

# **PHẪU THUẬT LONGO TRONG CÁC TRƯỜNG HỢP ĐẶC BIỆT**

## **(Lớp Chứng chỉ Cơ sở HMTT)**

**PGS. TS NGUYỄN TRUNG TÍN**

# MỤC TIÊU

- ▶ 1. Nhận biết được phẫu thuật Longo có thể thực hiện được trên 3 trường hợp bệnh trĩ có kết hợp với bệnh toàn thân và bệnh tại chỗ
- ▶ 2. Hiểu rõ về lưu đồ điều trị bệnh trĩ theo phân độ BPRST
- ▶ 3. Ứng dụng được các chỉ định và chống chỉ định trong phẫu thuật Longo
- ▶ 4. Trình bày được phẫu thuật Longo có cải biên (BV ĐHYD) trong điều trị bệnh trĩ hỗn hợp

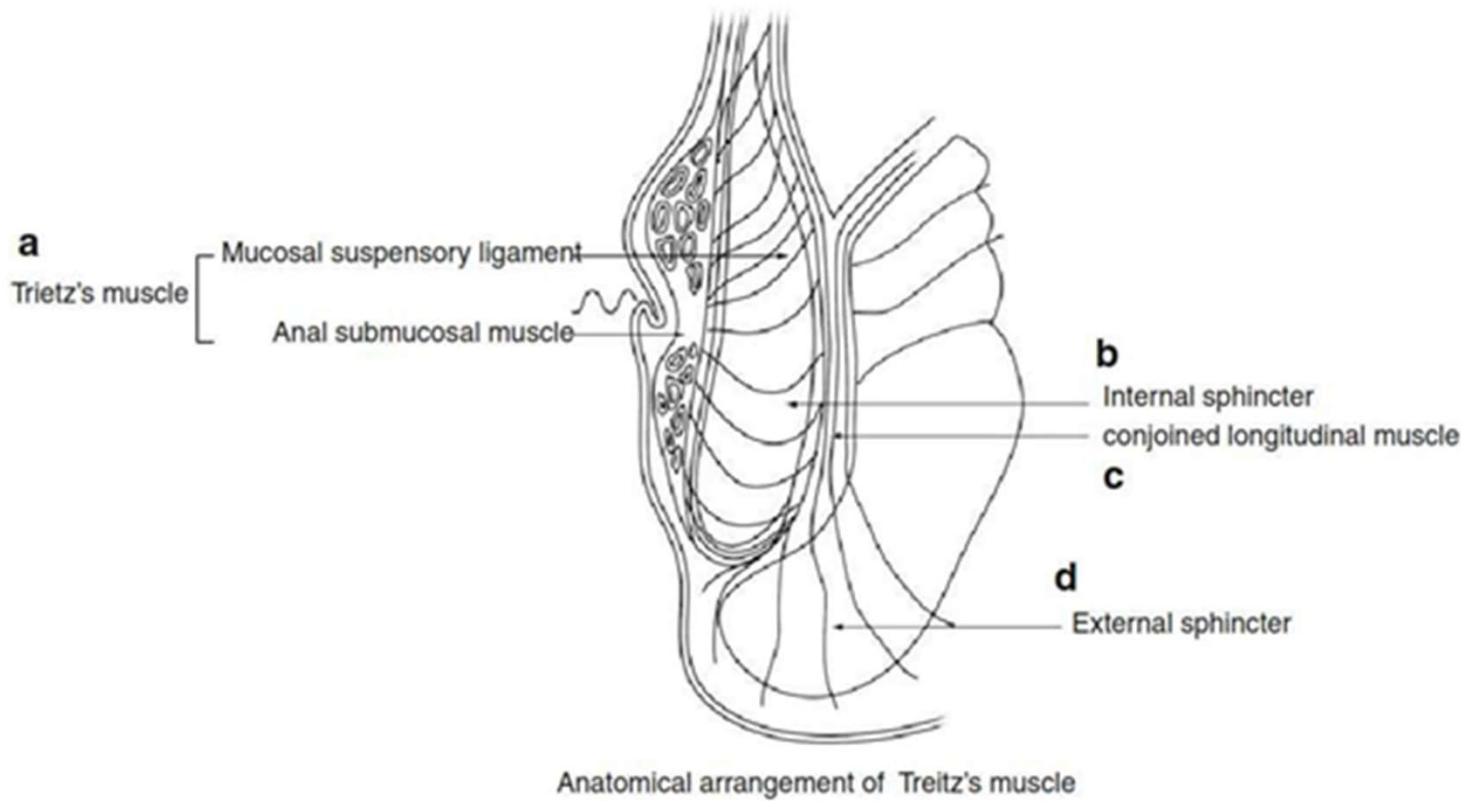
# BỆNH SINH

# BỆNH SINH BỆNH TRĨ

**Table 7.1** The different concepts of hemorrhoids in terms of pathophysiology and the current direction of operation

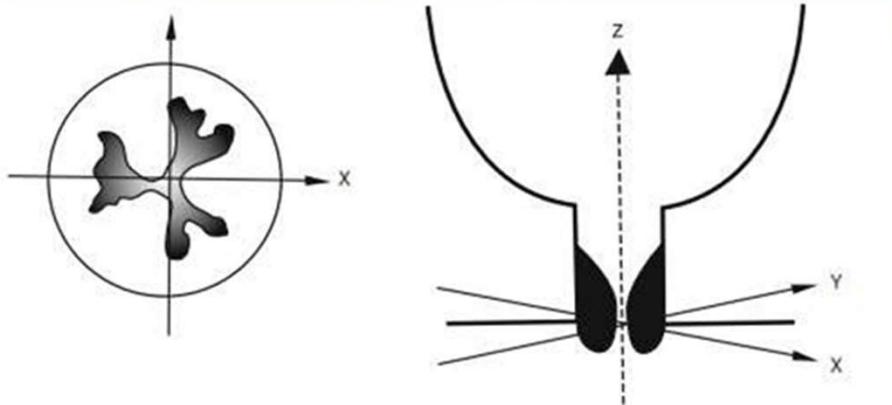
Pathogenesis	Viewpoint for hemorrhoids	Amount of removed tissue on hemorrhoidectomy
Varicose vein theory	Abnormal tissue	Large
Vascular hyperplasia theory		
Sliding anal lining theory	Normal tissue	Small

