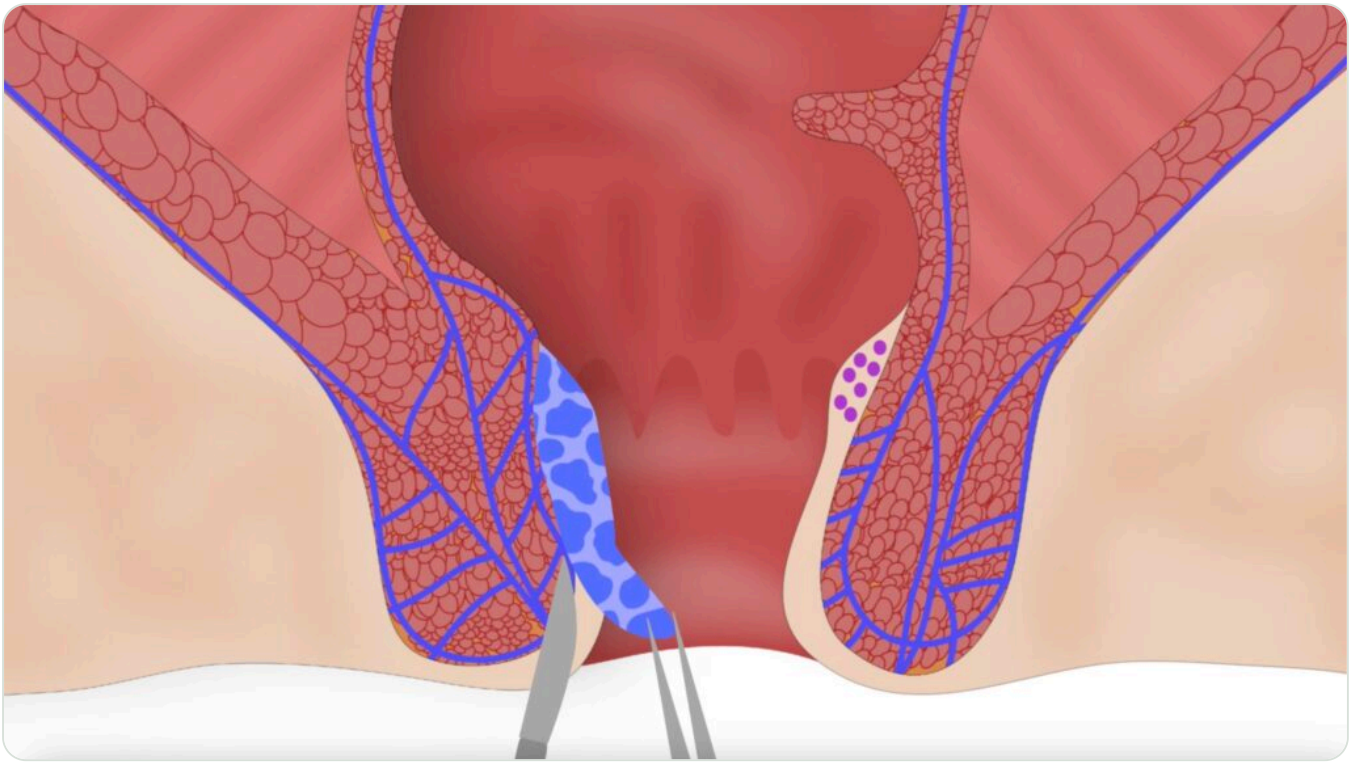
Surgical Treatment of Haemorrhoids: From Milligan-Morgan to Modern Techniques



surgical treatment of haemorrhoids

Surgical treatment of haemorrhoids - **Milligan-Morgan**

When conservative treatments such as fibre supplements, laxatives, and local anaesthetic ointments are no longer sufficient, or if the patient experiences recurrent **rectal bleeding** and painful prolapse, surgical treatment of haemorrhoids becomes a necessity.

The choice of surgical strategy depends on the severity of the haemorrhoids (Grade I-IV) and the patient's individual profile.

Small haemorrhoids can be treated using the Milligan-Morgan technique under local anaesthesia

Indications for surgery

Surgical **treatment of haemorrhoids** is primarily considered in the case of:

- **Grade III and IV haemorrhoids:** Where the tissue prolapses (falls out) and must either be manually pushed back into place or is permanently fixed outside the anal canal.
- **Refractory bleeding:** Persistent bleeding from the rectum leading to anaemia or significantly reduced quality of life, where other treatments have not yielded the desired results.

The Gold Standard: Milligan-Morgan (Open Haemorrhoidectomy)

The Milligan-Morgan technique, developed in 1937, is still considered the "gold standard" due to its extreme effectiveness and low recurrence rate.

The Procedure

Kirurgen.dk dissects the three primary haemorrhoidal cushions and ligates the feeding arteries. Subsequently, the diseased tissue is removed, and the wound is left open (excision according to Milligan-Morgan). This ensures drainage and minimises the risk of deep infections.

Advantages:

- Lowest risk of recurrence compared to less invasive methods.
- Highly effective for both internal and external components.

Disadvantages:

- Significant postoperative pain (due to wounds in the pain-sensitive part of the anal canal).
- Longer healing time (typically 4-6 weeks).

