

## Ambulatory Carbon Dioxide Laser Haemorrhoidectomy Without Disability

Sir,

Haemorrhoids are part of the normal human anal anatomy<sup>1</sup>. They can give rise to troublesome symptoms, namely bleeding, protrusion and pain. 80% of these patients respond to medical treatment, sclerotherapy, rubber banding or infrared coagulation. Surgical haemorrhoidectomy is necessary for the remaining symptomatic patients.

The complications of conventional haemorrhoidectomy are largely related to severe pain, bleeding, fissure, stenosis, infection and recurrence. Because of these, the patients have considerable fear and anxiety towards haemorrhoidectomy.

Ambulatory haemorrhoidectomy using carbon dioxide laser is an effective treatment with minimal post-operative pain and complications<sup>2</sup>. The post-operative care is also simplified.

A small series of 20 patients treated this way is presented. These patients elected for this method for 2 main reasons, namely, financial constraint and a desire to be discharged home on the same day. Eighteen patients had third degree and two had fourth degree thrombosed haemorrhoids. The operations were performed under sedation in eight and under general anaesthesia in twelve patients. The patients were placed in the lithotomy position. The anal area was infiltrated with 10 mls of 2% lignocaine with 10 mls of 2% lignocaine in 1:200,000 epinephrine. The duration of the operation was between 20 and 40 minutes.

As it was a day-case surgical procedure it was very important to prevent any untoward post-operative complications, the most important of which were bleeding and excessive pain. The dissection had to be performed meticulously. The largest haemorrhoid was removed first. The remaining haemorrhoids could then be easily removed.

A 2/0 Vicryl suture was placed at the proximal extent of the haemorrhoidal pedicle to be removed. This suture acted as a valuable landmark during proximal dissection, which could be difficult to appreciate, as the tissues could flatten during surgery. This suture also helped to prevent potential arterial bleeding.

The carbon dioxide laser is very suitable for haemorrhoidectomy because of its very predictable biologic effect, with minimal damage to adjacent normal tissue, good haemostasis and surgical precision<sup>3</sup>.

The power was set between 15-25 watts in the continuous wave. Two haemostats were attached to the largest haemorrhoid were drawn to the opposite side to stretch the skin of the anus. The haemorrhoid was then mobilised by cutting across the skin from the lumen of the anus. The pedunculated pedicle was transfixed with the 2/0 Vicryl suture twice, leaving sufficient cuff of tissue to guard against suture slipping.

The same procedure was repeated in the other haemorrhoidal positions as required.

Even though a near bloodless surgery could be easily accomplished, the wound was thoroughly inspected for bleeding. A sofratulle gauze was left in the anal canal.

For pain relief, 500 mg of oral mefenamic acid were given. The patients usually took discharge 3 to 4 hours after surgery. The medication on discharge was 500 mg of mefenamic acid for pain relief when necessary, 10mls of liquid paraffin per day for 5 days and ampicillin 500mg six hourly for a week. The patients had free access to surgeon. They were asked to return in 3 weeks. They were advised to have frequent warm water Sitz bath.

None of the patients sought further medical attention on the night of the operation. When seen 3 weeks later most of the wounds had nearly healed.

As the post-operative care of carbon dioxide laser haemorrhoidectomy is simple it offers considerable benefit to the surgical treatment of haemorrhoids.

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**References**

1. Mazier WP. Haemorrhoids, Fissures and Pruritis Ani. *Surgical Clinics North America* 1994;74(6) : 1277-92.
2. Enders JC, Steinhagen RM. Lasers in Anorectal Surgery. *Surgical Clinics North America* 1994;74(6) : 1415-32.
3. Iwagaki H, Higuchii Y, Fuchimoto S, Orita K. The Laser Treatment of Haemorrhoids: Results of a Study on 1816 Patients. *Jap J Surg* 1989;19(6) : 658-61.