# BỆNH SINH

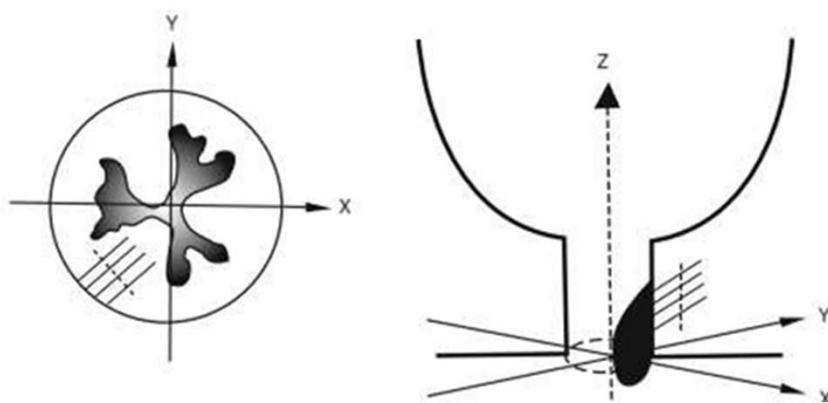


# BỆNH SINH

**Fig. 7.1** The hemorrhoids on the planes of X, Y, and Z axes



**Fig. 7.2** The disintegration of mucosal suspensory ligament causing hemorrhoids

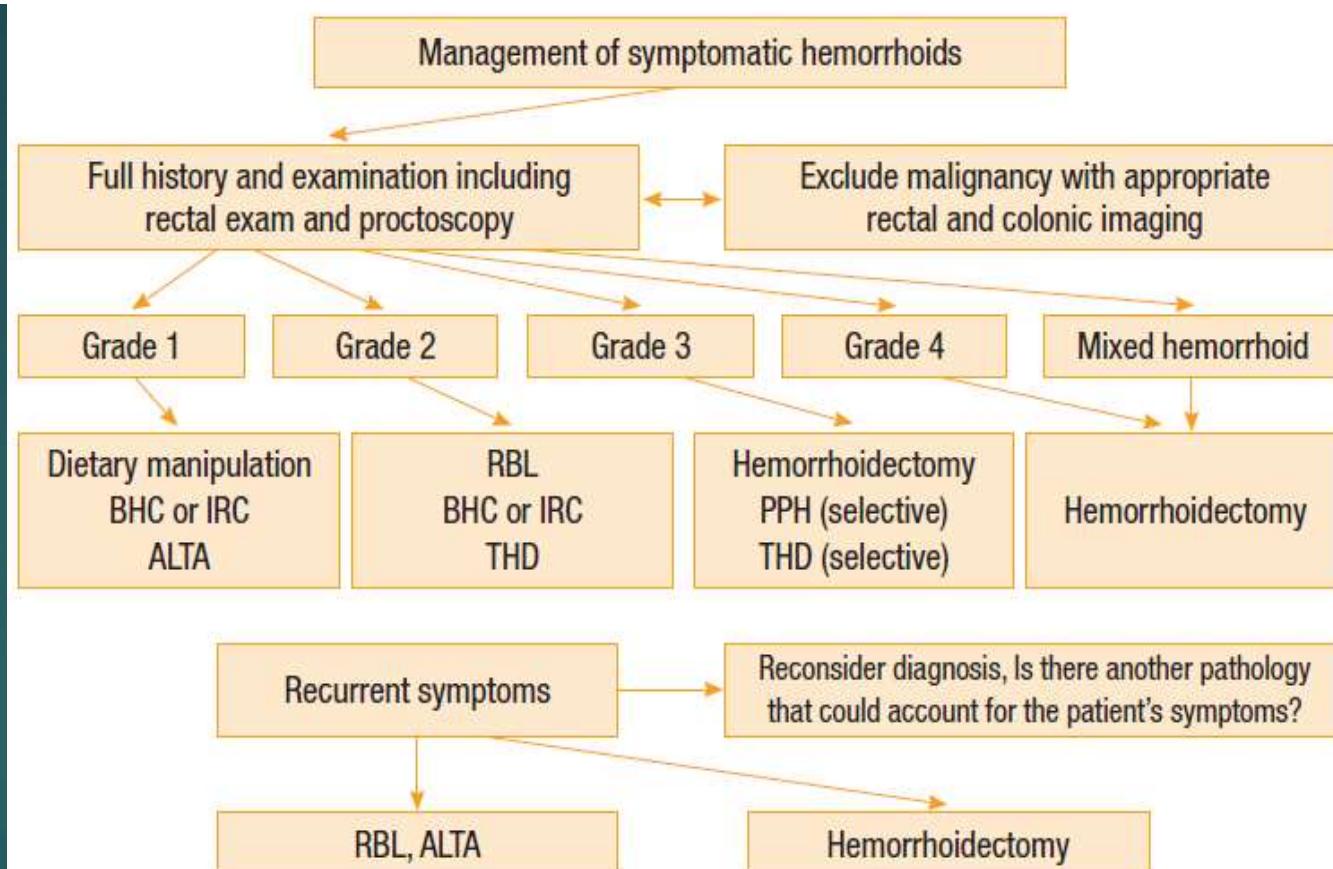


# PHÁC ĐỒ ĐIỀU TRỊ

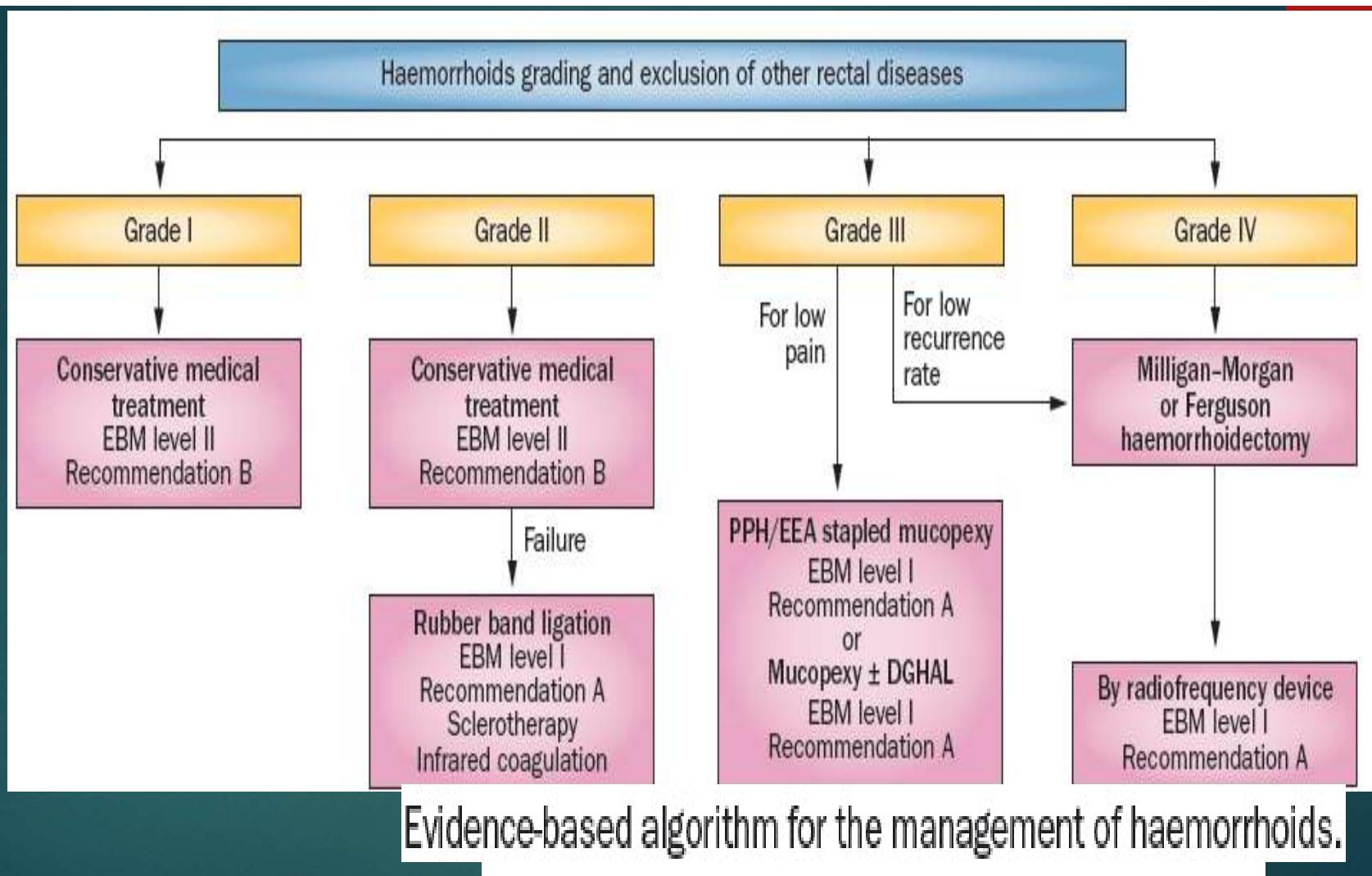
# Optimal Treatment of Symptomatic Hemorrhoids

Seok-Gyu Song, Soung-Ho Kim

Department of Coloproctology, Seoul Song Do Colorectal Hospital, Seoul, Korea



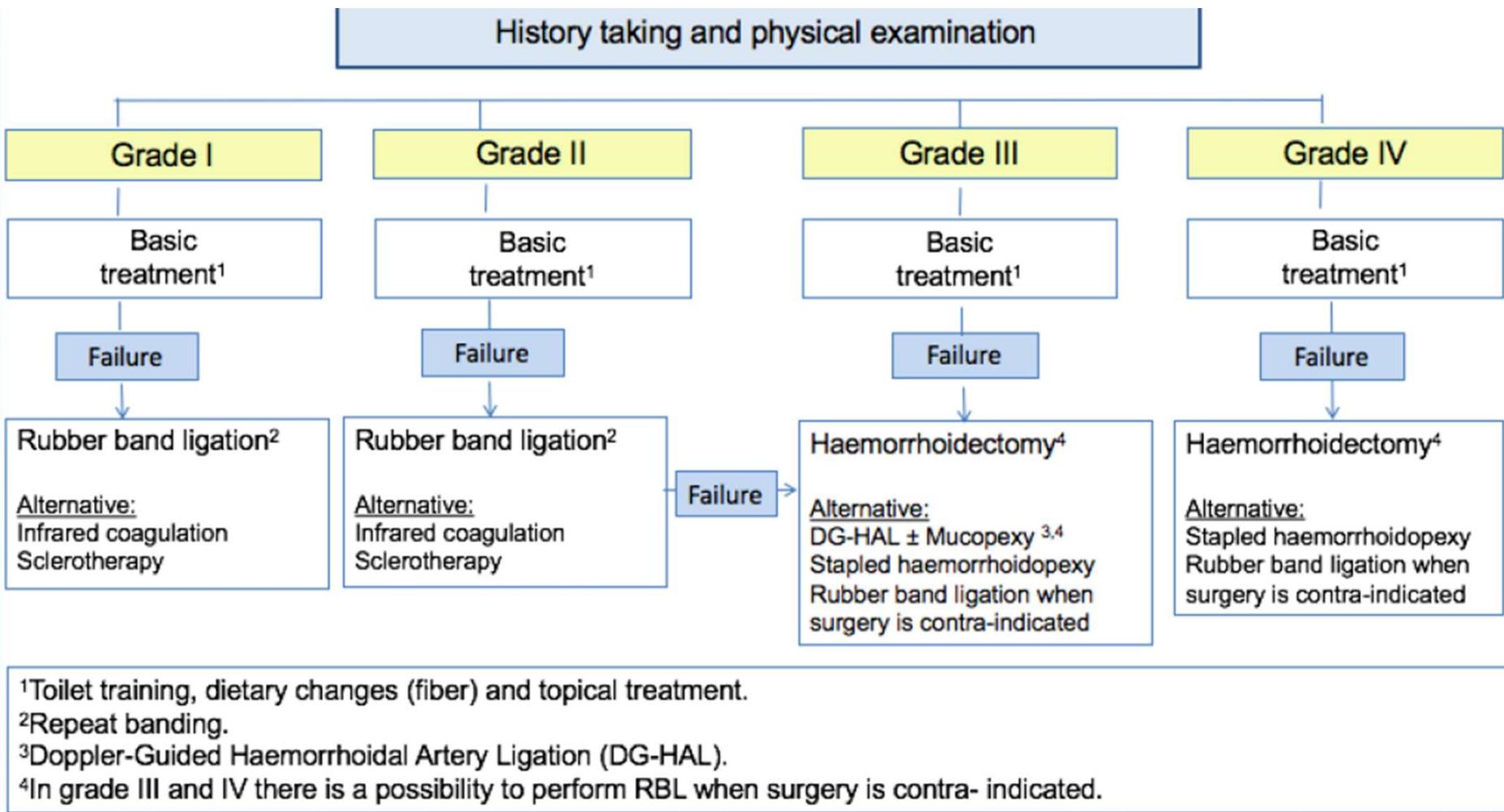
Optimal treatment of symptomatic hemorrhoids. BHC, bipolar hyperthermic coagulation; IRC, infrared photocoagulation; ALTA, aluminum potassium sulfate and tannic acid; RBL, rubber band ligation; THD, transanal hemorrhoidal dearterialization; PPH, procedure for prolapsed hemorrhoid.



## Evidence-based algorithm for the management of haemorrhoids.

Altomare, D. F. & Giuratrabocchetta, S. *Nat. Rev. Gastroenterol. Hepatol.* 10, 513-521 (2013); published online 11 June 2013;

[doi:10.1038/nrgastro.2013.91](https://doi.org/10.1038/nrgastro.2013.91)



*European Society of Coloproctology (ESCP)  
Guidelines For Haemorrhoidal Disease - 2020*

**Table 1.** Characteristics evaluated on BPRST classification, with gradation and descriptions

Bleeding (B)	Prolapse (P)	Reduction (R)	Skin tag (S)	Thrombosis (T)
B0 No bleeding	P0 No prolapse	R0 Spontaneous reduction	S0 No skin tags	T0 Without acute thrombosis
B1 Bleeding	P1 Prolapse of 1 pile	R1 Manual reduction	S1 Symptomatic skin tags	T1 With thrombosis <sup>a</sup>
-	P2 Prolapse of 2 or more piles	R2 Irreducible prolapse	-	-

<sup>a</sup>Refractory to medical treatment.

**Table 2.** Clinical staging of hemorrhoids based on BPRST classification and proposed therapeutic approaches for each stage

Clinical staging	BPRST description <sup>a</sup>	Proposed approach
Stage I	B1 P0 and R0 and S0 and T0	Lifestyle modifications AND outpatient procedures
Stage II	Any B P1 or P2 or R1 T0	Approaches for stage I AND nonanodermal excision methods (especially if circumferential prolapse)
Stage III	Any B Any P R2 or S1 or T1	Anodermal excision methods (first option) OR nonanodermal excision methods (associated with excision of external components)

<sup>a</sup>Refer to Table 1 for each description.

# **CHỈ ĐỊNH PHẪU THUẬT LONGO ĐIỀU TRỊ BỆNH TRĨ**

# CHỈ ĐỊNH PHẪU THUẬT LONGO

## Indications (symptomatic vs anatomical grading system)

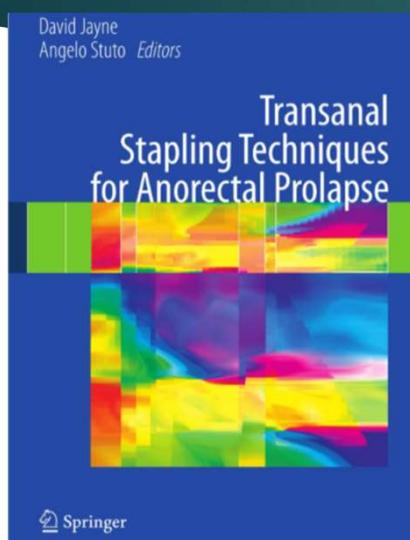
- Prolapsing haemorrhoids requiring manual reduction (Grade III);
- Uncomplicated haemorrhoids, irreducible by the patient but reducible at surgery (Grade IV);
- Irreducible haemorrhoids at surgery but by a modified surgical technique (see below);
- Selected prolapsing haemorrhoids with spontaneous reduction (Grade II);
- Failure to alleviate haemorrhoidal symptoms by other methods (e.g. rubber band ligation).

