TREATMENT OF GRADE III HEMORRHOIDS

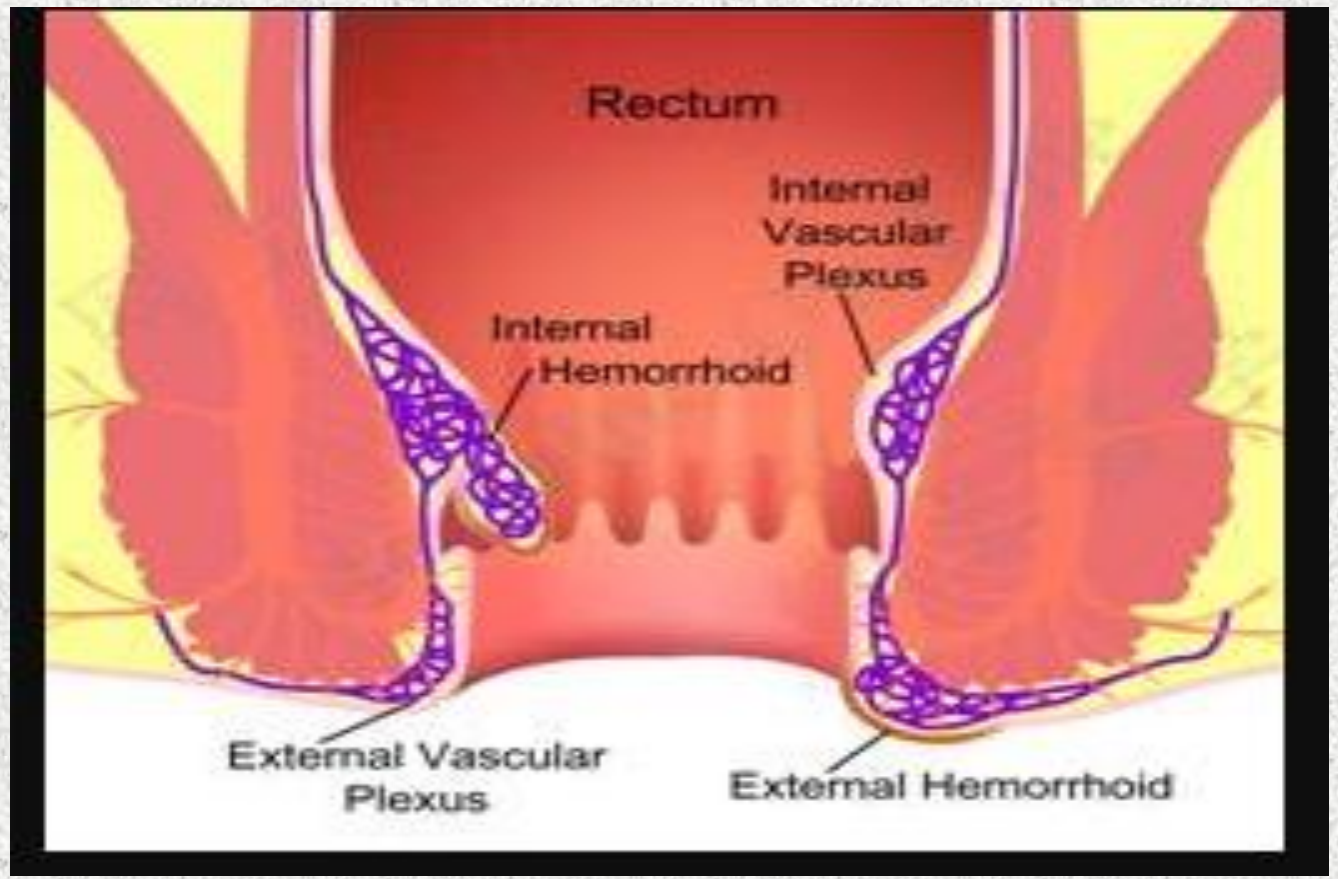
By

Radwan A. Torky, MD

Lecturer of general & colorectal surgery

Assiut University

2021


Rectum
Internal Vascular Plexus
Internal Hemorrhoid
External Vascular Plexus
External Hemorrhoid

Background

- Normally there are 3 main anal cushions :

  left lateral,

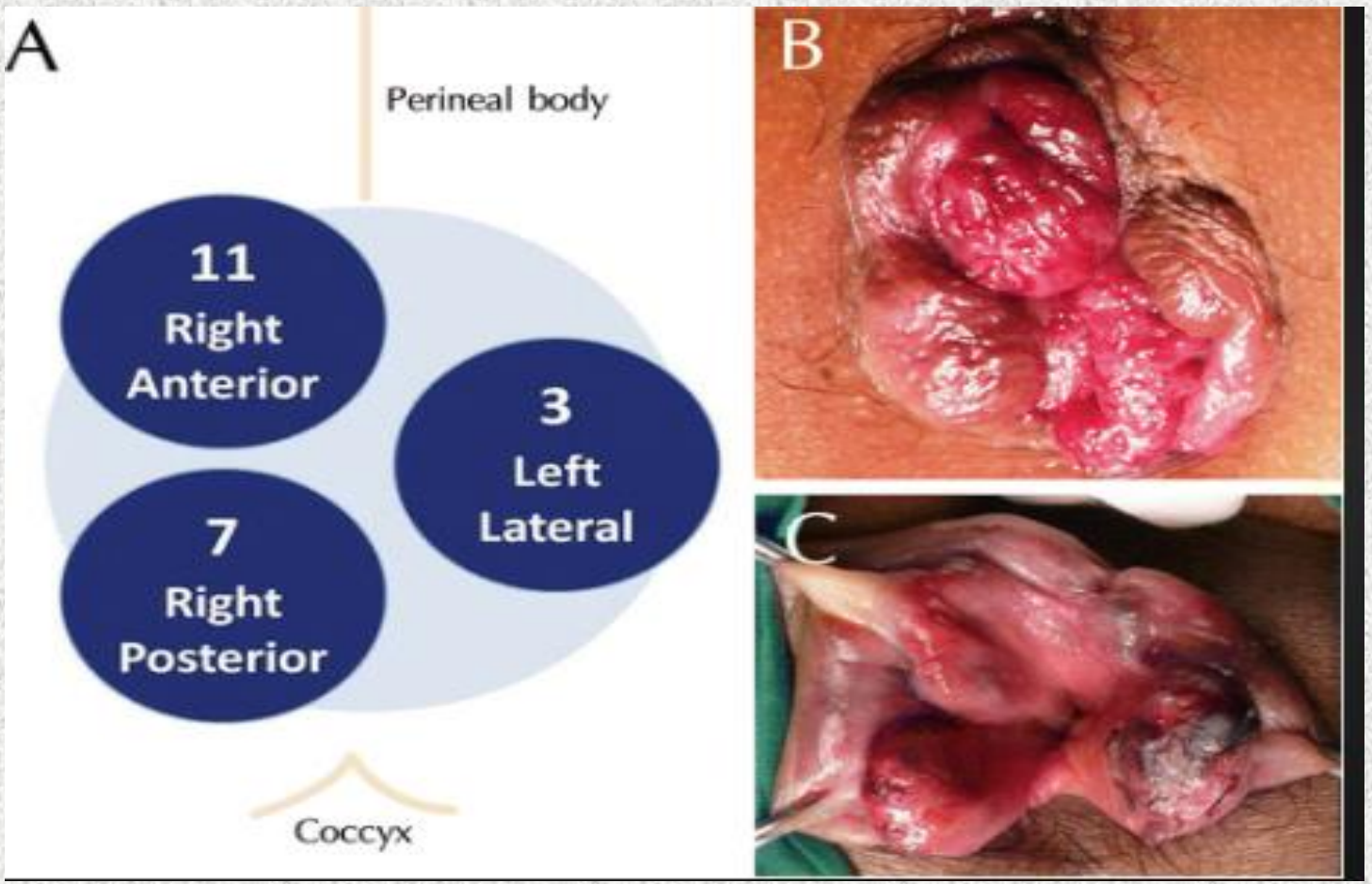
  right anterior,

  right posterior

- Currently, hemorrhoids is the pathologic term describing symptomatic and abnormally downward displacement of normal anal cushions

