



WYOMING **VEIN** SPECIALISTS  
A Division of Casper Medical Imaging

**Don't Suffer** from the  
Pain of **Varicose Veins.**

**We Can Help.**



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## **Bulging, blue, and varicose veins hurt. Period.**

You are not alone. Nearly 25% of women and 15% of men suffer from painful varicose veins. Wyoming Vein Specialists provides a simple, effective, insurance approved, no-surgery way to treat varicose veins and take that pain away.

Varicose Veins are not difficult to diagnose; however, veins are often overlooked as “cosmetic” rather than given their appropriate attention as a medical disease. While it is true that varicose veins can be big, blue, and bulging, more often than not they are the source of significant leg pain. We treat your veins because it’s not necessarily how your legs look – it’s how they feel that impacts your lifestyle.

In most circumstances, varicose veins do not present an immediate health problem. However, if left untreated they could lead to complications like permanent skin changes, ulceration, and infection.



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# What are **Varicose Veins**?

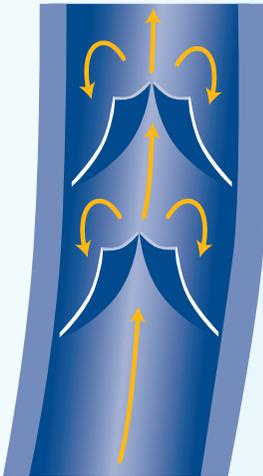
Varicose veins are dilated or swollen veins that are unable to do their job. The result is painful, tired, swollen and heavy legs.



## Where Do They Come From?

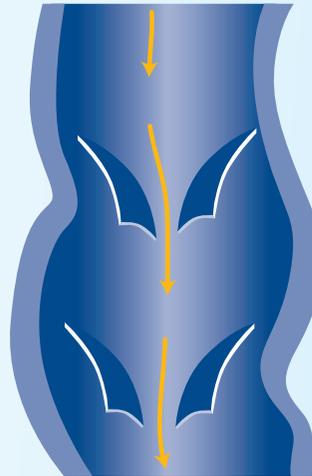
Veins in your lower extremities contain valves that keep blood moving in one direction – toward your heart. When these valves break, the blood flows with gravity in the wrong direction. This causes pressure to increase in the veins of the legs.

**Healthy Veins**



Valves open to allow blood through, and close to prevent blood from going back down the leg.

**Varicose Veins**



Damaged valves allow blood to flow backwards, where it pools in the legs.

Your body tries to reroute the venous blood into other veins, ultimately leading to the failure of more valves. As time goes on more and more veins “appear” and your symptoms worsen.

# The Symptoms

- Achy or heavy feeling in your legs
- Burning, throbbing, cramping and swelling in the calf/ankle
- Pain after sitting or standing for a long period
- Skin irritation and itching
- Ulcers near the ankle
- Darkening or discoloration of the skin in the lower legs and ankles

If left untreated varicose veins can turn into serious health complications with symptoms that include:

- Ulcers
- Infection
- Bleeding
- Inflammation and skin discoloration

# The Causes

- **Family History** - If your parents or grandparents had them, you are at an increased risk.
- **Gender** - Women have a higher incidence of varicose veins because of the effect of hormones on the vein walls.
- **Pregnancy** - Blood volume increases during pregnancy and hormonal effects contribute to vein enlargement.
- **Age** - The tissues of vein walls lose their resilience as you age, causing the valve system to fail.
- **Prolonged standing** - Work that involves standing for long periods of time increases the volume and pressure of blood in the lower limbs due to the effects of gravity.
- **Obesity** - Weight gain increases abdominal pressure, which can worsen vein problems.
- **Clots** - Prior episodes of superficial venous thrombosis can contribute to valve failure.
- **Physical Trauma** - Any injury to the lower limbs can damage underlying blood vessels and contribute to the problem.

# The Diagnosis

In addition to an accurate patient history, a focused physical examination is required to characterize the severity of venous disease. A special type of ultrasound imaging is the next step to determining the location of damaged venous valves, how the deep venous system participates in the overall picture, and how the anatomic layout of the superficial system is unique to each patient. This will require about an hour of time and is usually performed on a day separate from the clinical examination. The exam requires intermittent gentle compression of the calf, and sometimes thigh, in order to collect a comprehensive and detailed understanding of the venous system.

## Treatment Options

Our highly skilled board-certified interventional radiologists combine their clinical expertise with the latest techniques to eliminate the cause of your painful veins.

We offer minimally invasive treatments as an alternative to surgery that are well tolerated, safe, and effective.

Our treatments are performed in a sterile setting using only local anesthetic. There is virtually no downtime and there are very few risks.



# Laser Treatment

A single vein can be safely treated in about one hour. Sometimes it is necessary to treat multiple veins with laser ablation, which typically can be completed in one setting.

## What to Expect

- Prior to your laser treatment your deep and superficial veins will be mapped using ultrasound.
- On the day of your treatment the affected area will be prepped and draped in a sterile fashion.
- The skin overlying the refluxing vein is anesthetized and a small incision is made. Using ultrasound, a needle is advanced into the vein, a small wire is then fed through, and once the wire is in place a small tube (called a catheter) is inserted into the vein.
- The wire is removed and the laser fiber is advanced into the catheter. The tissues surrounding the vein are anesthetized by injecting local numbing medicine.
- The laser is turned on, the catheter and laser fiber are removed from the body slowly, and the limb is cleansed.
- Compression hose are necessary for 2 weeks following your treatment to ensure that the vein heals shut.
- After 6 weeks you will return to Wyoming Vein Specialists for a follow-up ultrasound to confirm proper healing. Over this time, the visible veins will decrease in size and the limb will feel better.