Stapled haemorrhoidopexy: a consensus position paper by an international working party – indications, contra-indications and technique

M. L. Corman\*, J.-F. Gravié†, T. Hager‡, M. A. Loudon‡, D. Mascagni§, P.-O. Nyström\*\*, F. Seow-Choen††, H. Abcarian‡‡, P. Marcello†\*, E. Weiss§§ and A. Longo\*\*\*

Received 7 March 2003; accepted 10 March 2003

# CHỐNG CHỈ ĐỊNH PHẪU THUẬT LONGO



2009

## *Absolute Contraindications*

- Situations where stapled hemorrhoidopexy is technically not feasible:
  - Patients with anal stenosis
- Situations where stapled hemorrhoidopexy is technically feasible, but potentially dangerous for the patient. These include the presence of coexistent anorectal disease:
  - Anal sepsis, abscess, or fistula
  - Anal or rectal cancer or other tumors
  - Intra-anal condylomata
  - Acute proctitis due to inflammatory bowel disease, radiotherapy, etc.
  - Anorectal sexually transmitted diseases

# CHỐNG CHỈ ĐỊNH TƯƠNG ĐỐI

## *Relative Contraindications*

- Situations where stapled hemorrhoidopexy is technically feasible, but may be unnecessary or result in a suboptimal outcome:
  - First-degree hemorrhoids
  - Fixed, not reducible fourth-degree hemorrhoids
- Situations where stapled hemorrhoidopexy is technically feasible, but maybe difficult with a high risk of complications:
  - Previous low rectal or coloanal anastomosis
  - Previous proctological surgery resulting in rigidity of the anorectum
- Previous sphincter reconstruction
- Patients with known or potential bleeding disorders, e.g., anticoagulant medication, liver cirrhosis, renal failure
- Patients at risk of septic complications as a result of transient bacteremia, e.g., immunosuppressed patients, patients undergoing chemotherapy, HIV patients
- Situations where stapled hemorrhoidopexy is technically possible, but may be dangerous for the partner:
  - Patients (male or female) practicing receptive anal intercourse

## Special Considerations

A group of patients where stapled hemorrhoidopexy may be of particular benefit is those suffering with liver cirrhosis and portal hypertension [36–38].

Although the risks of bleeding will be higher than in noncirrhotic patients, this may be reduced with stapled hemorrhoidopexy as compared to conventional hemorrhoidectomy. In addition, the avoidance of open anal wounds has the theoretical advantage of reduced local sepsis and associated portal pyemia.

Any patients practicing receptive anal intercourse should be warned of the dangers of the staple line causing penile injury or condom rupture in the early postoperative period [39, 40]. Such patients should be advised to refrain from anal penetration until such time as all the staples have fallen out. This usually takes between 3 and 6 weeks, although isolated staples may remain embedded indefinitely.



# **ĐIỀU TRỊ TRĨ TRONG CÁC TRƯỜNG HỢP ĐẶC BIỆT**

# CÁC TRƯỜNG HỢP ĐẶC BIỆT

- ▶ Bệnh trĩ hỗn hợp, nhiều trĩ ngoại và da thừa
- ▶ Bệnh trĩ kết hợp với Condyloma acuminata
- ▶ Bệnh trĩ trong các trường hợp xơ gan

# BỆNH TRĨ HỒN HỌP

# 1. BỆNH TRĨ HỒN HỌP



# TRƯỜNG HỢP TRĨ HỒN HỢP

**Systematic review and network meta-analysis comparing clinical outcomes and effectiveness of surgical treatments for haemorrhoids**

**C. Simillis, S. N. Thoukididou, A. A. P. Slesser, S. Rasheed, E. Tan and P. P. Tekkis**

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*Correspondence to:* Mr C. Simillis (e-mail: csimillis@gmail.com)

# Systematic review and network meta-analysis comparing clinical outcomes and effectiveness of surgical treatments for haemorrhoids

C. Simillis, S. N. Thoukididou, A. A. P. Slesser, S. Rasheed, E. Tan and P. P. Tekkis

Department of Colorectal Surgery, Royal Marsden Hospital, Fulham Road, London SW3 6JJ, UK

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**Background:** The aim was to compare the clinical outcomes and effectiveness of surgical treatments for haemorrhoids.

**Methods:** Randomized clinical trials were identified by means of a systematic review. A Bayesian network meta-analysis was performed using the Markov chain Monte Carlo method in WinBUGS.

**Results:** Ninety-eight trials were included with 7827 participants and 11 surgical treatments for grade III and IV haemorrhoids. Open, closed and radiofrequency haemorrhoidectomies resulted in significantly more postoperative complications than transanal haemorrhoidal dearterialization (THD), LigaSure™ and Harmonic® haemorrhoidectomies. THD had significantly less postoperative bleeding than open and stapled procedures, and resulted in significantly fewer emergency reoperations than open, closed, stapled and LigaSure™ haemorrhoidectomies. Open and closed haemorrhoidectomies resulted in more pain on postoperative day 1 than stapled, THD, LigaSure™ and Harmonic® procedures. After stapled, LigaSure™ and Harmonic® haemorrhoidectomies patients resumed normal daily activities earlier than after open and closed procedures. THD provided the earliest time to first bowel movement. The stapled and THD groups had significantly higher haemorrhoid recurrence rates than the open, closed and LigaSure™ groups. Recurrence of haemorrhoidal symptoms was more common after stapled haemorrhoidectomy than after open and LigaSure™ operations. No significant difference was identified between treatments for anal stenosis, incontinence and perianal skin tags.

# **Systematic review and network meta-analysis comparing clinical outcomes and effectiveness of surgical treatments for haemorrhoids**

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**Conclusion:** Open and closed haemorrhoidectomies resulted in more postoperative complications and slower recovery, but fewer haemorrhoid recurrences. THD and stapled haemorrhoidectomies were associated with decreased postoperative pain and faster recovery, but higher recurrence rates. The advantages and disadvantages of each surgical treatment should be discussed with the patient before surgery to allow an informed decision to be made.

## Original Article

Ann Coloproctol 2020;36(4):249-255  
<https://doi.org/10.3393/ac.2020.02.06>



Annals of  
Coloproctology

pISSN 2287-9714 eISSN 2287-9722  
[www.coloproctol.org](http://www.coloproctol.org)

# A New Classification for Hemorrhoidal Disease: The Creation of the “BPRST” Staging and Its Application in Clinical Practice

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Discipline of Coloproctology, Division of Digestive Surgery, Department of Surgery, University of São Paulo Medical School, São Paulo, Brazil

**Purpose:** Present an updated classification for symptomatic hemorrhoids, which not only guides the treatment of internal hemorrhoids but also the treatment of external components. In addition, this new classification includes new treatment alternatives created over the last few years.

**Methods:** Throughout the past 7 years, the authors developed a method to classify patients with symptomatic hemorrhoids. This study, besides presenting this classification proposal, also retrospectively analyzed 149 consecutive patients treated between March 2011 and November 2013 and aimed to evaluate the association between the management adopted with Goligher classification and our proposed BPRST classification.

**Results:** Both classifications had a statistically significant association with the adopted management strategies. However, the BPRST classification tended to have fewer management discrepancies when each stage of disease was individually analyzed.

**Conclusion:** Although there is much disagreement about how the classification of hemorrhoidal disease should be updated, it is accepted that some kind of revision is needed. The BPRST method showed a strong association with the management that should be adopted for each stage of the disease. Further studies are needed for its validation, but the current results are encouraging.

**Keywords:** *Hemorrhoids; Hemorrhoidectomy; Classification; Therapeutics*

# CẮT BỎ TRĨ NGOẠI VÀ DA THÙA

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Contents lists available at ScienceDirect

## Annals of Medicine and Surgery

journal homepage: [www.elsevier.com/locate/amsu](http://www.elsevier.com/locate/amsu)



# The novel BPRST classification for hemorrhoidal disease: A cohort study and an algorithm for treatment



Carlos Walter Sobrado, Carlos de Almeida Obregon, Lucas Faraco Sobrado\*,  
Lucas Morales Bassi, José Américo Bacchi Hora, Afonso Henrique Silva e Sousa Júnior,  
Sergio Carlos Nahas, Ivan Cecconello

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### ARTICLE INFO

**Keywords:**  
Hemorrhoids  
Classification  
Hemorrhoidectomy  
Management

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### ABSTRACT

**Background:** The classification for HD was developed by Goligher in 1980 and does not contemplate important aspects of this disease, which limits its use in guiding treatment. The aim of this study is to apply in clinical practice the new classification for hemorrhoids named BPRST (bleeding, prolapse, reduction, skin tags, thrombosis), to compare it with the original classification proposed by Goligher and to propose an algorithm for treatment.

**Materials and methods:** This is a prospective study conducted at the University of São Paulo's teaching hospital and Hospital 9 de Julho. Patients with HD treated from March 2011 to July 2013 were included. Patients were classified according to BPRST and Goligher classifications and treated according to personal experience and most updated guidelines. The association between both classifications and the treatment adopted was compared and an algorithm for treatment was developed.

**Results:** 229 patients were included in this study and 28 patients were lost due to follow-up. According to Goligher, 29, 61, 85 and 26 were classified as grades I, II, III and IV, respectively. According to the BPRST, 23 were classified as stage I, 95 as stage II and 83 as stage III. Six patients classified as Goligher I were reclassified as BPRST stage III and required conventional hemorrhoidectomy, either due to thrombosis ( $n = 4$ ) or intolerable skin tags ( $n = 2$ ). The BPRST classification was more closely associated with the type of treatment employed and had few outliers than Goligher ( $p < 0.001$ ).

**Conclusion:** There are limitations to the use of Goligher's classification in clinical practice. The novel BPRST classification includes important aspects of HD that should be considered when deciding the best treatment option. Our algorithm for treatment contemplates the most commonly used techniques and can help to guide the treatment of this complex disease.