So

“Abnormal haemorrhoids are dilated cushions of arteriovenous plexus with stretched suspensory fibromuscular stroma with prolapsed rectal mucosa”


A
Perineal body
11
Right
Anterior
3
Left
Lateral
7
Right
Posterior
Coccyx
B
C

Risk factors

Habitual

1. Constipation and straining
2. Low fibre high fat/spicy diet
3. Prolonged sitting in toilet
4. Pregnancy
5. Aging
6. Obesity
7. Office work

Pathological

1. Chronic diarrhea (IBD)
2. Colon malignancy
3. Portal hypertension
4. Spinal cord injury

"you don't defecate in the library, so you shouldn't read in the bathroom".

classifications

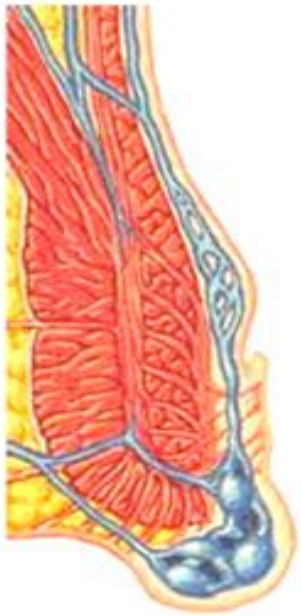
Origin in relation to Dentate line

- Internal: above DL
- External: below DL
- Mixed

Degree of prolapse through anus

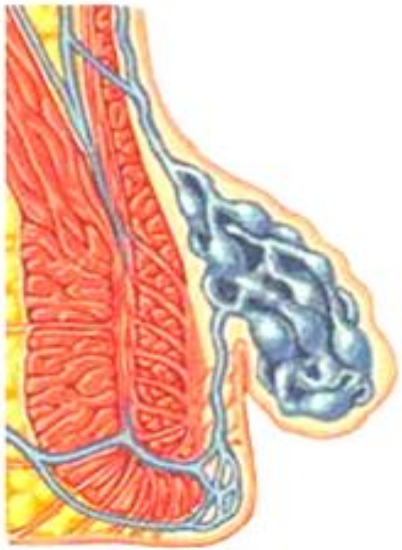
- 1st: bleed but no prolapse
- 2nd: spontaneous reduction
- 3rd: manual reduction
- 4th: not reducible

External hemorrhoid



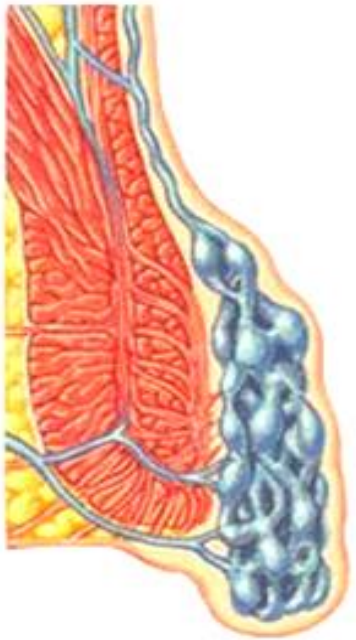
Origin below dentate line
(external rectal plexus)

Internal hemorrhoid

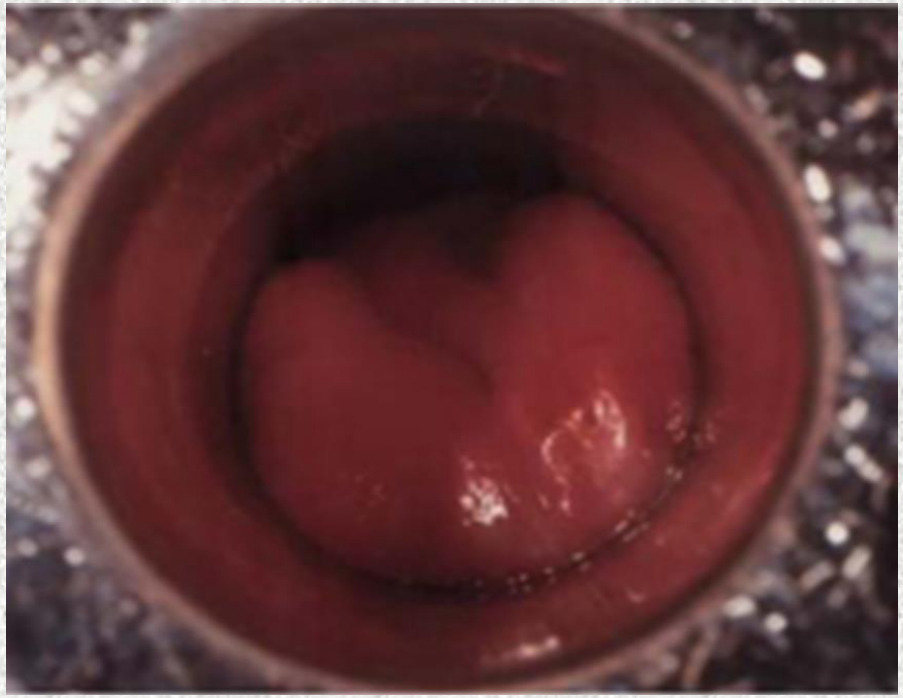


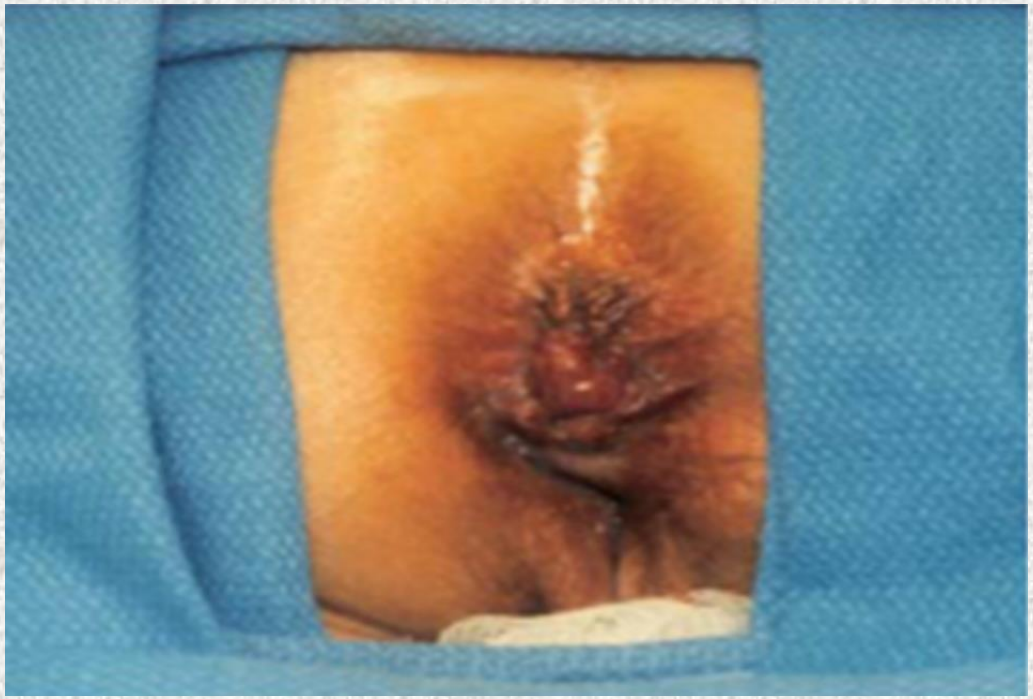
Origin above dentate line
(internal rectal plexus)

