasive outpatient procedures require no hospital stay with a short recovery period. Most procedures allow patients to return to normal activity within a few days.
- Lower level of anesthesia: Patients remain comfortable with minimal anesthesia delivery under constant monitoring.
- High success rate: There is a high success rate of endovascular procedures with relief of symptoms.

WHAT ARE THE RISKS?

- Catheter-related risks: Any procedure that involves placement of a catheter inside a blood vessel carries certain risks. These risks include damage to the blood vessel, bruising or bleeding at the puncture site, and infection. The chance of any of these events occurring is rare.
- Allergy to X-ray contrast material: Patient may have an allergic reaction to the X-ray contrast material used during endovascular procedures. These episodes range from mild itching to severe reactions that can affect breathing or blood pressure. Patients having procedures are carefully monitored by a physician and a nurse during the procedure, so that any allergic reactions can be detected immediately and reversed.
- X-ray exposure: Endovascular procedures are done under X-ray. Exposure levels usually are well below those where adverse effects on the patient or future children would be a concern.

PREPARING FOR YOUR PROCEDURE

- 1.) You will need to have current blood work done and may be asked to have a chest X-ray and EKG prior to your procedure if indicated.
- 2.) Shave the bikini area/groin area the day before the procedure.
- 3.) Arrange for a responsible adult to drive you to the facility and home after your procedure.
- 4.) Do not eat or drink after midnight the night before your scheduled procedure.
- 5.) Take all of your medications with sips of water the morning of your procedure except for diabetic medications and other medications that you may be instructed not to take.
- 6.) If you are prescribed any special medications that need to be taken for your procedure, please take all doses prescribed and as ordered.
- 7.) Arrive at the office at your scheduled time.
- 8.) Please give at least 48 hours notice for rescheduling when possible. Please contact us as soon as possible for last minute conflicts.

WHAT WILL HAPPEN DURING YOUR RECOVERY?

1. The catheter will be removed from your groin area and direct pressure will be applied for 15 minutes.
2. You will need to lay flat and keep your leg straight for 30 minutes following the removal of the catheter.
3. Total recovery time is typically 2-3 hours.

DISCHARGE AFTER YOUR PROCEDURE

YOU MUST HAVE A RESPONSIBLE ADULT AVAILABLE TO DRIVE YOU HOME.

After your procedure most patients will be able to resume a fairly normal level of activity within a day or two of the procedure. We do ask that you adhere to the following care instructions. We value your health, well-being and comfort. If you do have any questions or issues related to your procedure please feel free to call the office. If it is after hours or on the weekend your call will go through to our answering service.

ACTIVITY RESTRICTIONS

Following your discharge, we ask that you please refrain from any heavy lifting (i.e. no more than 10 lbs.), straining, pushing or impact exercises (i.e. running, jogging, cycling) for the first 5 days following the procedure. You may walk, climb steps and possibly drive, so long as you do not have excessive bruising, swelling or pain at the puncture site. **NOTE: Do not drive and/or operate any type of machinery the day of discharge.**

MEDICATION

Outside of certain blood thinning agents, most medications can be continued immediately following your procedure. Medications such as Coumadin (Warfarin) and injectable Heparin/Lovenox are potent blood thinners that can cause delayed bleeding from the puncture site. We ask that these blood thinners be held for a period of time prior to the procedure. We will provide you with specific instructions.

DRESSING REMOVAL

You will be discharged with a dressing over the puncture site. This may be removed the next morning. Please inspect the puncture site daily for the first few days and notify us for any significant changes; especially bleeding and swelling with increased pain. Bruising around the area may be present.

If you do notice bleeding, swelling, or increase in bruising apply constant direct pressure over the area and seek medical attention immediately.

PAIN MEDICATION

Abdominal pain/lower back discomfort is typical for 1-2 weeks following the procedures and is best treated with NSAIDS (Ibuprofen, Motrin, Aleve, Advil, etc.). Warm compresses and heating pads to the abdominal region or lower back is also helpful in reducing the pain. Narcotic pain medication is not typically needed with these procedures. Prescriptions will be provided only when absolutely necessary.

SHOWERING & BATHING

You may shower 24 hours after your procedure. We ask that you refrain from soaking in a bathtub, hot-tub or pool until the puncture site is healed (about 5 days). Failure to do this may cause infection.

EATING & DRINKING

You may resume your normal diet following your procedure. We encourage you to drink lots of water and non-caffeinated beverages for the first 2 days after your procedure.

PLEASE CALL OUR OFFICE AT **1-866-356-9286** IF YOU NOTICE ANY OF THE FOLLOWING SIGNS OR SYMPTOMS:

- Increased swelling or bleeding at the puncture site.
- Swollen, painful calf with or without fever.
- Painful, cold leg or foot with or without discoloration.
- Increasing low back, abdominal, or leg pain.
- Redness, swelling and/or drainage from the puncture site with fever.
- Increased bruising down the leg or by the abdomen.

If you are unable to reach our office and have noticed any of the conditions bulleted in red to the right, please report to the nearest Emergency Room for prompt medical attention.