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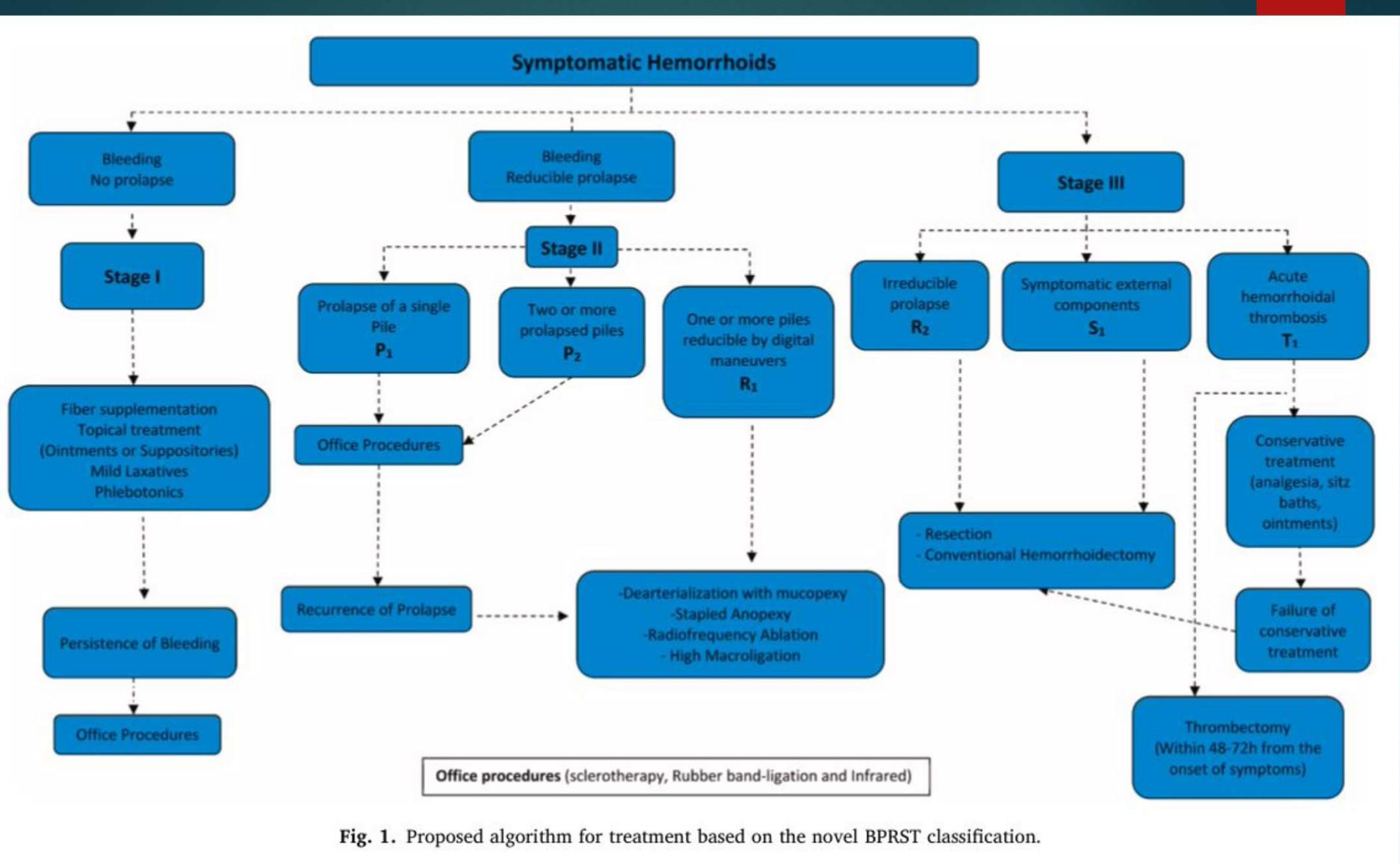
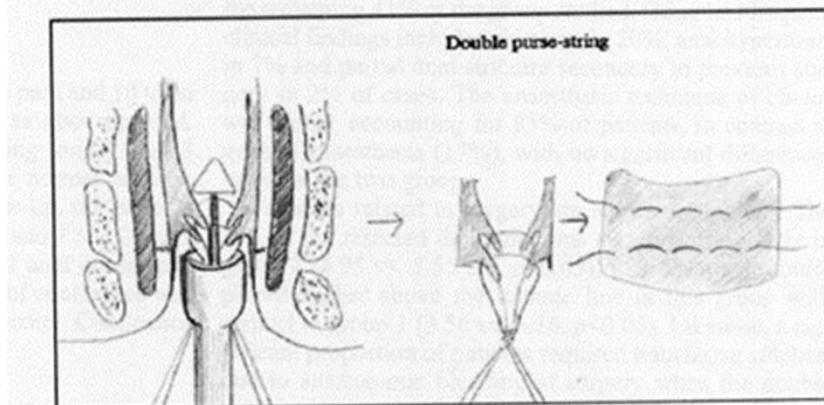
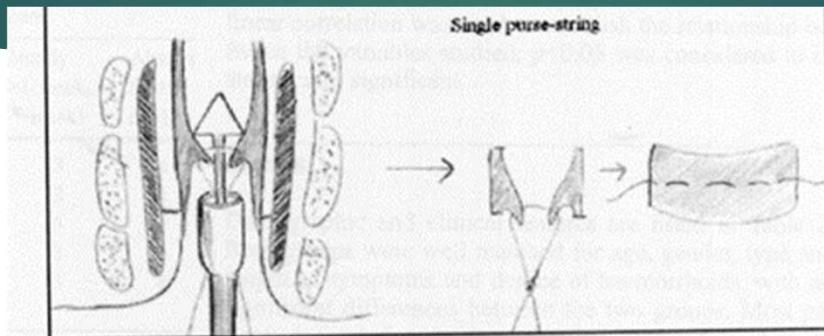
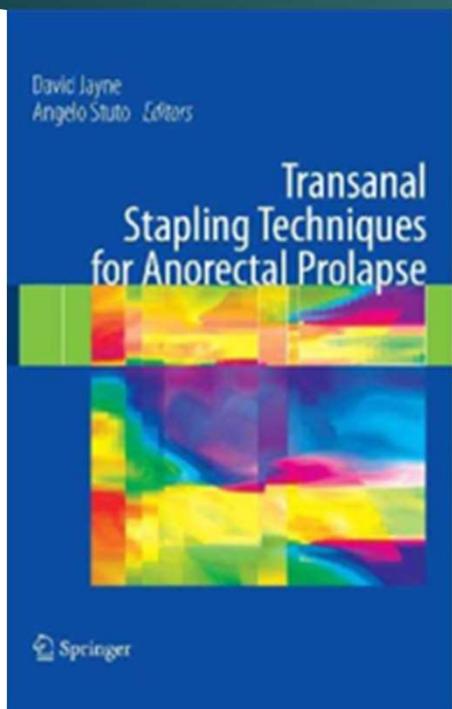


Fig. 1. Proposed algorithm for treatment based on the novel BPRST classification.

# DOUBLE PURSE-STRING SUTURES



# HẠ THẤP PURSE-STRING



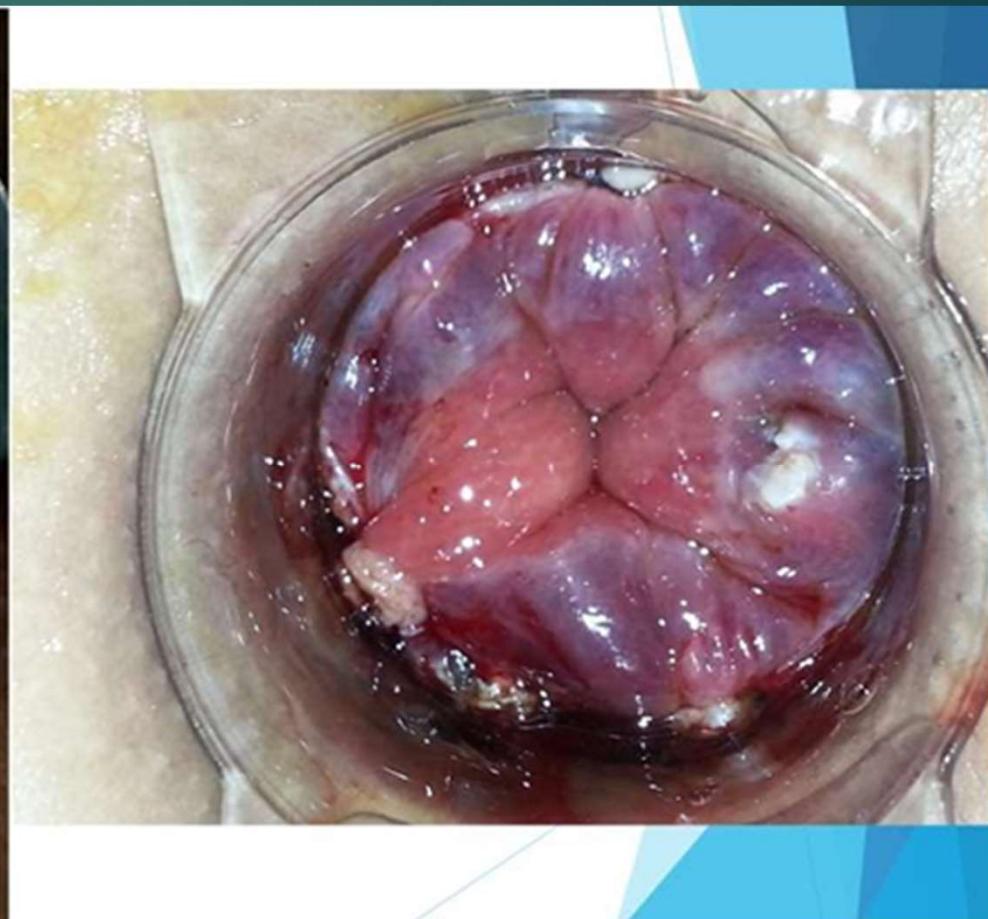
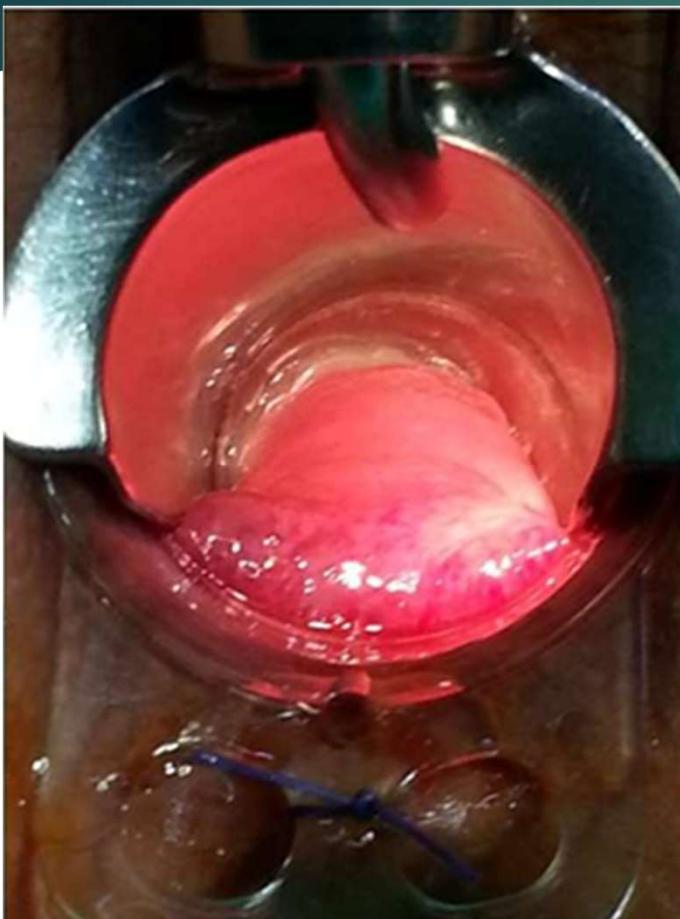
## Chapter 6 Stapled Hemorrhoidopexy: The Technique