## After Laser Treatment

Aside from heavy lifting and vigorous exercise for the first two weeks, there are no restrictions. After laser therapy you will be given a short course of anti-inflammatory medications to reduce swelling and promote faster healing.

Technical and clinical success rates of laser treatment are excellent, and recurrence of reflux in the treated vein is rare.

## VenaSeal

The VenaSeal procedure is a venous closure technique that uses a special type of glue to seal the refluxing vein shut. This type of glue has been used in the treatment of numerous types of vascular conditions and has been proven to be safe for closing the lower extremity superficial venous system.

## What to Expect

- Prior to the closure of your vein your deep and superficial venous system will be mapped with ultrasound.
- The affected lower extremity will be prepped and draped in a sterile fashion. The skin overlying the refluxing vein is anesthetized and a small incision is made.
- Using ultrasound, a needle is advanced into the vein, a small wire is then fed through, and once the wire is in place a small tube (called a catheter) is inserted into the vein.
- The vein is glued shut using a slow injection and venous compression.
- You will return for a follow-up ultrasound to document closure. Over this time the visible veins will decrease in size and the limb will feel better.

## After VenaSeal

Technical and clinical success rates of venaseal are excellent and recurrence of reflux in the treated vein is uncommon. No compression hose are necessary, and you can return to normal activities immediately.

# Sclerotherapy

Many different liquid and foam agents have been successfully used to treat venous disease. Injections are performed with or without ultrasound. Your doctor will discuss with you the appropriate and safe agent for you.

## What to Expect

- Ultrasound is used to identify the abnormal veins.
- The skin overlying the refluxing vein is prepped, a small needle is inserted into the vein, and the sclerosant (typically a foam detergent) is injected into the vein.
- The skin is cleansed and compression hose are placed on the treated extremity.
- Each session takes approximately 15-30 minutes.
- More than one session may be required to treat your veins.

## After Sclerotherapy

Aside from heavy lifting and vigorous exercise for the first two weeks, there are no restrictions. Patients typically report little to no pain. Over the counter analgesic medications are only required if mild discomfort occurs, which is typically of short duration.

The damaged veins won't disappear immediately, but will gradually resolve over time. As with laser treatment, technical and clinical success rates of Sclerotherapy are excellent, and recurrence of the treated vein is uncommon.

# Your Doctor

Dr. Charles Bowkley III M.D. is an Interventional Radiologist who specializes in the diagnosis and treatment of varicose veins. A consultation with one of our physicians and a simple ultrasound can diagnose venous insufficiency.

## Charles W. Bowkley III, M.D.



- Joined CMI in 2010
- Board Certified  
*Interventional & Diagnostic Radiology*
- First Fellowship  
*Vascular & Interventional Radiology  
Brown University*
- Second Fellowship  
*Neurointerventional Radiology  
Johns Hopkins University*



We will walk with you until  
your legs are healthy again.



## Best of Care Close to Home

When it comes to providing quality around-the-clock patient care – local matters. The doctors and staff at Wyoming Vein Specialists are invested in their community. We pride ourselves on being your local team of radiology experts. We have the cutting-edge medical imaging technology, highly trained clinical staff, and board certified radiologists to provide you with personalized care, right here – close to home.

# FAQs

## What are the risks?

Risks are minimal with laser, VenaSeal, and Sclerotherapy treatments. However, bleeding, infection, damage to local structures, and deep vein thrombosis are reported in the literature and are extremely uncommon.

## What are the side effects?

There may be minimal bruising at the site of needle entry for laser ablation, VenaSeal, or sclerotherapy. Since the veins are going to undergo a series of steps for healing, there will be some discomfort along the length of treated vein for 1-2 weeks. After this early phase there will be a tight feeling associated with the treated vein that will gradually fade over time. A small percentage of patients will have a local response to the glue that can be easily treated with anti-inflammatory medication.

## How soon will I see results?

Veins take time to heal. However, many patients have stated that despite the minimal discomfort following the procedure they are aware that the heaviness has already begun to immediately improve.

## Is the loss of this vein a problem?

No. When the vein is refluxing, it is causing problems. Once the vein is treated, it can no longer hurt you. We often are asked what happens to the blood that the treated vein used to carry? After treatment, the blood in the broken veins will be diverted to the deep venous system and carried back to your heart naturally.

## What will happen if I do nothing?

While not currently life threatening, there are several severe health problems that can develop over time if these veins aren't eliminated. Some of these problems include: blood clots, permanent darkening or discoloration of the skin in the lower legs and ankles, skin ulcers near the ankle, bleeding, or stasis dermatitis (an inflammatory skin disease). If you develop any of these conditions, see your physician immediately.

## How successful is laser treatment?

Published clinical studies and our experience show that laser treatment has a 99% success rate with excellent long-term results.

## How successful is VenaSeal?

95% of veins treated with VenaSeal are completely eradicated.

## How successful is Sclerotherapy?

The lower extremity venous system is complex. While sclerotherapy is very effective, more than one session of injections is typically required to eradicate symptomatic veins.

## Insurance Coverage

We understand that insurance coverage for the diagnosis and treatment of varicose veins is an important concern. The majority of varicose vein treatments are covered by third party payers, insurance companies, as well as Medicare and Medicaid.

## How do I make an appointment?

Call (307) 232-5022 to schedule your personalized evaluation.



ACTUAL WYOMING VEIN SPECIALISTS PATIENT



# WYOMING VEIN SPECIALISTS

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**Schedule** (307) 232-5022

**Nurse** (307) 232-5043

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[www.wyomingveinspecialists.com](http://www.wyomingveinspecialists.com)