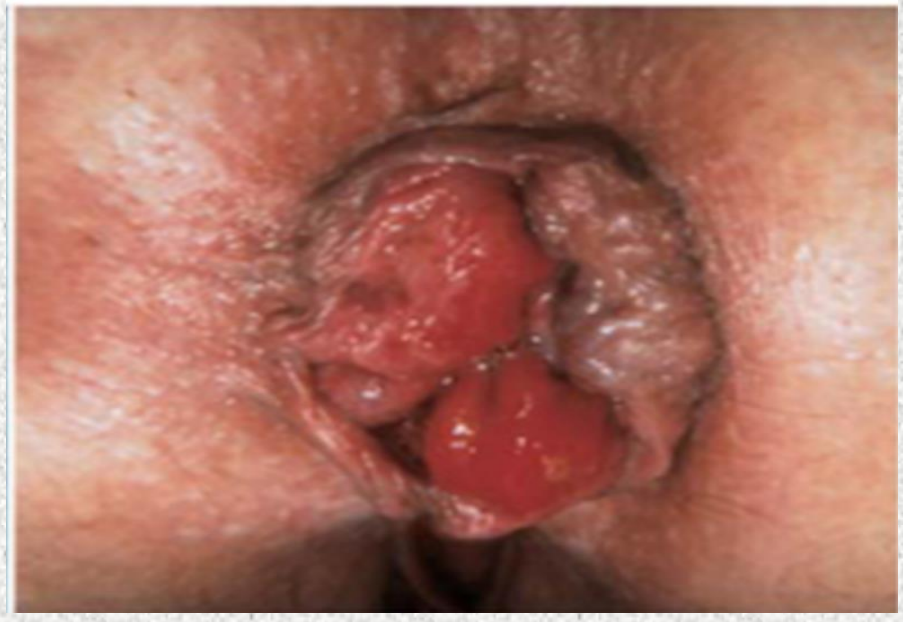
Mixed hemorrhoid

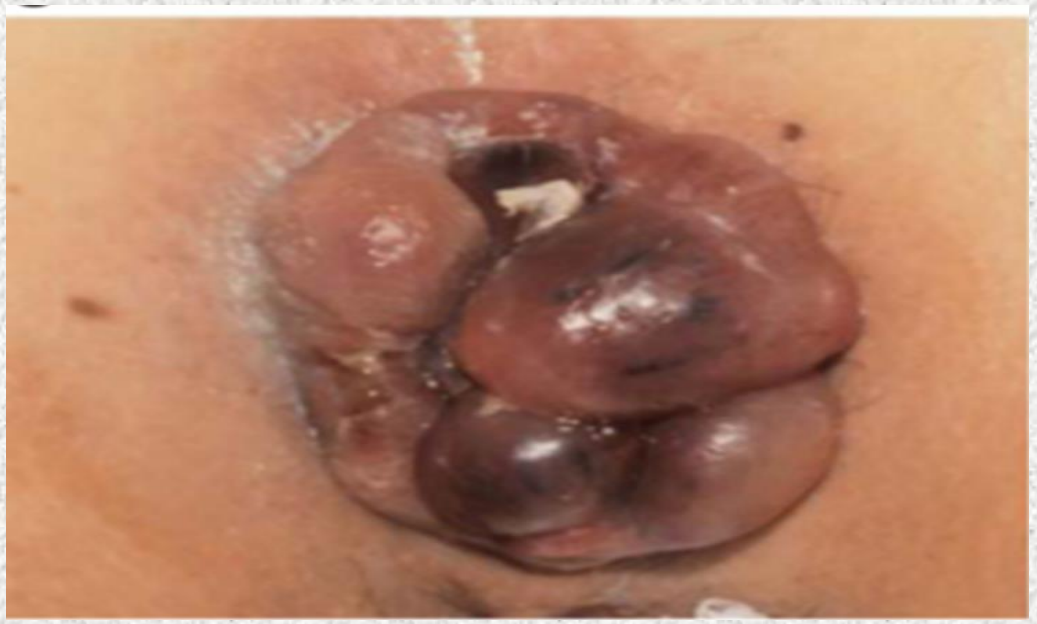


Origin above and below dentate line
(internal and external rectal plexus)



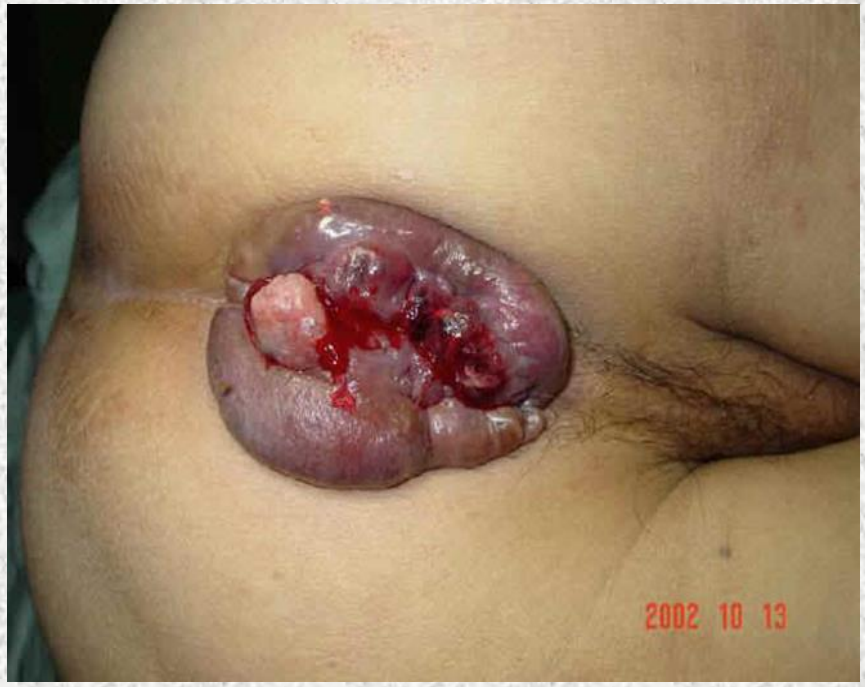






complications

1. Thrombosis
2. strangulation
3. Ulceration
4. Sepsis and abscess formation
5. Incontinence



Protocol of management of grade III hemorrhoids according to the ASCRS and the ESCP guidelines

- Medical treatment
- Office treatment
- Surgical hemorrhoidectomy
- Newer techniques

Medical treatment

- Dietary modification
- Counseling regarding defecation habits
- Medical treatment as phlebotonics e.g diosmine
- Local anaethetics and steroids