E. Espin and F. Corbisier

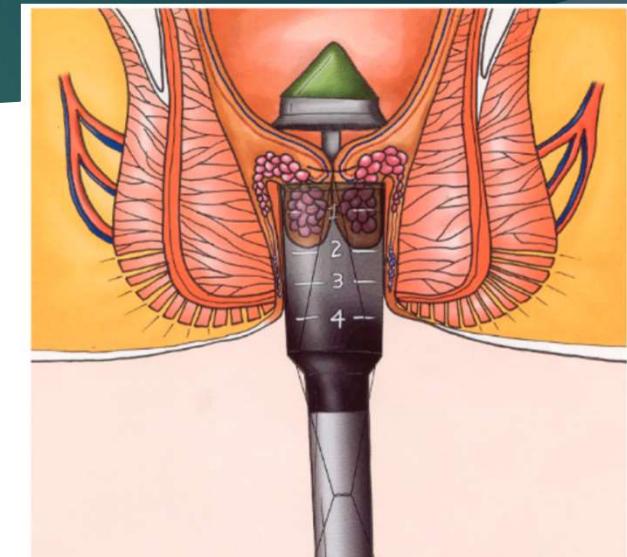
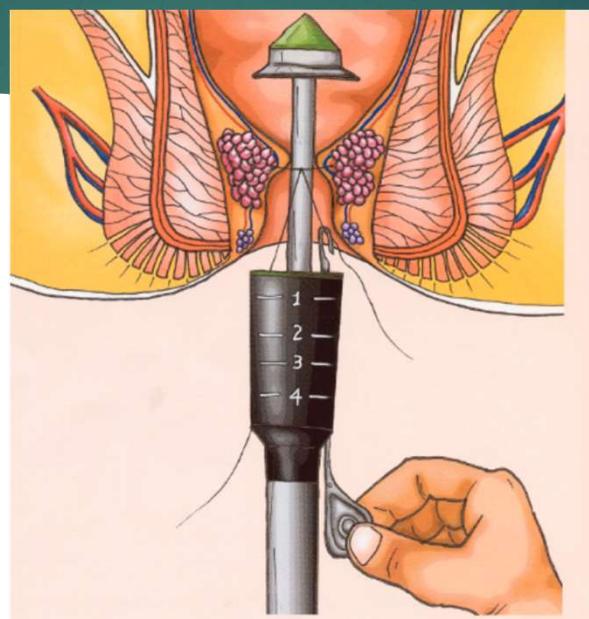
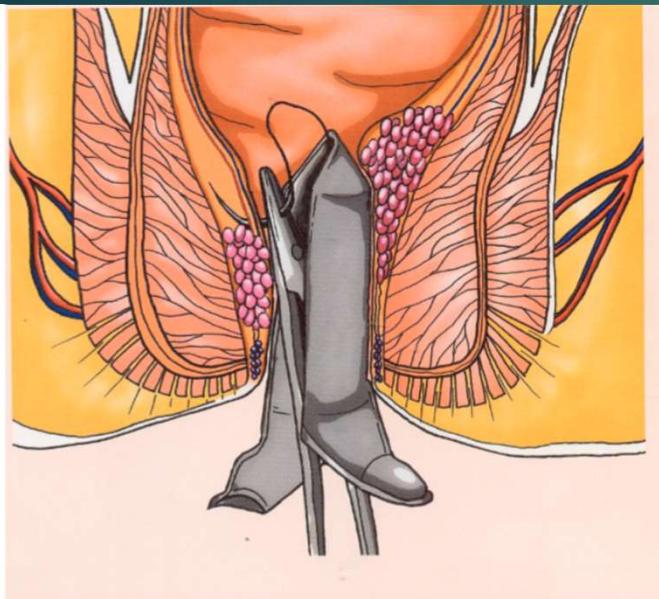
### *Placement of the Purse-String Suture*

The purse-string suture is next inserted. A 2/0 polypropylene suture on a 30-mm round bodied needle is suitable. Great care must be exercised to position the suture correctly at 2 cm above the apex of the hemorrhoidal tissue. The object is not to include the entire hemorrhoidal tissue, but rather a cuff of tissue incorporating normal rectal mucosa and only the apices of the hemorrhoidal pedicles. The suture is submucosal in depth and should not include rectal muscularis propria (Fig. 6.3a, b). The operator must ensure

# HẠ THẤP PURSE-STRING



# NO CAD VÀ HẠ THẤP PURSE-STRING



**Fig. 4.** Reduction of redundant mucosa or excess internal haemorrhoidal component into the housing of the PPH03 stapler before firing of stapler.

# CÀI BIÊN CỦA BV ĐHYD

- ▶ Không đặt CAD khi khâu 2 vòng buột túi
- ▶ Hạ thấp đường khâu vòng buộc túi ngay trên đỉnh búi trĩ
- ▶ Vòng khâu bấm thứ hai ngay trên các búi trĩ ngoại



# **BỆNH TRĨ KẾT HỢP CONDYLOMA HẬU MÔN**



# HPV (Human Papilloma Virus)

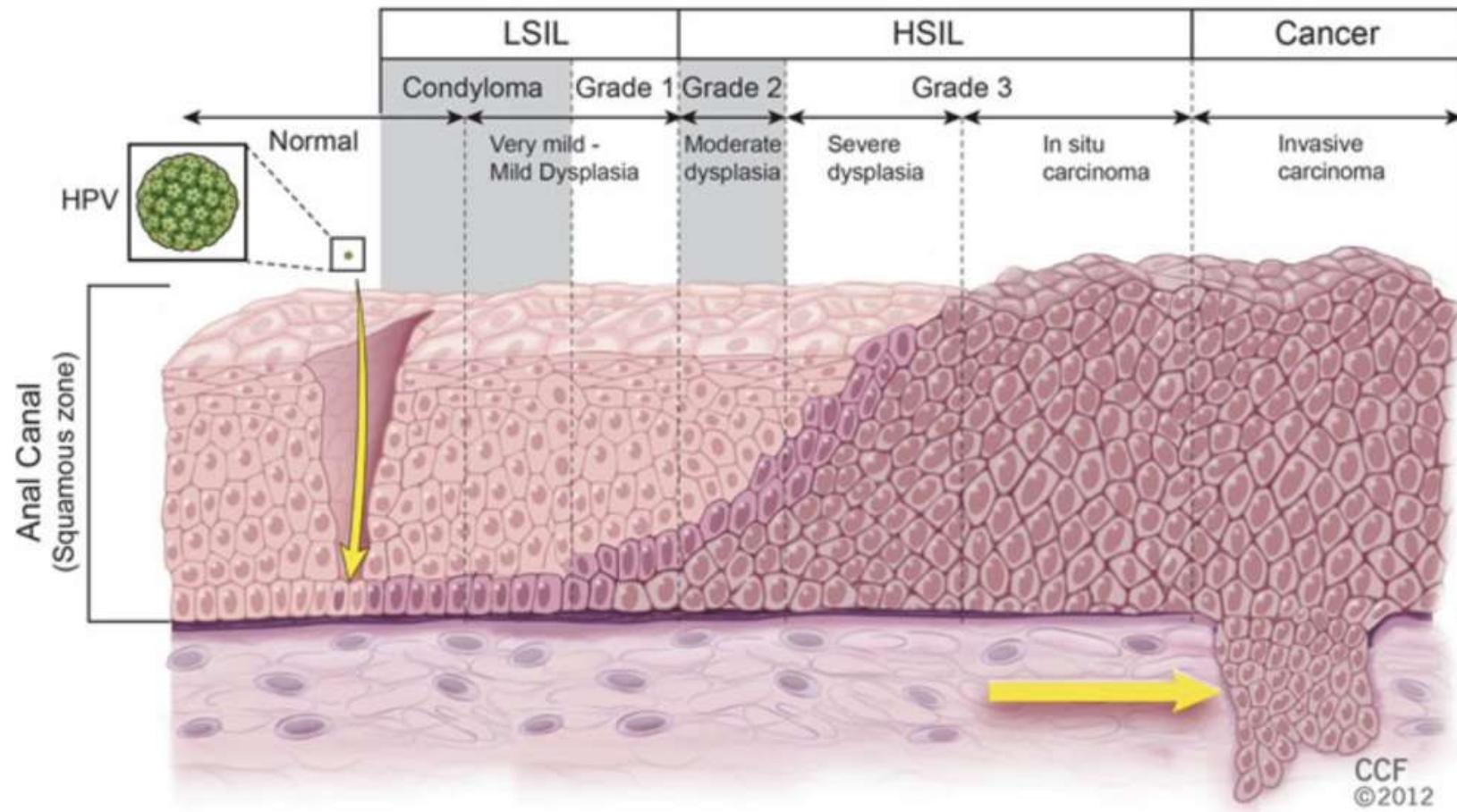
- ▶ > 200 serotypes
- ▶ Nguy cơ ung thư hậu môn

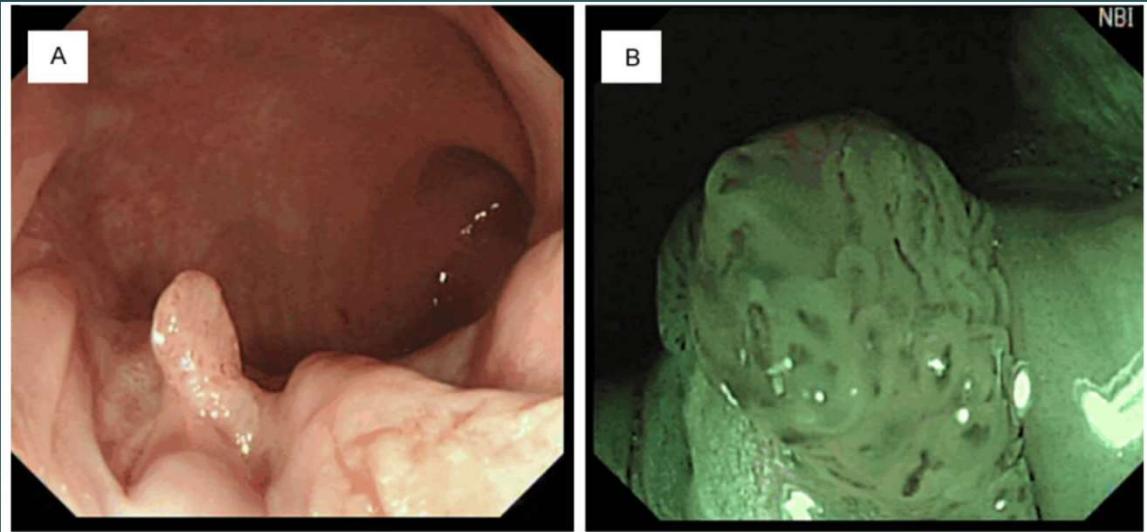
**Table 8.1** Risk factors for anal cancer

Human papillomavirus
Anoreceptive intercourse
Genital dysplasia
Anal condyloma acuminata
Tobacco consumption
Immunosuppression
Human immunodeficiency virus
Transplantation

**Table 8.2** HPV serotypes and cancer risk [31]

Group	HPV types
High risk	<b>16, 18, 31, 35, 39, 45, 51, 52, 56, 58, 59</b>
Probably high risk	26, 53, 66, 68, 73, 82
Low risk	<b>6, 11, 40, 42, 43, 44, 54, 61, 70, 72, 81</b>





**Fig. 8.6** High-resolution anoscopy: the anoderm is inspected with magnification using an operating colposcope through an anoscope with white light and green light following anoderm preparation with acetic acid and Lugol's iodine

## 2. BỆNH TRĨ KẾT HỢP MỒNG GÀ HẬU MÔN



### *Absolute Contraindications*

- Situations where stapled hemorrhoidopexy is technically not feasible:
  - Patients with anal stenosis
- Situations where stapled hemorrhoidopexy is technically feasible, but potentially dangerous for the patient. These include the presence of coexistent anorectal disease:
  - Anal sepsis, abscess, or fistula
  - Anal or rectal cancer or other tumors
  - Intra-anal condylomata
  - Acute proctitis due to inflammatory bowel disease, radiotherapy, etc.
  - Anorectal sexually transmitted diseases

## 2. BỆNH TRĨ KẾT HỢP MỒNG GÀ HẬU MÔN

- Previous sphincter reconstruction
- Patients with known or potential bleeding disorders, e.g., anticoagulant medication, liver cirrhosis, renal failure
- Patients at risk of septic complications as a result of transient bacteremia, e.g., immunosuppressed patients, patients undergoing chemotherapy, HIV patients
- Situations where stapled hemorrhoidopexy is technically possible, but may be dangerous for the partner:
  - Patients (male or female) practicing receptive anal intercourse

