**LASER TREATMENT IN GENERAL SURGERY (Piles and Varicose Veins)**

**Laser treatment for Piles**

**Overview:**

**Piles** (Bavasir), clinically known as Hemorrhoids, is the swelling of the blood vessels near the anal opening. An increased pressure on these blood vessels due to any reason, causes them to enlarge and swell, thus forming lumps which are occasionally felt at the anal opening.

**Causes Of Piles:**

* [Constipation](https://www.healinghandsclinic.co.in/constipation-treatment-centre/)- Most common cause
* Hard stools/ Straining during bowel movement
* Faulty toilet habits
* Family history
* Pregnancy and childbirth
* Lifting heavy weights
* Obesity

**Symptoms Of Piles:**

* Painless bleeding while passing stools
* Feeling a lump outside the anus
* [Pruritus ani](https://www.healinghandsclinic.co.in/blog/mulvyadh/pruritus-ani-embarrassing-itch/) or itching around the anus
* Faecal soiling of undergarments
* If a blood clot forms in the hemorrhoid (Thrombosed hemorrhoid) it leads to a severely painful swelling which worsens with bowel movement and sitting.

**Diagnosis Of Piles:**

A medical history followed by visual examination of the anus is usually enough. However, a digital examination and Proctoscopy (a scope is inserted to examine the anal canal) is done to confirm the diagnosis. At times a Barium study or [Colonoscopy](https://www.healinghandsclinic.co.in/colonoscopy/) may be advised if any other cause of bleeding is suspected it needs to be ruled out.

**Types of Haemorrhoids:**

**External**

If not [thrombosed](https://en.wikipedia.org/wiki/Thrombosis), [external hemorrhoids](https://en.wikipedia.org/wiki/External_hemorrhoids) may cause a few problems

**Internal**

Internal hemorrhoids usually present with painless, bright red [rectal bleeding](https://en.wikipedia.org/wiki/Rectal_bleeding) during or following a bowel movement.

**Who Should Undergo Laser Treatment for Piles?**

Piles, medically known as hemorrhoids, are divided into 4 grades depending upon their severity:

**Grade 1**: is the initial stage where a person has bleeding or itching but no prolapse.

**Grade 2:** is where the mass of haemorrhoids begins to come out of the anal opening (prolapse) during defecation but goes back in, on completion of the act.

**Grade 3:** the prolapsed haemorrhoidal mass does not go back on its own, but needs to be manually pushed back.

**Grade 4:** prolapse with inability to be manually reduced.

**Most of the cases of Grade 2, Grade 3 and early stages of Grade 4 hemorrhoids are treated with Laser Hemorrhoidoplasty.** Grade 4 requires  [MIPH (Minimally Invasive Procedure for Hemorrhoids)](https://www.healinghandsclinic.co.in/stapler-surgery-for-piles/) or PPH (Procedure for Prolapse and Hemorrhoids) or Stapler Hemorrhoidopexy

**LASER treatment for Piles or**[**Laser hemorrhoidoplasty (LHP)**](https://www.healinghandsclinic.co.in/laser-surgery-for-piles/)

Laser Hemorrhoidoplasty is the preferred treatment for Grade 2, Grade 3 and early stages of Grade 4 Piles. We use world best Diode laser machine (LASOTRONIX). This procedure is done under short general anesthesia and takes about 20 minutes. Through the natural anal opening, laser energy is applied using a special radially emitting fibre. The controlled emission of laser energy causes vaporization leading the haemorrhoidal mass to shrink

**Advantages of LASER:**

* No cuts, no open wounds
* Less post-operative pain as compared to other procedures
* Healing is excellent as there are no cuts or stitches
* No sense of urgency (need to rush to the toilet) after the procedure
* No risk of rectal stenosis
* Patient can return to normal activities within a shorter space of time

**Potential drawbacks of LASER:**

* Burning sensation

**Laser Has Remarkable Benefits:**

* **As mentioned earlier, Laser Hemorrhoidoplasty has no cuts or incisions.**
* **The post-operative pain is a lot less compared to other procedures. In fact, patients describe it more as 'burning' rather than pain, which lasts around 3-4 days.**
* **Healing is excellent as there are no cuts or stitches**
* **There is no urgency (a feeling of having to rush to the toilet) after the procedure.**
* **There is no risk of rectal stenosis.**
* **Being a simple procedure, one can return to normal activities within a short span of time (3rd day in case of sedentary job)**