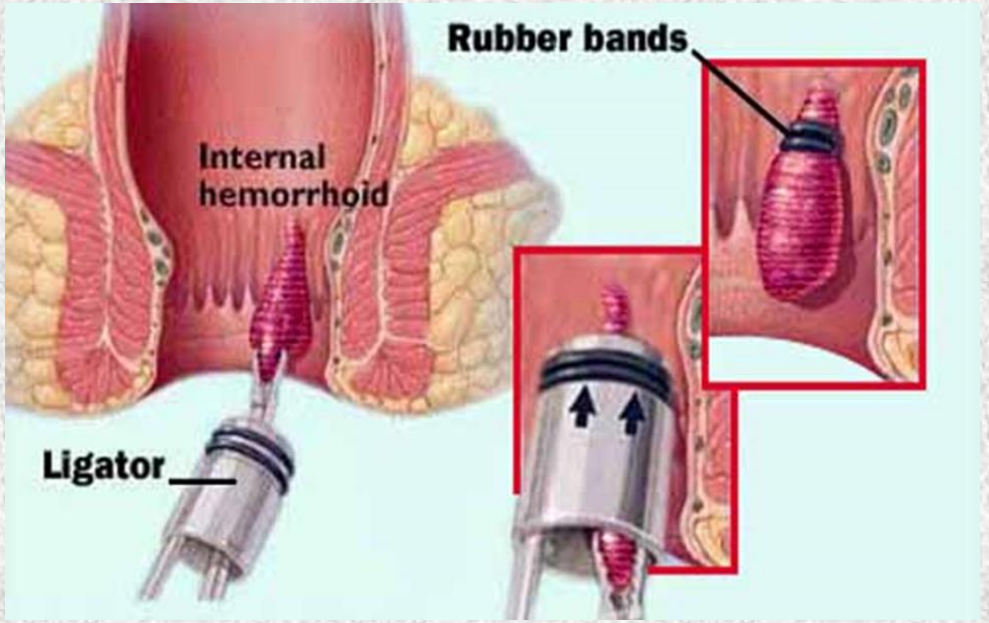
Office treatment

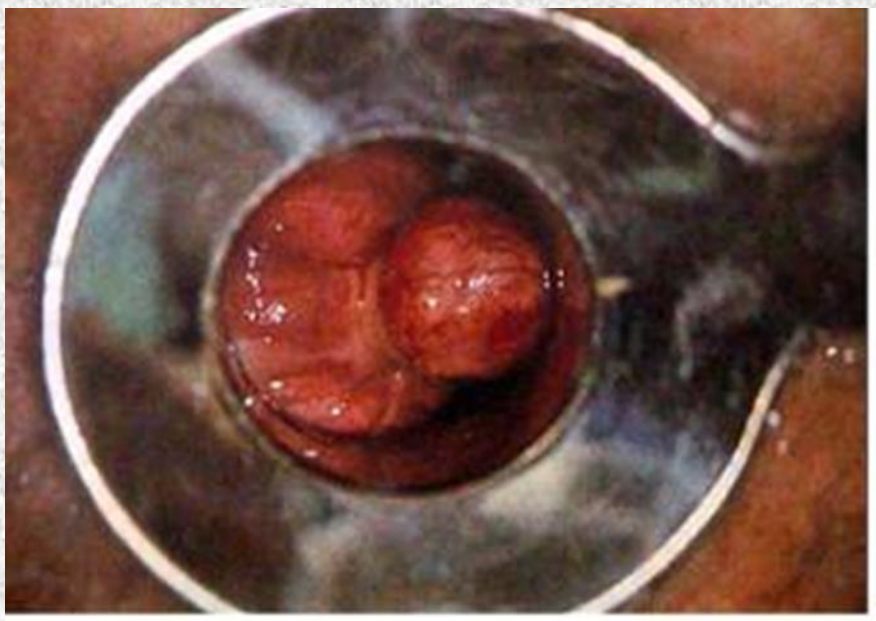
- **Indications:**

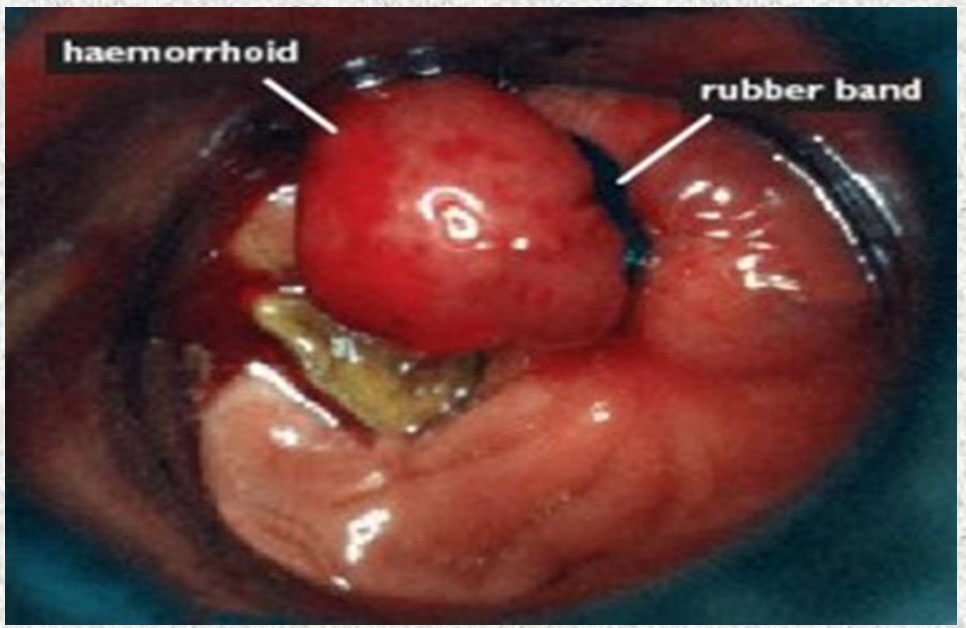
  after failure of medical treatment.

- **Options:**

  1. banding
  2. sclerotherapy (only success in 20%)

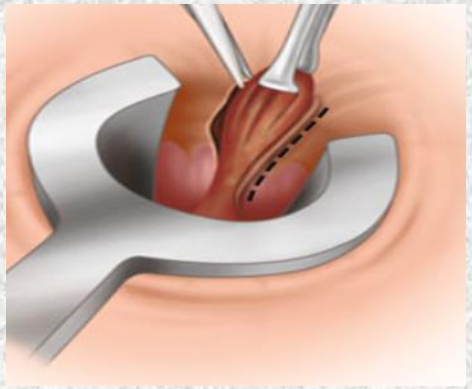
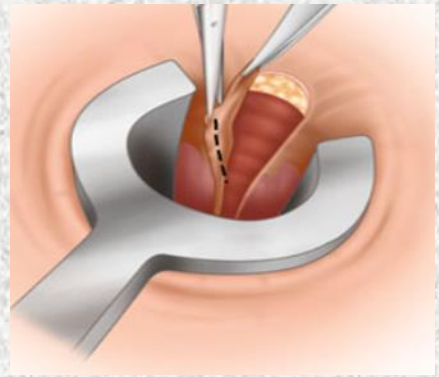
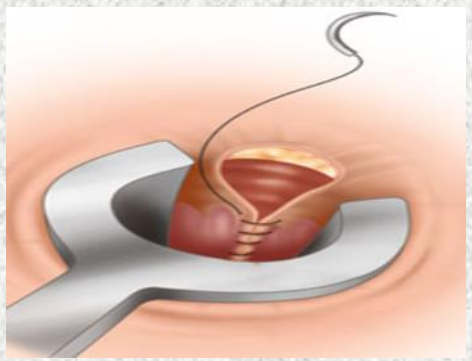
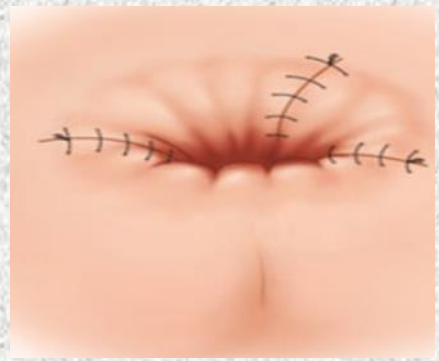

Rubber bands
Internal hemorrhoid
Ligator



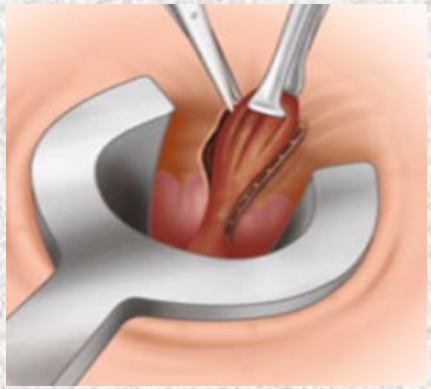
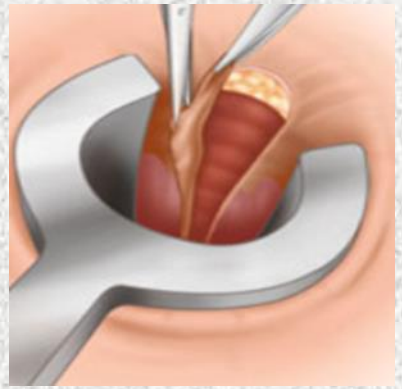
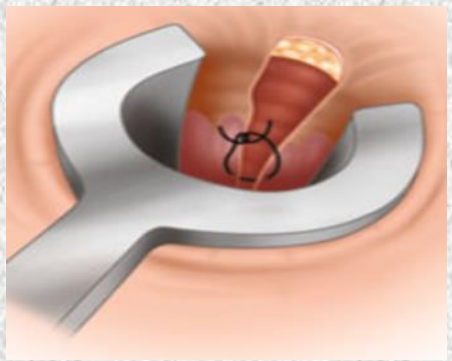
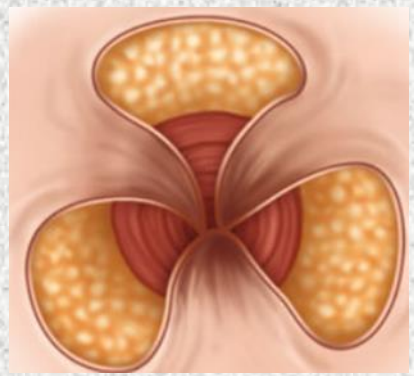

haemorrhoid
rubber band

Surgical hemorrhoidectomy

❑ Excisional hemorrhoidectomy:

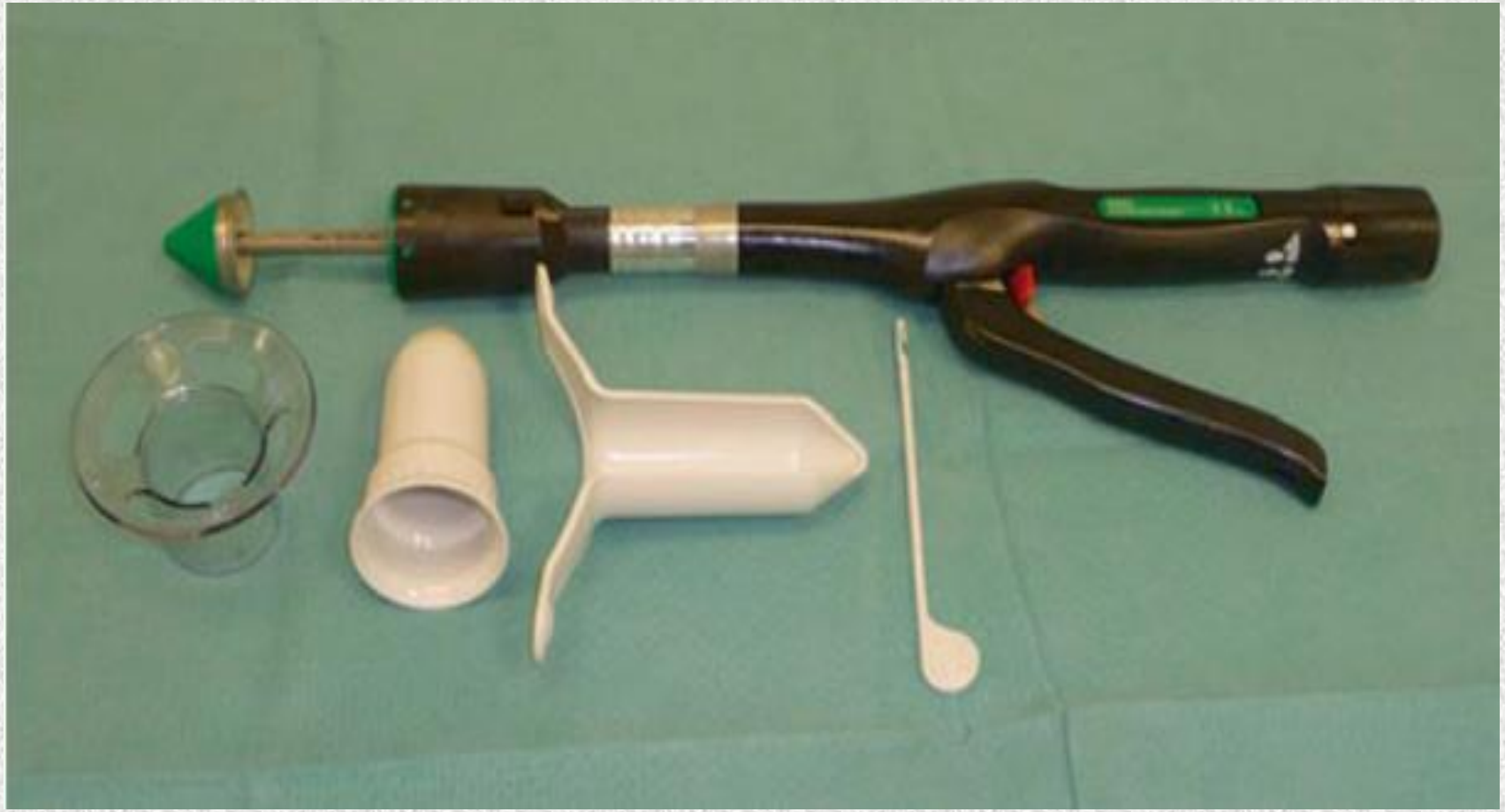





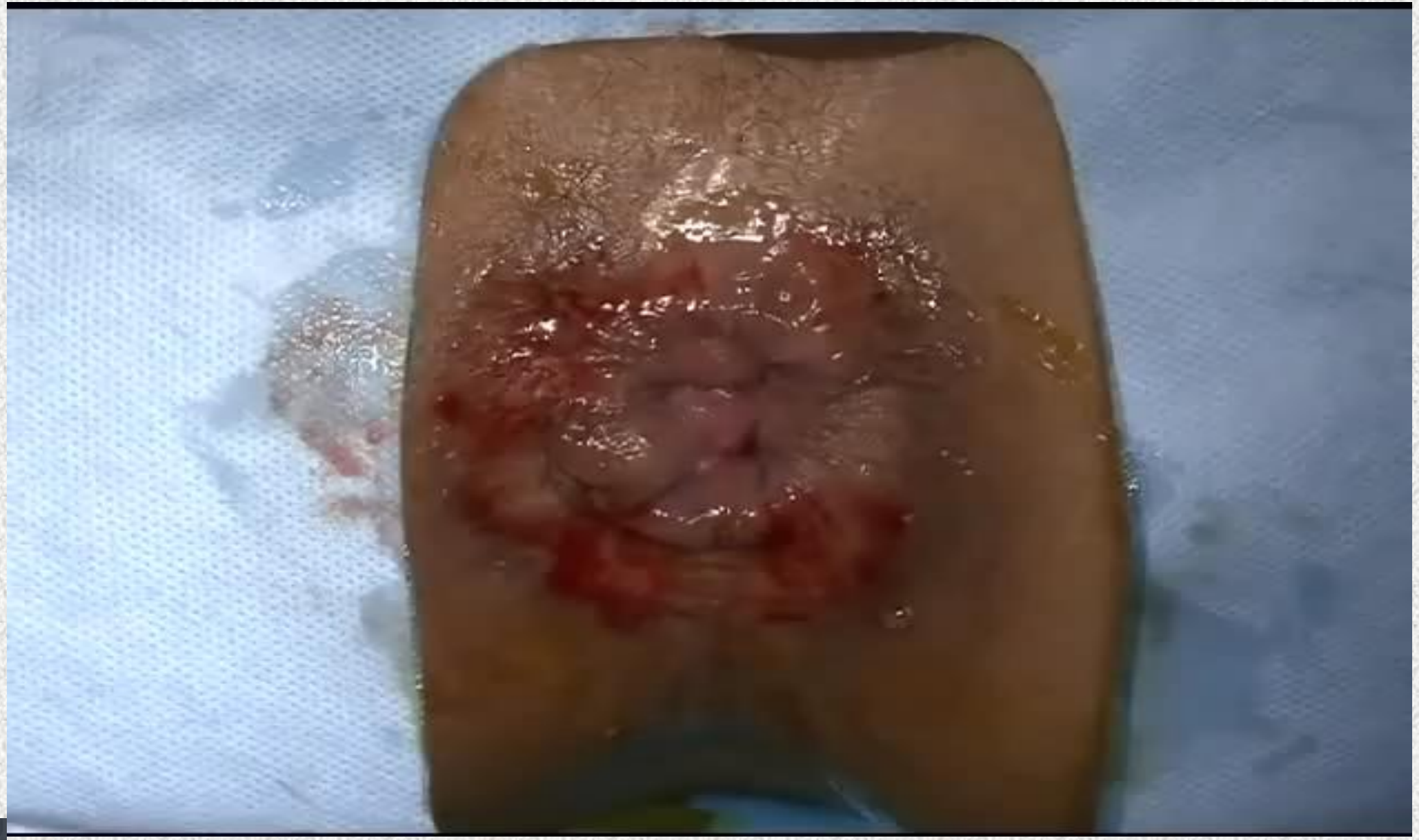
Closed (Ferguson) hemorrhoidectomy