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  - Anorectal sexually transmitted diseases

# BỆNH KẾT HỢP

Bệnh trĩ kết hợp bệnh mồng gà hậu môn

Thường gặp bệnh nhân nhiễm HIV chưa phát hiện hay đang điều trị

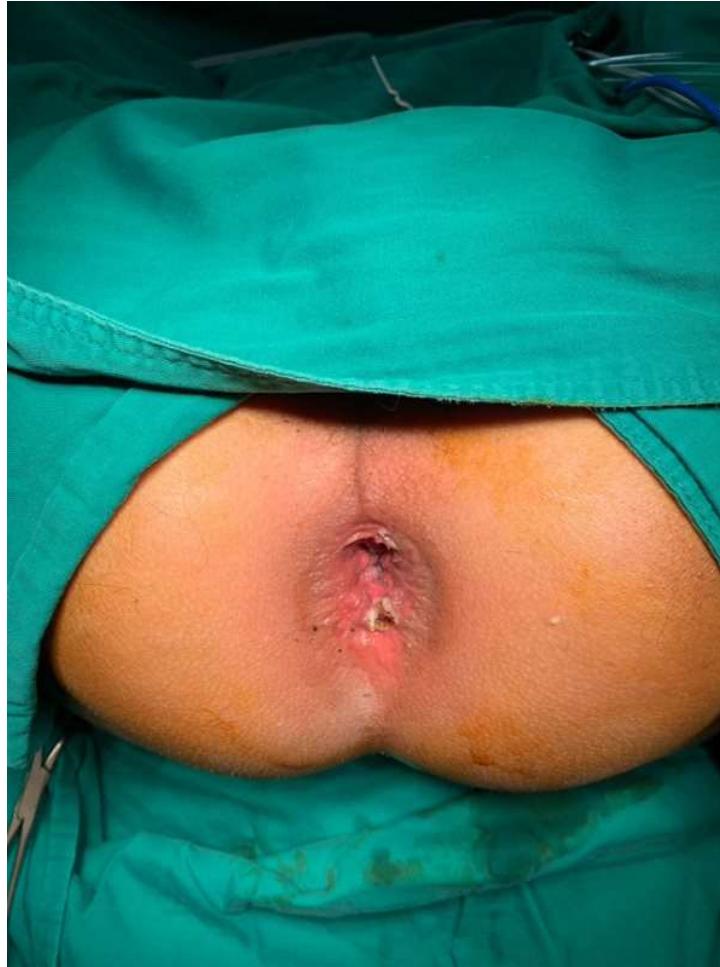
Thường gặp với các bệnh lây qua đường sinh dục nhưa giang mai

# BỆNH CẢNH LÂM SÀNG



# CẮT ĐỐT MÔNG GÀ HẬU MÔN





# PHẪU THUẬT LONGO



# KẾT QUẢ

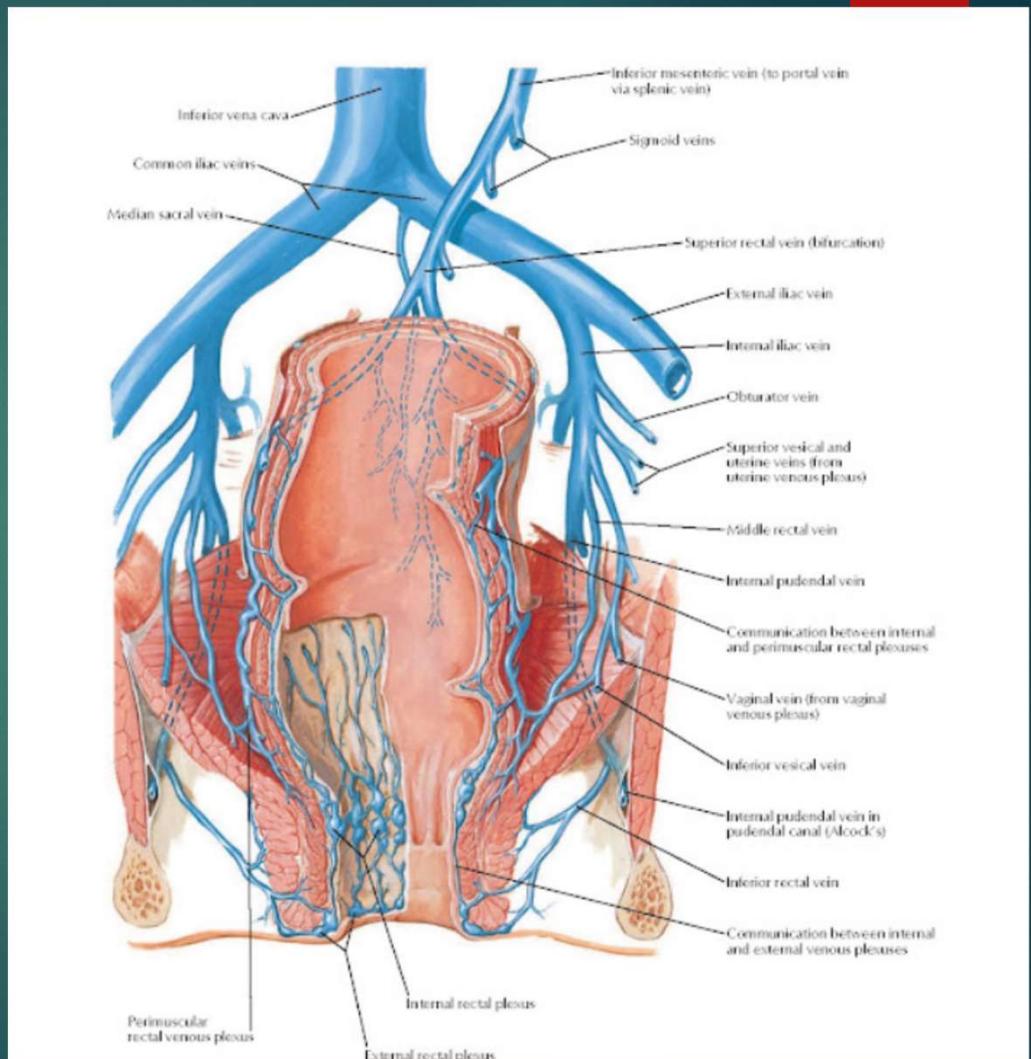
BV ĐHYD, 3-  
2021 đến nay

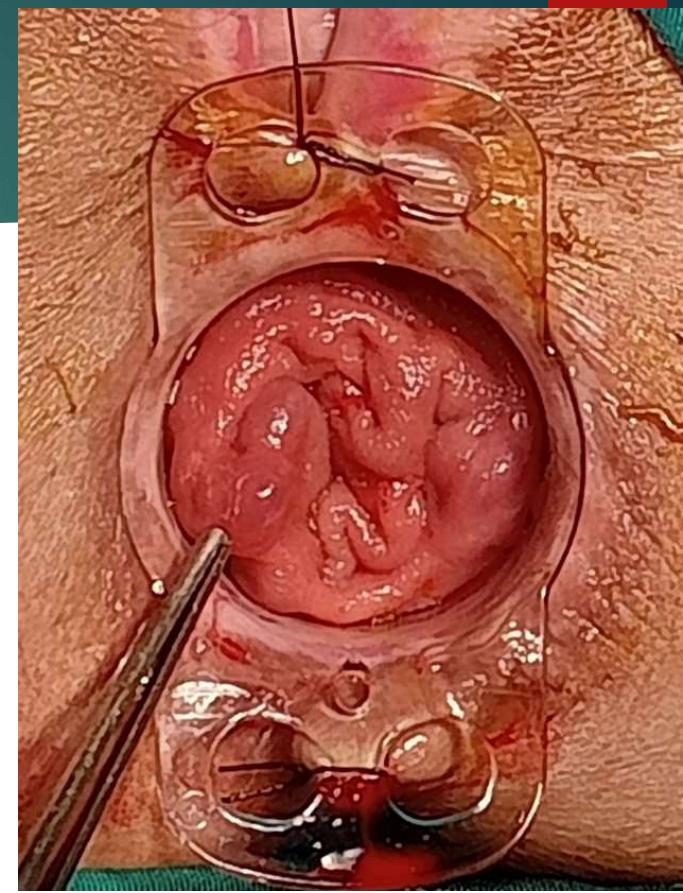
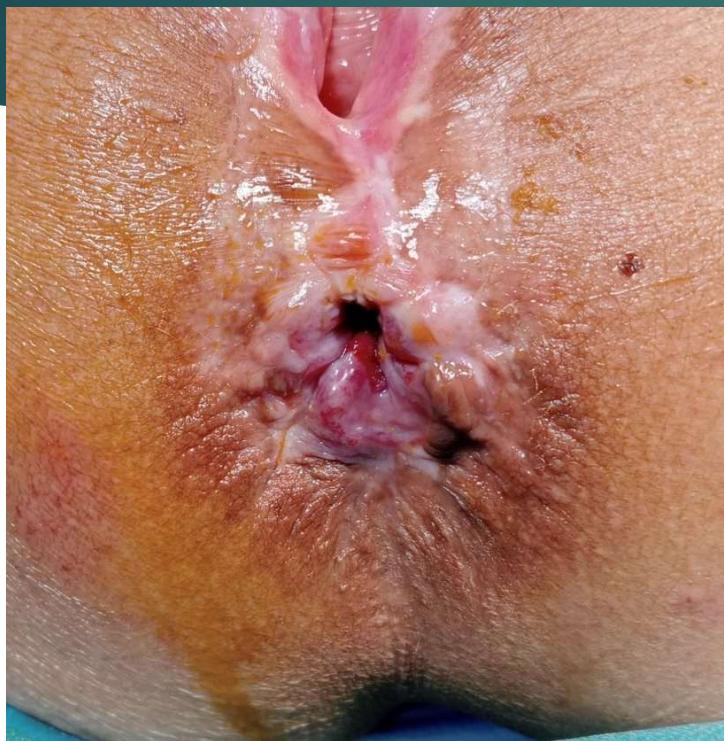
PT Longo 7  
trường hợp

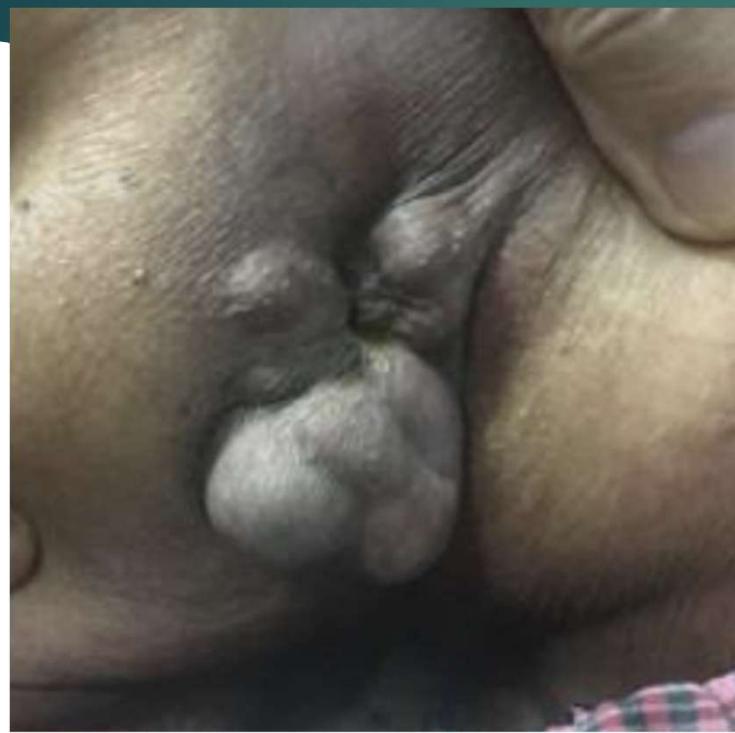
1 trường hợp tái  
phát, 1 trường  
hợp hẹp HM