Alternative Surgical Methods

To reduce postoperative pain, techniques have been developed that operate above the "dentate line" (linea dentata), where the nerve supply is less sensitive.

1. Ferguson (Closed Haemorrhoidectomy)

Similar to Milligan-Morgan, but the mucosa is sutured closed after removal of the tissue.

- **Advantage:** Faster wound healing.
- **Disadvantage:** Increased risk of wound dehiscence and infection (abscess).

2. Stapled Haemorrhoidopexy (Longo Procedure)

A circular stapler is used to remove a ring of mucosa above the haemorrhoids themselves, which "lifts" them back into place and interrupts the blood supply.

- **Advantage:** Significantly less pain and a quick return to work.
- **Disadvantage:** Higher risk of recurrence and specific complications such as rectal perforation (though rare).

3. THD / HAL (Transanal Haemorrhoidal Dearterialisation)

An ultrasound-guided technique where the arteries supplying the haemorrhoids are located and ligated.

- **Advantage:** Minimally invasive, no skin wounds, very little pain.
- **Disadvantage:** Less effective for very large, fixed Grade IV haemorrhoids.

Comparison of Advantages and Disadvantages

Method	Pain Level	Recurrence Risk	Healing Time
Milligan-Morgan	High	Very Low	4-6 weeks
Longo (Stapler)	Low/Medium	Medium	1-2 weeks

Method	Pain Level	Recurrence Risk	Healing Time
THD/HAL	Low	Medium	< 1 week

Postoperative care after Milligan-Morgan surgery

Following an open haemorrhoidectomy, the goals are to ensure pain control, keep stools soft, and promote wound healing in the open area.

1. Pain Management (Analgesics)

Pain is the greatest challenge after treatment of haemorrhoids with this method.

- **Combination Therapy:** A fixed regimen of paracetamol and NSAIDs (e.g., Ibuprofen) is typically used to cover baseline pain.
- **Stronger Painkillers:** For the first 3-5 days, opioids (e.g., Tramadol or Oxycodone) may be necessary.
  - *Caution:* Opioids cause constipation, which can make the first bowel movement very painful.
- **Local Anaesthetic Ointment:** Application of lidocaine gel before and after bowel movements can provide short-term relief.

2. Bowel Regulation and Diet

It is crucial that the first bowel movement (typically 1-3 days after surgery) is soft.

- **Laxatives:** Patients are routinely prescribed osmotic laxatives (e.g., Magnesium Hydroxide or Macrogol) to avoid hard stools and straining.
- **Diet:** A high-fibre diet (vegetables, whole grains) combined with plenty of fluid intake (2-3 litres daily) is essential.
- **Habit:** Avoid sitting too long on the toilet as this increases pressure on the operated areas.

3. Hygiene and Wound Care

Since wounds in Milligan-Morgan surgery are left open, cleanliness is important to prevent infection.

- **Sitz Baths:** It is often recommended to take lukewarm sitz baths (or rinse with a shower head) 2-3 times daily and always after bowel movements. This cleanses the wound and can have a relaxing effect on the sphincter muscle, reducing spasms and pain.
- **Dressing:** A simple absorbent dressing (gauze swab) is used to absorb wound fluid, which is normal during the first few weeks.

4. When to Seek Medical Advice?

Although a small amount of fresh **rectal bleeding** is normal during the first bowel movements, the patient should react if they experience:

- Heavy or persistent bleeding.
- Fever or increasing swelling and redness (signs of infection).
- Inability to pass urine (urinary retention is a known, though temporary, side effect).

Sources (PubMed-based)

1. **Brown S.R.** (2017). *Haemorrhoids: An update on management*. Therapeutic Advances in Chronic Disease. PMID: 28670481
2. **Lohsiriwat V.** (2012). *Hemorrhoids: From basic pathophysiology to clinical management*. World Journal of Gastroenterology. PMID: 22611310
3. **Salfi R., et al.** (2020). *Milligan-Morgan hemorrhoidectomy: still the gold standard?* Reviews on Recent Clinical Trials. PMID: 32204732
4. **Watson A.J., et al.** (2016). *Hemorrhoidal artery ligation versus rubber band ligation for the management of third-degree hemorrhoids (HubBLe): a multicentre, open-label, randomised controlled trial*. The Lancet. PMID: 27233860
5. **Burch J., et al.** (2008). *Stapled haemorrhoidopexy for the treatment of haemorrhoids: a systematic review*. Health Technology Assessment. PMID: 18331705
6. · **Joshi G.P., et al.** (2010). *Techniques for managing postoperative pain after hemorrhoidectomy*. Current Opinion in Anaesthesiology. PMID: 20644415

7. · **Gallo G., et al.** (2020). *Consensus statement of the Italian society of colorectal surgery (SICCR): management and treatment of hemorrhoidal disease*. Techniques in Coloproctology. PMID: 32036511
8. · **Moesgaard F., et al.** (1982). *High-fiber diet reduces the recurrence of hemorrhoids: a randomized trial*. Diseases of the Colon & Rectum. PMID: 6754359
9. · **Sjödahl R., et al.** (2015). *Postoperative pain and quality of life after hemorrhoidectomy*. International Journal of Colorectal Disease. PMID: 25433653