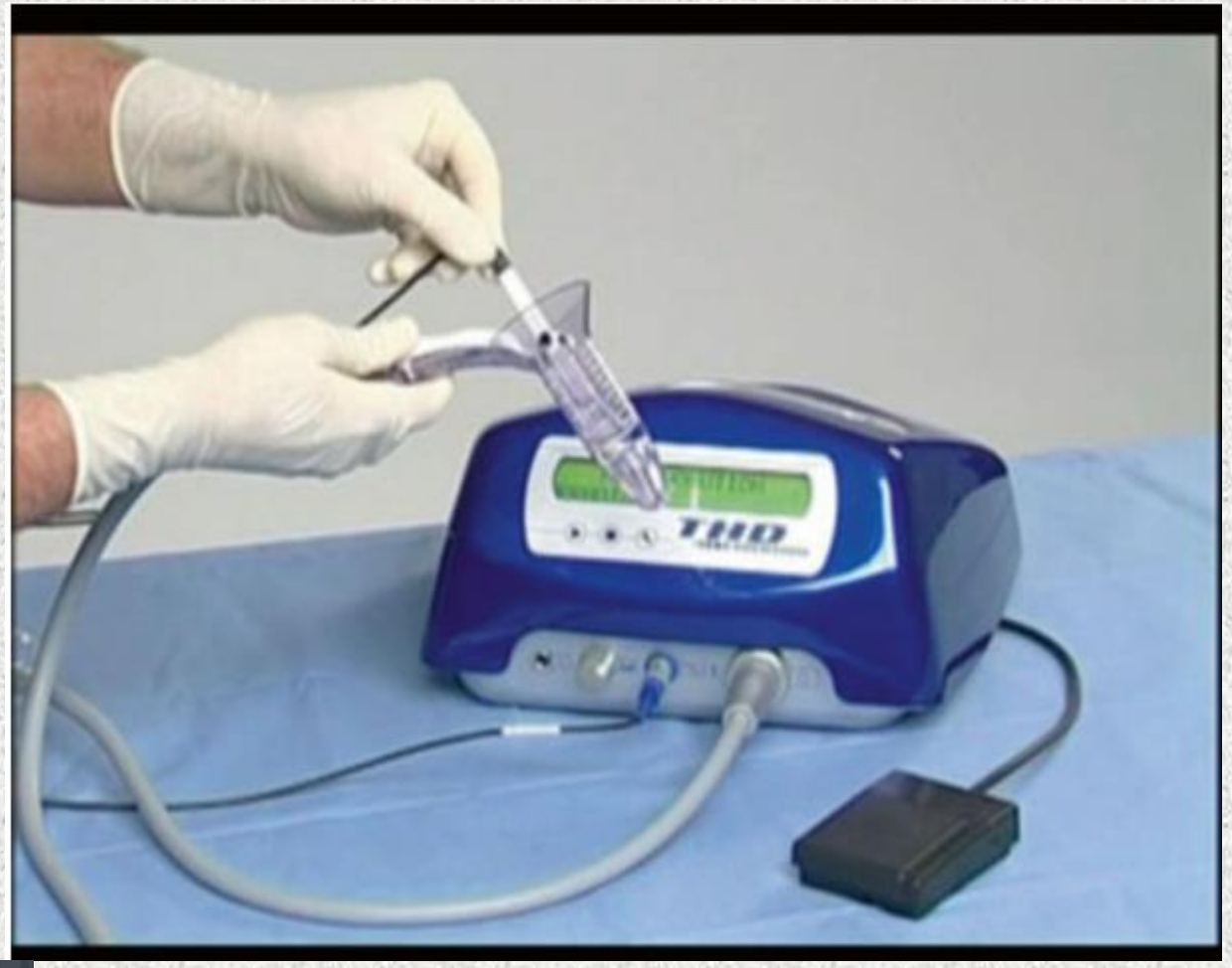
Open (Milligan- Morgan) hemorrhoidectomy

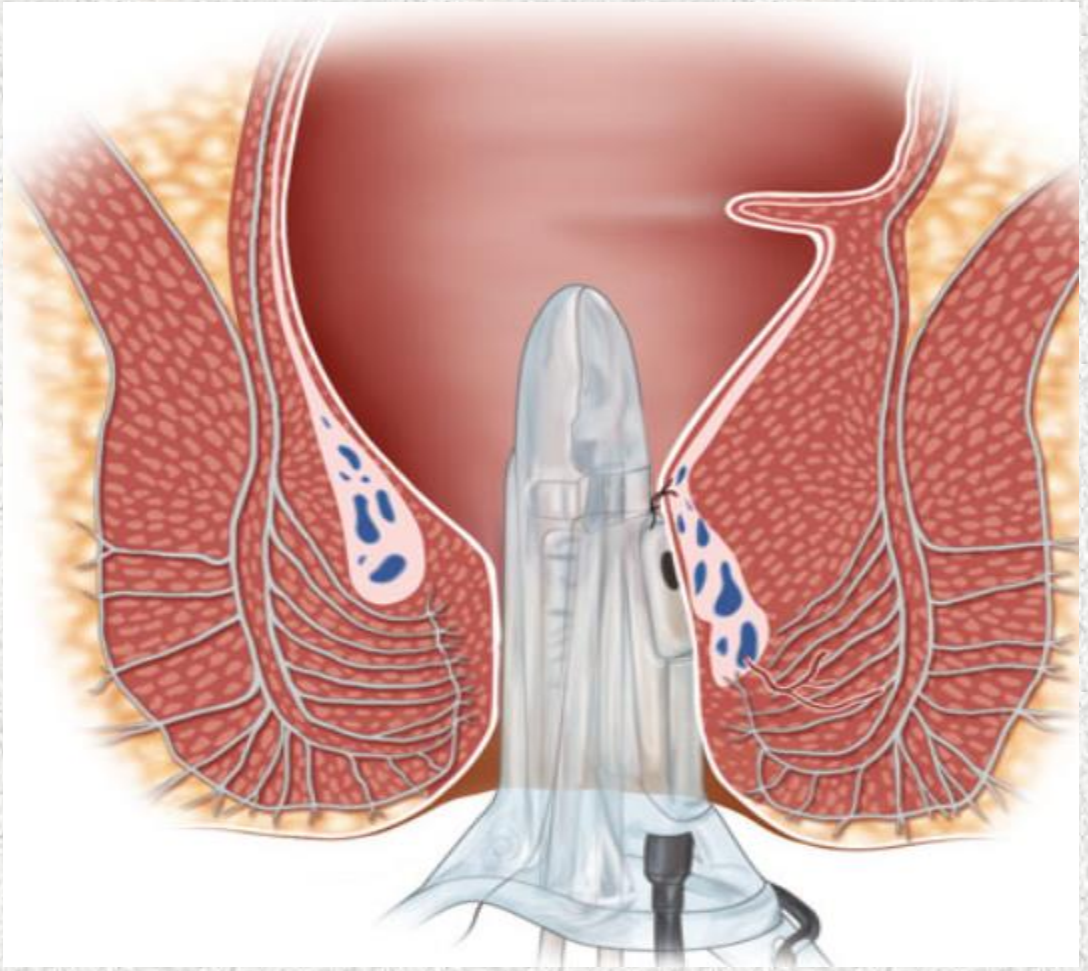
❑ Stapled hemorrhoidopexy:





❑ Trans anal hemorrhoidal dearterialization (THD)





Popov et al. BMC Surgery (2019) 19:4
https://doi.org/10.1186/s12893-019-0469-9

BMC Surgery

RESEARCH ARTICLE Open Access

Doppler-guided transanal hemorrhoidal dearterilization versus conventional hemorrhoidectomy for treatment of hemorrhoids – early and long-term postoperative results

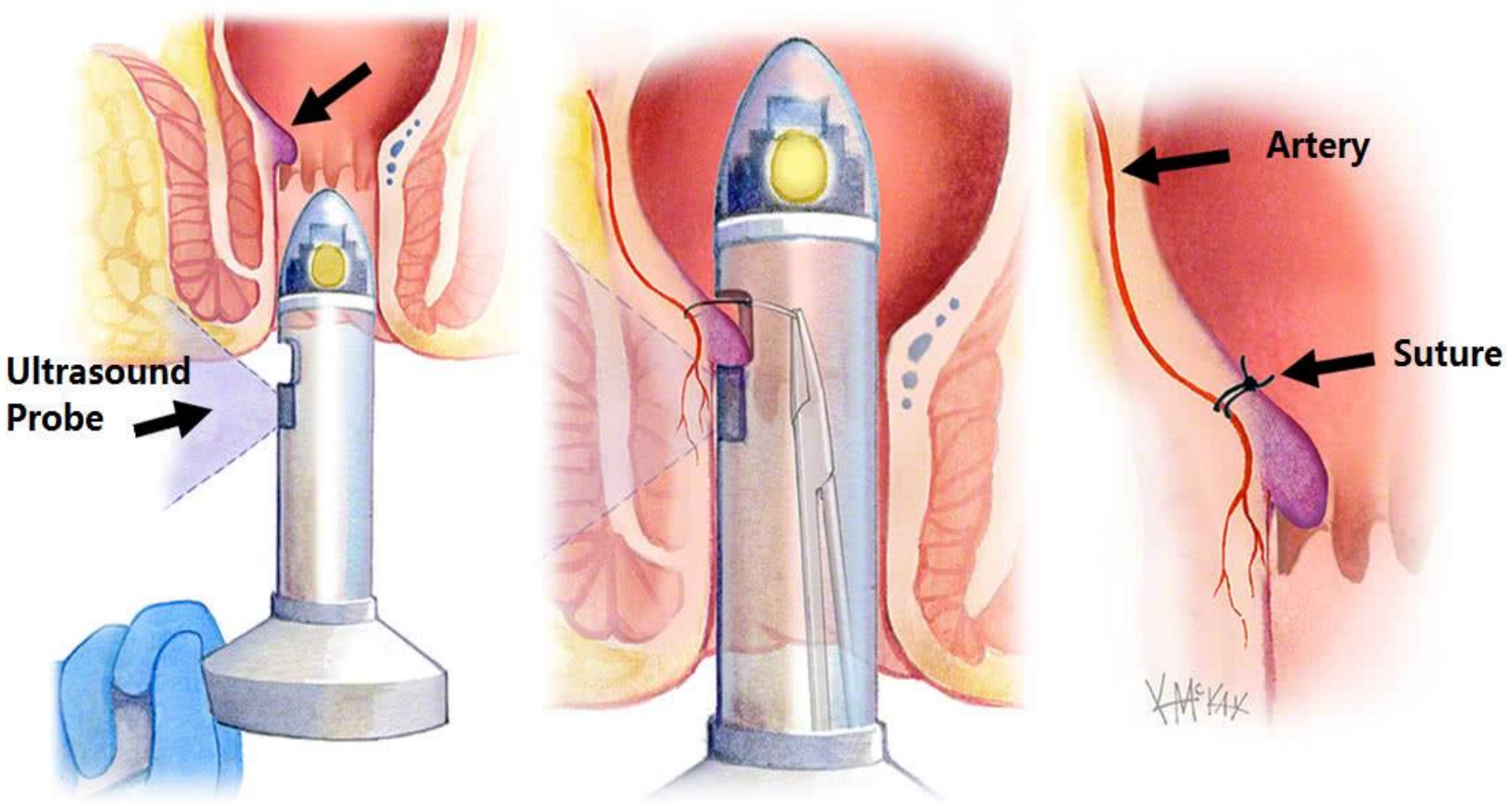
V. Popov[1,2], A. Yonkov[1,2], E. Arabadzhieva[1,2*], E. Zhivkov[1,2], S. Bonev[1,2], D. Bulanov[1,2], V. Tasev[1,2], G. Korukov[1,2], L. Simonova[1,2], N. Kandilarov[1], A. Taseva[1] and V. Dimitrova[1,2]

- Total number of pts. was 287 (CH, 167 – doppler guided THD, 120)
- **Results:**

frequent in THD group ($p = 0{,}002$). The mean visual analog scale (VAS) pain scores in CH and THD groups on days 1, 2 and 7 were 7.01 vs 5.03, 5.07 vs 2.98, 2.39 vs 0,57 ($p = 0{,}000$). Practically, there was no difference in VAS on day 30 and patients' satisfaction at the 18th month. Mean hospital stay was 5,13 (CH) and 3,38 days (THD), $p = 0{,}000$. The

Conclusions: Doppler-guided THD seems to be an efficient and safe option for treatment of hemorrhoids, related to lower postoperative pain and excellent, similar long-term outcomes compared to CH. For advanced grades of hemorrhoids, Doppler-guided THD could be a valuable alternative, but there is a need for patients' selection.

Doppler-guided Haemorrhoid Artery Ligation (HAL)



Newer techniques

❑ Radiofrequency ablation (RFA):

Techniques in Coloproctology (2019) 23:769–774
https://doi.org/10.1007/s10151-019-02054-2

TECHNICAL NOTE

Radiofrequency ablation for the treatment of haemorrhoidal disease: a minimally invasive and effective treatment modality

M. M. R. Eddama[1,2,3] · M. Everson[1] · S. Renshaw[1] · T. Taj[1] · R. Boulton[1] · J. Crosbie[1,2] · C. Richard Cohen[1,2]

Received: 10 March 2019 / Accepted: 24 July 2019 / Published online: 9 August 2019

Methods A total number of 27 patients who had RFA for the treatment of HD were recruited to this study. The procedure was performed under deep sedation and local anaesthesia. Patients' demographics; haemorrhoid severity score (HSS); quality of life; pain and satisfaction scores; and recurrence rate were recorded.

Conclusions RFA for the treatment of HD is safe and effective in achieving symptomatic relief. It is associated with minimal postoperative pain and low incidence of recurrence.

❑ Laser (HeLP) procedure:

ORIGINAL ARTICLE

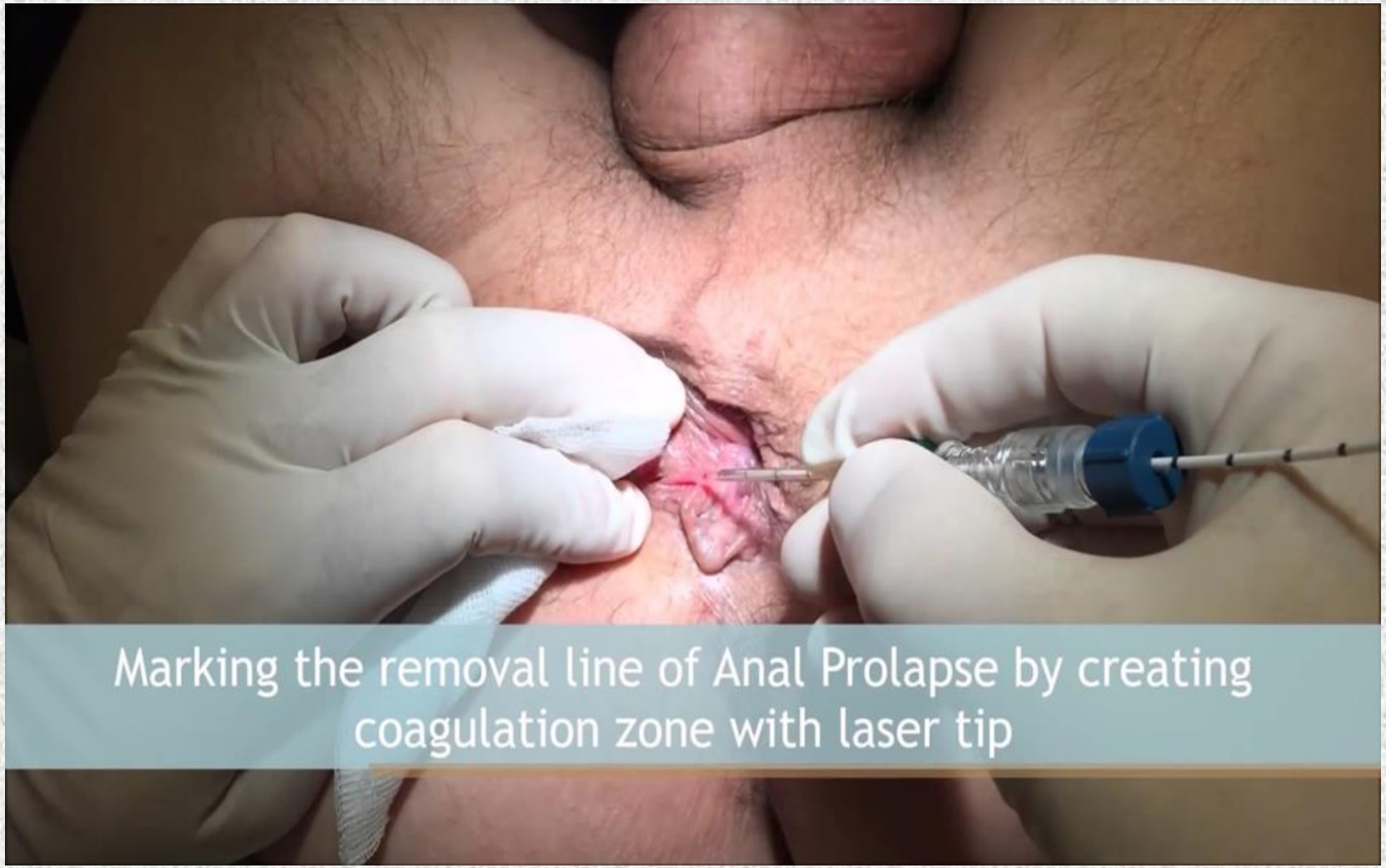
Hemorrhoid laser procedure (HeLP) for second- and third-degree hemorrhoids: results from a long-term follow-up analysis

Nicola Crea[1] · Giacomo Pata[2] · Mauro Lippa[1] · Andrea Marco Tamburini[3] · Abdul Halim Berjaoui[1]

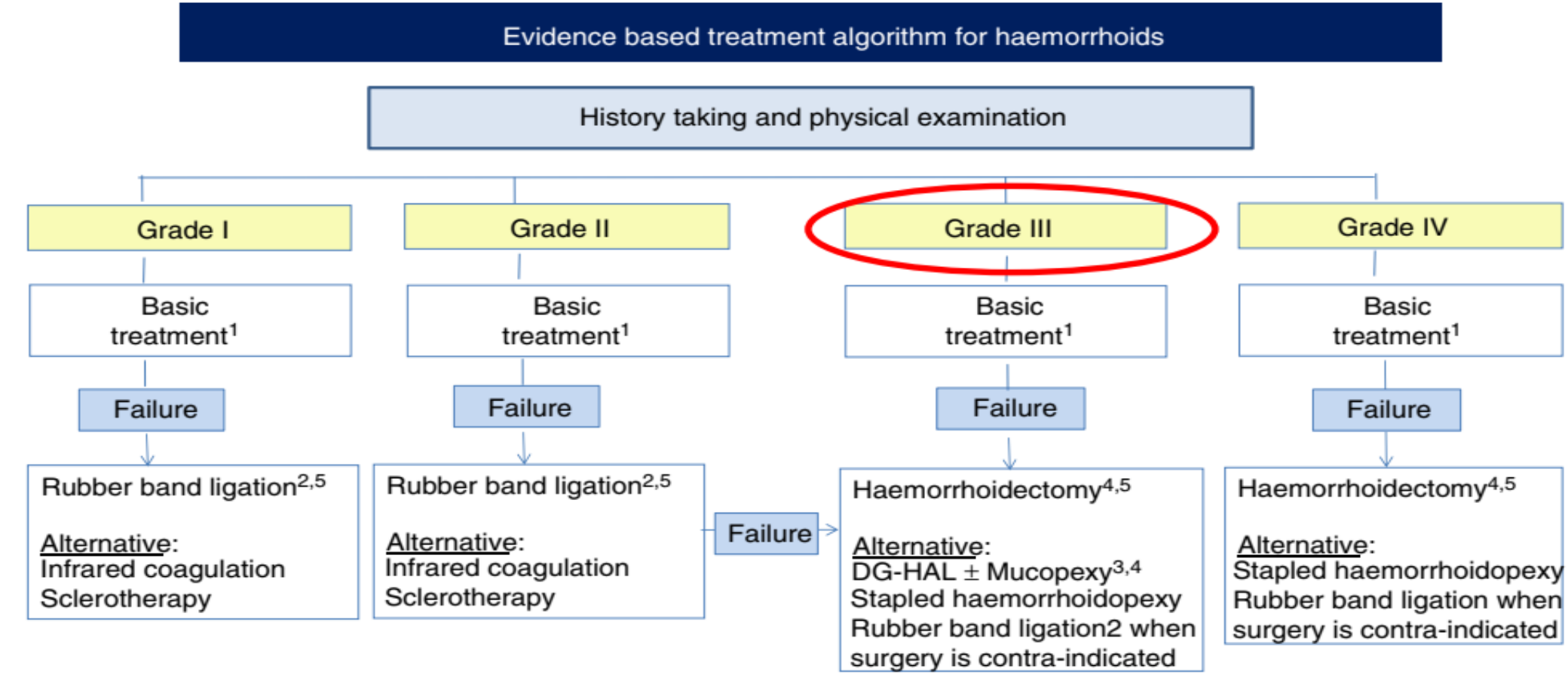
Received: 4 November 2020 / Accepted: 5 January 2021

Abstract

We aimed to analyze the results of 5-year consecutive use of the hemorrhoidal laser procedure (HeLP) in patients with second- to third-grade hemorrhoids with minimal or moderate mucosal prolapse. A total of 189 patients were treated between April 2012 and October 2017. We reported perioperative complications, postoperative pain, improvement of hemorrhoids grade, and relapse of hemorrhoidal disease (HD). Improvement of symptoms was assessed using the Patient Global Improvement (PGI) Scale. No severe intraoperative complications were observed. The median follow-up was 42 months (range 6–62 months). Pain after surgery was absent in 94% of patients. No cases of rectal tenesmus or alterations of defecation habits were reported. Symptoms and HD improvement reached a "plateau" at 3 to 6 months following surgery. We observed a significant decrease in HD degree, occurrence of bleeding, pain, itching, and acute HD. Complete resolution of HD was reported in > 60% of patients 1 year after surgery. The individual level of improvement in symptoms was consistent (very much and much improved, according to PGI-I score) for about 90% of patients during the follow-up. This study confirmed that the HeLP is a safe, painless, and effective procedure for the treatment of HD in selected cases.


Marking the removal line of Anal Prolapse by creating
coagulation zone with laser tip

Summary



[1]Toilet training, dietary changes (fiber) and topical treatment.
[2]Repeat banding.
[3]Doppler-Guided Haemorrhoidal Artery Ligation (DG-HAL).
[4]In grade III and IV there is a possibility to perform RBL when surgery is contra-indicated.
[5]Shared-decision making, taking into account patient preferences, availability of procedures and fitness for further procedures.


Thank You
For Your
Attention