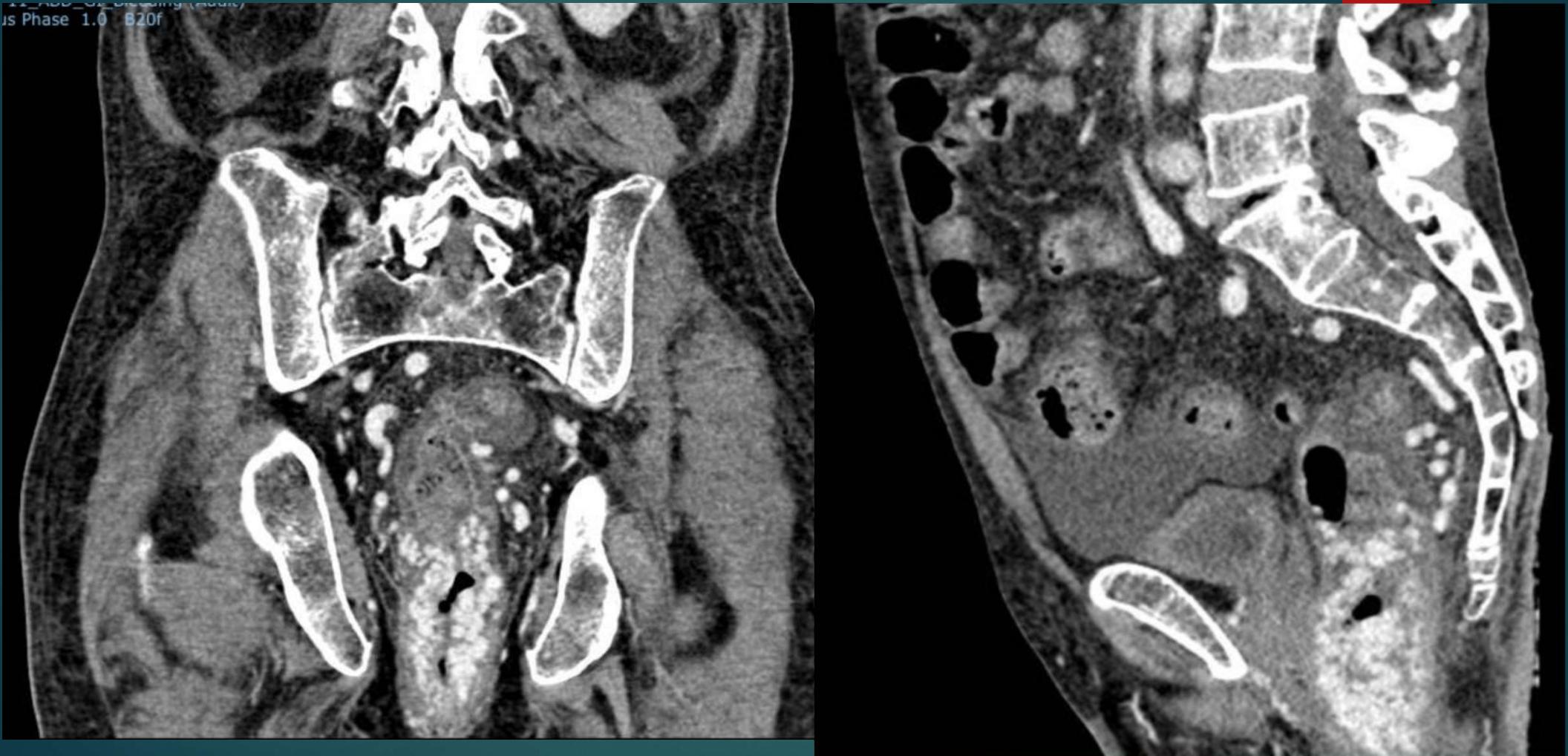
# BỆNH TRĨ KẾT HỢP XƠ GAN

- ▶ Rectal varices are collaterals between the portal and systemic circulations that manifest as a dilation of the submucosal veins and constitute a pathway for portal venous flow between the superior rectal veins which branch from the inferior mesenteric system and the middle inferior rectal veins from the iliac system









### 3. BỆNH TRĨ TRÊN XƠ GAN

Trĩ triệu chứng

Còn gọi là  
giãn tĩnh  
mạch  
quanh hậu  
môn

Chảy máu  
gây mất  
máu cấp  
tính

Điều trị nội  
khoa khó  
khăn



# PHẪU THUẬT LONGO ĐIỀU TRỊ GIÃN TĨNH MẠCH HẬU MÔN TRÊN BỆNH NHÂN XƠ GAN

- Previous sphincter reconstruction
  - Patients with known or potential bleeding disorders, e.g., anticoagulant medication, liver cirrhosis, renal failure
  - Patients at risk of septic complications as a result of transient bacteremia, e.g., immunosuppressed patients, patients undergoing chemotherapy, HIV patients
- Situations where stapled hemorrhoidopexy is technically possible, but may be dangerous for the partner:
- Patients (male or female) practicing receptive anal intercourse

### Special Considerations

A group of patients where stapled hemorrhoidopexy may be of particular benefit is those suffering with liver cirrhosis and portal hypertension [36–38]. Although the risks of bleeding will be higher than in noncirrhotic patients, this may be reduced with stapled hemorrhoidopexy as compared to conventional hemorrhoidectomy. In addition, the avoidance of open anal wounds has the theoretical advantage of reduced local sepsis and associated portal pyemia.

Any patients practicing receptive anal intercourse should be warned of the dangers of the staple line causing penile injury or condom rupture in the early postoperative period [39, 40]. Such patients should be advised to refrain from anal penetration until such time as all the staples have fallen out. This usually takes between 3 and 6 weeks, although isolated staples may remain embedded indefinitely.

2002

### **Correction of symptomatic ano-rectal varices with circumferential stapled anoplasty**

*Sir,* Ano-rectal varices are common complication of portal hypertension. Bleeding that results from ano-rectal varices may be debilitating and result in frequent need for transfusion. Conventional treatment has involved injection sclerotherapy or ligation banding. We report the use of the circular stapled anoplasty technique to correct ano-rectal bleeding that failed to respond to either injection sclerotherapy or ligation banding. A 65-year-old-female was referred with bright red rectal bleeding. She had a past history of primary biliary cirrhosis with established portal hypertension and oesophago-gastric varices. Her oesophago-gastric varices had previously been controlled with injection sclerotherapy prophylactic beta blockade. Anoscopy showed ano-rectal varices and flexible sigmoidoscopy excluded additional pathology in the descending colon. Initial treatment with rubber band ligation failed, as did subsequent injection sclerotherapy. Transjugular intrahepatic porto-systemic shunting (TIPSS) was contemplated but considered unduly invasive. Based on the premise of porto-systemic disconnection (used historically in the technique of oesophageal transection) it was elected to perform stapled circumferential anoplasty. This was carried out using a circumferential stapling device (PPH01, Ethicon Endosurgery, Bracknell, UK). There were no postoperative complications and the patient has experienced no further bleeds 20 months after surgery.

Anal varices have been documented to occur in 35% to

overt rectal bleeding. Previous treatments for symptomatic ano-rectal varices have included injection sclerotherapy, rubber band ligation, suture occlusion and porto-systemic shunting (including TIPSS).

The technique of circumferential stapled anoplasty was originally described for symptomatic Grade 3/4 haemorrhoids [3]. Based on the historical technique of oesophageal transection; it seemed that the PPH device would be ideally suited to disconnect the communication between portal and systemic venous systems. The technique is simple and appears an intuitively safer option than TIPSS for those patients with anal varices who have failed to respond to treatments such as banding, injection sclerotherapy or photocoagulation.

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2005

# Stapled Hemorrhoidopexy: An Alternative Technique for the Treatment of Bleeding Anorectal Varices. Report of a Case

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[Key words: Stapled hemorrhoidopexy; Anorectal varices]

**A**cute rectal bleeding from rectal varices can be challenging. Various techniques, including injection sclerotherapy with cyanoacrylate<sup>1</sup> and embolization<sup>2</sup> or ligation<sup>3</sup> of the inferior mesenteric vein, have been advocated. There are also reports of portal venous decompression using transjugular intrahepatic portosystemic shunts (TIPSS), but this procedure is associated with mortality and morbidity,<sup>4</sup> particularly in elderly patients.<sup>5</sup> Pharmacotherapy has a role for hypertensive colonopathy<sup>6</sup> but remains unproven for anorectal varices.

We describe the successful use of stapled hemorrhoidopexy for the treatment of bleeding anorectal varices in a patient with liver cirrhosis.

## CASE REPORT

A 50-year-old male went to a district hospital with acute hematemesis and fresh bleeding *per rectum*. He

bore the clinical stigmata of chronic liver disease and admitted to the consumption of 200 to 250 units (1 unit = 10 ml of pure ethanol) of alcohol per week. Biochemically, he had deranged liver function and a grossly abnormal clotting profile, which proved difficult to correct.

After resuscitation (4 units of blood, 4 units of fresh frozen plasma (FFP), and 1 pool of platelets), gastrointestinal endoscopy was performed, which demonstrated bleeding esophageal varices. These were treated with a combination of injection sclerotherapy and banding. This was successful but six days later his fresh rectal bleeding recommenced. At this stage he was referred to the surgical team and underwent flexible sigmoidoscopy, which revealed bleeding anorectal varices. After further correction of his clotting profile (4 units of FFP), he was taken to the operating room for an elective stapled hemorrhoidopexy. The procedure was performed under general anesthesia with the patient in the prone jackknife position. Circumferential stapled hemorrhoidopexy was performed using the PPH01 device (Ethicon endosurgery, Bracknell, United Kingdom)



## Management of rectal varices in portal hypertension

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extrahepatic portal vein obstruction. The diagnosis is typically based on lower endoscopy (colonoscopy or sigmoidoscopy). However, endoscopic ultrasonography

### Surgical management

Surgery has been used for treatment of rectal varices mainly when endoscopic management has failed. Surgical methods include simple suture ligation, inferior mesenteric vein occlusion and porto-caval shunt surgery. The later has been shown to be effective in controlling life threatening bleeding. However, the majority of patients presenting with bleeding rectal varices have a poor general condition and are not good candidate for these major surgical procedures<sup>[66]</sup>. The mortality in these patients is high and is mainly secondary to liver failure. Bittinger *et al*<sup>[66]</sup> reported 80% mortality within 2 mo despite adequate local treatment of the rectal varices.

Direct suture ligation is a technically challenging option and often not successful. However, the stapled approach seems to be a suitable alternative. Stapled procedure for the control of bleeding varices was first reported in 2002 by Botterill *et al*<sup>[67]</sup>. The authors reported a circumferential stapling device was used to successfully control bleeding ano-rectal varices after failure of injection sclerotherapy and band ligation. In 2005, another case report also demonstrated that stapled procedure may be an effective means of bleeding control<sup>[68]</sup>. A case series of nine patients was published by Kaul *et al*<sup>[69]</sup> with successful control of bleeding following a circumferential stapled procedure. Four of the nine patients were previously treated with endoscopic therapy (three with banding and one with injection sclerotherapy). No further rebleeding was noted during the follow up period of 4 to 24 mo.

