

# EDITORIAL

## LASER IN PROCTOLOGY

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Laser means light amplification by stimulated emission of radiation. A laser is a device that emits light through a process of optical amplification based on the stimulated emission of electromagnetic radiation. The first laser was built in 1960 by Theodore Maiman at Hughes Research Laboratories, based on theoretical work by Charles H. Townes and Arthur Leonard Schawlow. Laser surgery or laser therapy is a day-care procedure that offers several advantages over traditional surgery. Advantages of laser are less operation time, discharge within a few hours-Back to routine life in 3-5 days, greater surgical precision, suture less treatment with no scars, fastest recovery as there are no cuts or stitches, quick relief from the symptoms, less blood loss during surgery, no or minimal post-operative pain, reduced risk of infection, reduced risk of rectal stenosis or prolapsed, aesthetically the best procedures – helps as a confidence-booster for the patient, the anal sphincter action is well preserved, no chances of incontinence fecal leak, least recurrence rates, fewer doctor visits post-surgery, high success rates, no need for general anesthesia, local or spinal anesthesia is applicable for this surgery.

In proctology we are using diode laser to treat hemorrhoids, chronic anal fissure, fistula in ano, pilonidal sinus and polyps.

The technique is increasingly being used to treat piles in both women and men. During the surgery a high energy laser is used to operate on the affected tissue. This makes the procedure scar less, bloodless and painless. We use 1470nm wavelength, 400ms pulse time 8w, 2Hertz laser to treat hemorrhoids. They also experience less bleeding, itching, and swelling around the anus and inside the rectum. Recovery from stapler surgery is quick and is linked to fewer complications. Laser surgery is the safest and most effective surgical option to treat piles.

Laser procedure is a simple, economical and novel method to cure complex fistula-in-ano. In fistula we use 12w, 1 amp, 0.5Hertz laser. For simple fistula we do fistula laser closure (FiLaC) and distal laser proximal ligation (DLPL) for complex fistula. It is associated with little pain, low morbidity and minimal risk of incontinence as both the anal sphincters are completely preserved. Laser treatment can offer relief from pain caused by the fissure and can also help reduce strain caused by the movement. We use 7w, 500ms pulse laser for fissure ablation and laser internal

sphincterotomy. The treatment with lasers for fissure is sought-after due to its advantages over open surgery as a traditional procedure.

The fate of laser therapy is promising. We hope laser will replace the traditional procedure in future to treat different diseases in proctology.

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