**Laser Treatment for Varicose Veins**

**Overview:**

Varicose veins are veins under the skin that have become **swollen, twisted, and bulging**. They are **usually seen in the legs and feet.** They are quite common, and most of the time do not cause any problems. However, they can be disfiguring and be a cause for cosmetic concern in females.  
The veins of the lower limb have one-way valves that keep the blood moving toward the heart and prevent its backflow. If the valves are weak or become damaged, blood can back up and pool in the veins. Over time, the continuous pooling causes the veins to become stretched, swollen, and tortuous. Raised pressure in these veins also causes the development of spider veins and discoloured areas which look like bruises.

**Causes Varicose of Veins:**

* Varicose Veins are a relatively common condition and may run in families.
* It is more common in females with women twice as likely as men to develop them. This is because of **hormonal factors like puberty, pregnancy, menopause, and the use of birth control pills.**
* It is also seen in people who have to stand for long hours **e.g. Bus conductors, teachers**
* Other factors include **aging, obesity, lack of exercise, and leg injury.**

**Symptoms/problems of Varicose Veins:**

Most of the time and especially in the early stages, varicose veins do not cause any symptoms and do not interfere with day-to-day activities. However, at any stage, they do pose a cosmetic problem giving the legs an unsightly appearance. This is especially troublesome in females.  
Other than the aesthetic problem, the symptoms could include a **dull ache, a feeling of heaviness in the legs especially on standing or sitting for a long time, cramping, and a throbbing pain**. There may be **swelling of the ankles and feet**, especially towards the end of the day. There may be **pruritus (itching)** in the area of the ankles and feet and the skin in that part may become discolored.

**Complications of Varicose Veins:**

Although not too serious or life-threatening, varicose veins can lead to the following complications:

* **Thrombophlebitis**  
  This is an inflammation of the veins in which a blood clot can form in the affected veins. It causes pain and other problems in the affected area.
* **Varicose eczema / Dermatitis**  
  In long-standing cases, the skin around the ankles becomes dry, itchy, and discolored. The resultant scratching may further lead to bleeding, erosions, and painful ulceration. These ulcers do not heal easily and over the years can cause cancerous skin changes.
* **Bleeding**  
  Although there is a risk of bleeding as a result of even mild trauma to the swollen superficial veins, it is never worrisome and can be easily controlled.
* **Lipodermatosclerosis**  
  The skin around the ankles loses its elasticity and becomes hard. The skin becomes dark brown with areas of white scarring. Sometimes the skin can become acutely inflamed, red, and sore and needs immediate attention.

***Note: Those with diabetes should get their Varicose Veins treated at the earliest and not wait for them to reach an advanced stage as complications are worse in those with high sugar levels.***

**Diagnosis of Varicose Veins**

Varicose Veins are usually diagnosed by a simple physical examination. However, other tests are needed to assess the extent of the problem and rule out any other condition. Most commonly you will be advised to do a Venous Colour Doppler by your doctor.

**LASER Treatment of Varicose Veins**

**Endovenous Laser Ablation (EVLA)**

**Laser** is a versatile, highly compact diode laser with dual-wavelength. The radial fibres are used in this procedure which increases the precision of the technique. This highly advanced laser was first introduced in this region at Jeevan Jyoti Hospital Prayagraj.  
  
Varicose vein **surgeries with Laser are extremely effective**: With the 2-phase radial emission of energy through the radial fibres, the energy can be applied homogeneously to the vessel wall. Thus, the vein is sealed accurately. The risk of perforating the vein wall is minimized, and side effects of typical varicose vein treatments rarely occur. The radial fibre with an atraumatic fibre tip is inserted into the affected vein through a small puncture. Due to the perfect view via ultrasound, the fiber can be monitored and placed perfectly well.  
  
The **whole treatment takes approximately 30-45 minutes**. During the treatment as well as afterwards the patient hardly feels any discomfort. Patients can return to their daily activities on the next day of the treatment.

**Why Choose Us?**

Laser treatment for both piles (hemorrhoids) and varicose veins at Jeevan Jyoti Hospital is being done with the world’s best LASER machine imported from Europe and our Surgeon is renowned & experienced in Laser treatment.