## Systematic review of anorectal varices

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Received 10 January 2013; accepted 18 June 2013; Accepted Article online 10 September 2013

### *Stapled anopexy*

Biswas *et al.* [36] reported the first successful use of stapled anopexy to stop massive bleeding from ARV. The pursestring was placed 4 cm above the dentate line. The patient was pain free, with an uneventful recovery and no recurrent bleeding. Botterill *et al.* [37] have similarly used stapled anopexy for the arrest of refractory bleeding from ARV. No further bleeding was noted at 20 months of follow-up. The principle behind this technique is possibly the discontinuation of porto-systemic connections in the anorectum, analogous to the older operative methods of oesophageal transection

and reanastomosis. This seems to be a simple, yet very effective, technique for the treatment of anorectal variceal bleeding, although more patients need to be treated. Stapled anopexy forms part of every colorectal surgeons' armamentarium, making it an attractive and easily available option for the initial treatment of ARV refractory to banding/injection sclerotherapy.



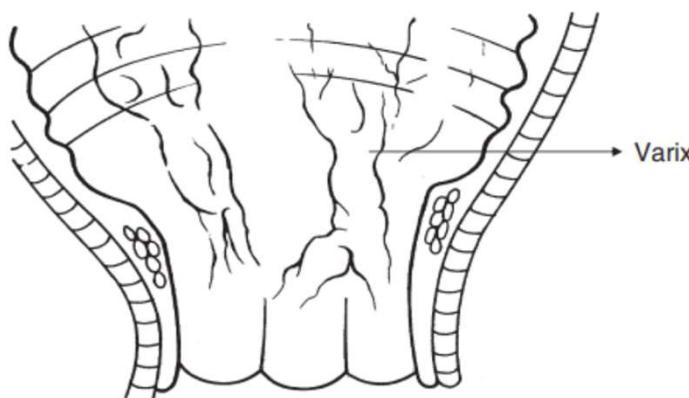
## The Management of Bleeding from Anorectal Varices

Marcus Robertson<sup>1,2</sup> · Alexandra Ines Thompson<sup>1</sup> · Peter Clive Hayes<sup>1</sup>

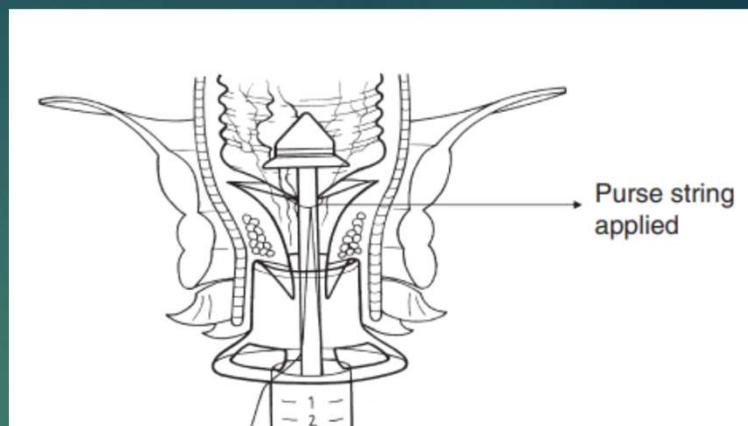
Published online: 7 November 2017  
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### Suture Ligation and Stapled Anopexy

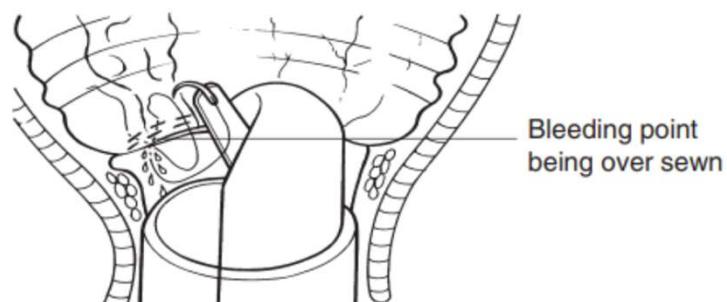
Direct suture ligation is a technically challenging procedure with questionable efficacy [6]. Stapled anopexy has been suggested as a simple technique that could be employed in treating bleeding anorectal varices if EBL or EIS fails. It is thought that this procedure may be effective due to disruption of portosystemic connections in the anorectum [6]. Stapled anopexy was described by Biswas et al., who placed a purse-string suture 4 cm above the dentate line to successfully halt massive bleeding from anorectal varices [86]. Botterill et al. used a circumferential stapling device to induce haemostasis in a patient with bleeding anorectal varices who had failed both EBL and EIS [87]. A subsequent case series of nine patients by Kaul and Skaife. also demonstrated that stapling can be an efficacious method of treating bleeding anorectal varices when carried out by an experienced colorectal surgeon, with no rebleeding encountered [88].



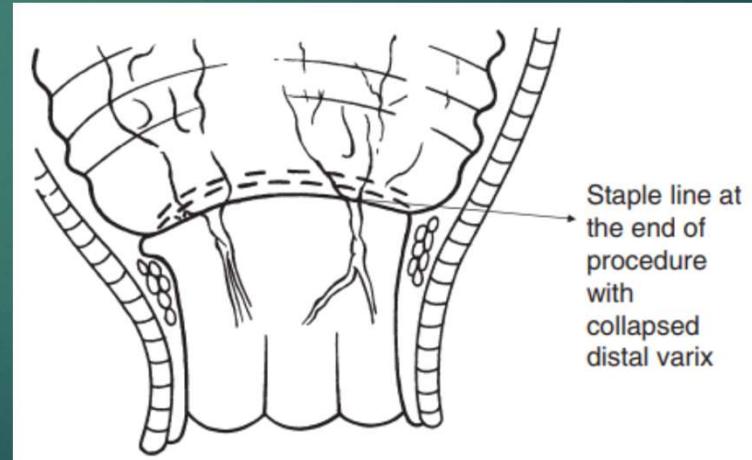
**Figure 1** Rectal varices.



**Figure 2** Purse string suture applied. Anvil in place. Retraction on purse string pulls mucosa into the stapling device.



**Figure 3** After the device is fired, bleeding points are identified and over sewn.



# Phẫu thuật Longo + Keo sinh học

2017;30(2):118-121  
DOI: /10.1590/0102-6720201700020009

## PPH AND BIOLOGICAL GLUE IN PATIENTS WITH HIGH RISK OF BLEEDING IN STAPLED HEMORRHOIDOPEXY

*PPH e cola biológica em pacientes com alto risco de sangramento em hemorroidopexia por grampeamento*

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**ABSTRACT - Background:** Stapled hemorrhoidopexy is a common treatment for grade 3 hemorrhoids. Patients with conditions that increase the risk of bleeding, as cardiac stents usage with clopidogrel bisulfate and liver cirrhosis, should receive an extra care in surgical procedures due to the high risk of bleeding. For this reason and for patients with third degree hemorrhoids we propose the use of stapled hemorrhoidopexy followed by the use of biological glue. **Aim:** Assess surgical outcomes in patients with hemorrhoids and high risk of bleeding submitted to stapled hemorrhoidopexy followed by biological glue. **Methods:** Between 2005 and 2015, 22 patients were analyzed, in a retrospective cohort study. **Results:** From 22 patients submitted to stapled hemorrhoidopexy followed by the use of biological glue, only one (4.5%) presented bleeding in the surgical postoperative. Patients do not have any other complications and pain in the postoperative period. The median (IQR) operation duration was 55 (12) min and the median (IQR) length of hospital stay after surgery was 3 (2) days. **Conclusion:** Patients with high risk of bleeding submitted to stapled hemorrhoidopexy followed by the use of biological glue presented very low rates of bleeding in the postoperative period.

**HEADINGS** - Hemorrhoid. Liver cirrhosis. Stents. Clopidogrel.

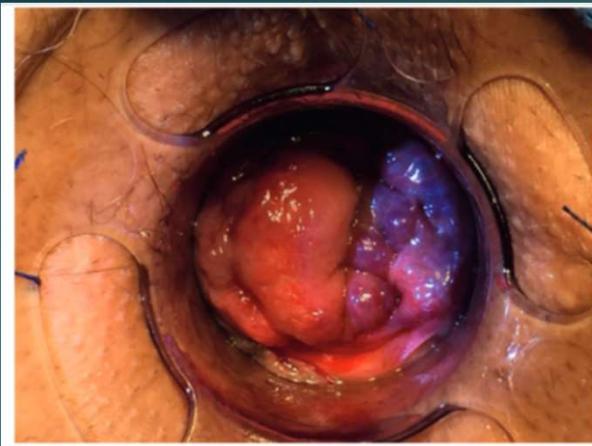


FIGURE 1 – Third degree hemorrhoid



FIGURE 2 – Insertion of circular stapler

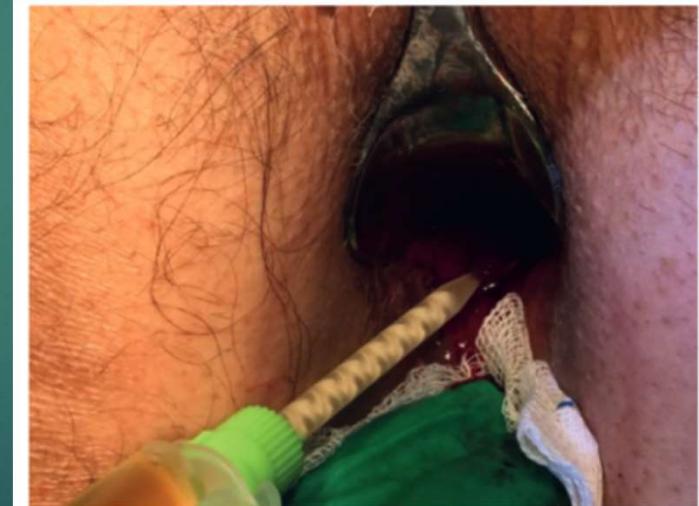
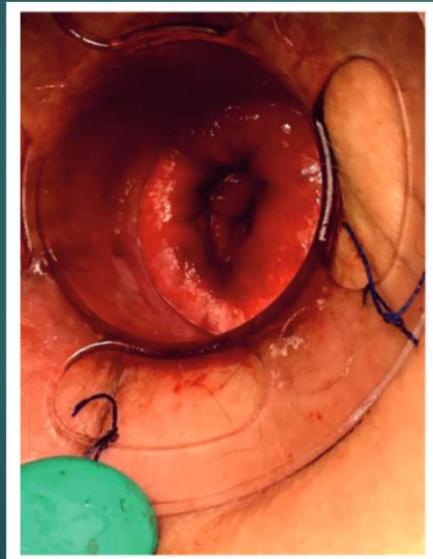


FIGURE 5 – Use of biological glue in the suture line

# KẾT LUẬN

- ▶ Phẫu thuật Longo có thể áp dụng điều trị cho các trường hợp đặc biệt như:
  - ▶ Bệnh trĩ hỗn hợp
  - ▶ Bệnh trĩ kết hợp xơ gan
  - ▶ Bệnh trĩ kết hợp mồng gà hậu môn
- ▶ Hiệu quả và tương đối an toàn
- ▶ Cần đường cong huấn luyện thích hợp