Third space endoscopy concepts and Basics

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Berenson Scholarship in Advanced endoscopy, BIDMC, Harvard Medical School.

Peter Cotton traveler fellowship ,MUSC,USA

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Member of WEO Committee for SMII

General secretary of ESDE

General secretary of ARSGE

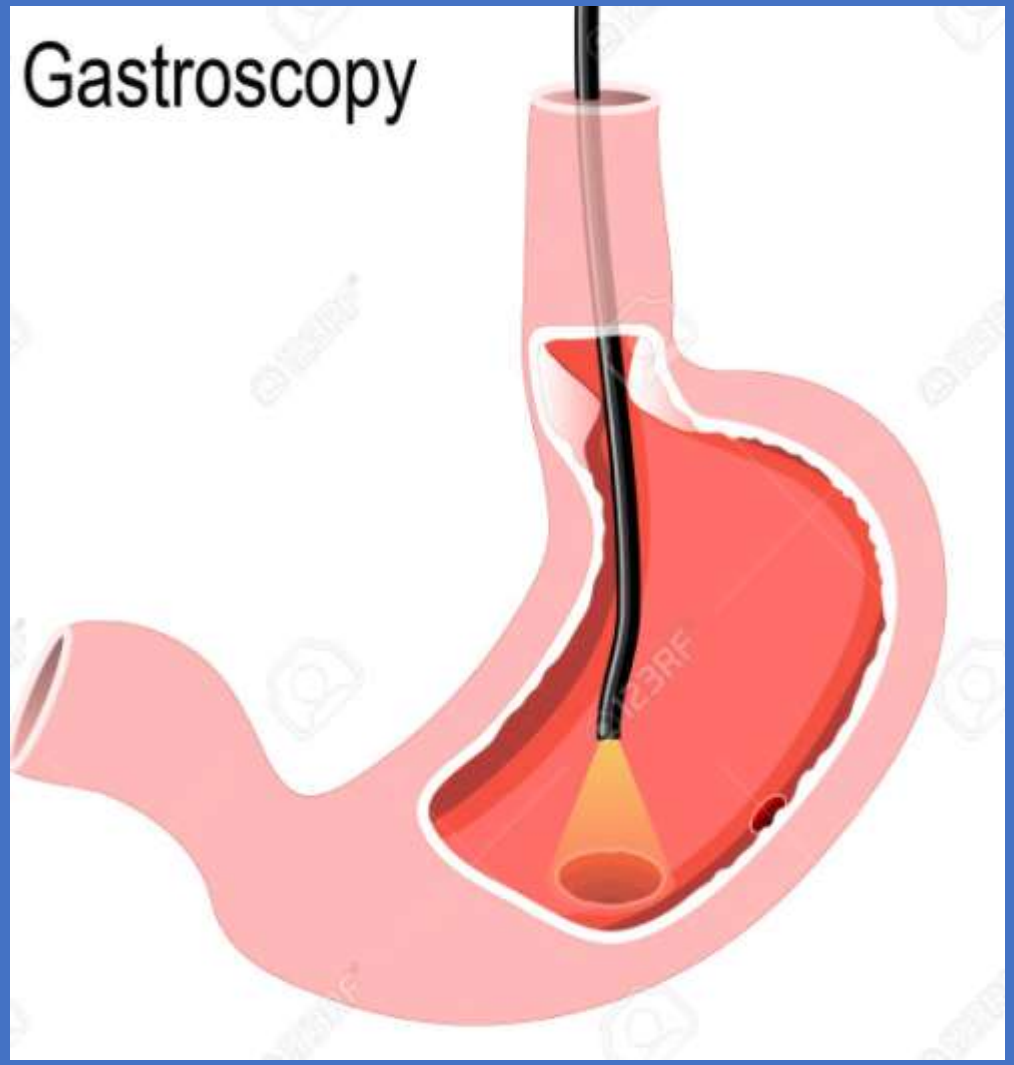
Member OF ASGE,ACGE,WEO

Agenda

- Background
- Applications
- Basic Steps
- Rules to follow
- Management of complications
- Be flexible with strategy
- Break borders
- Take home messages

Background

First space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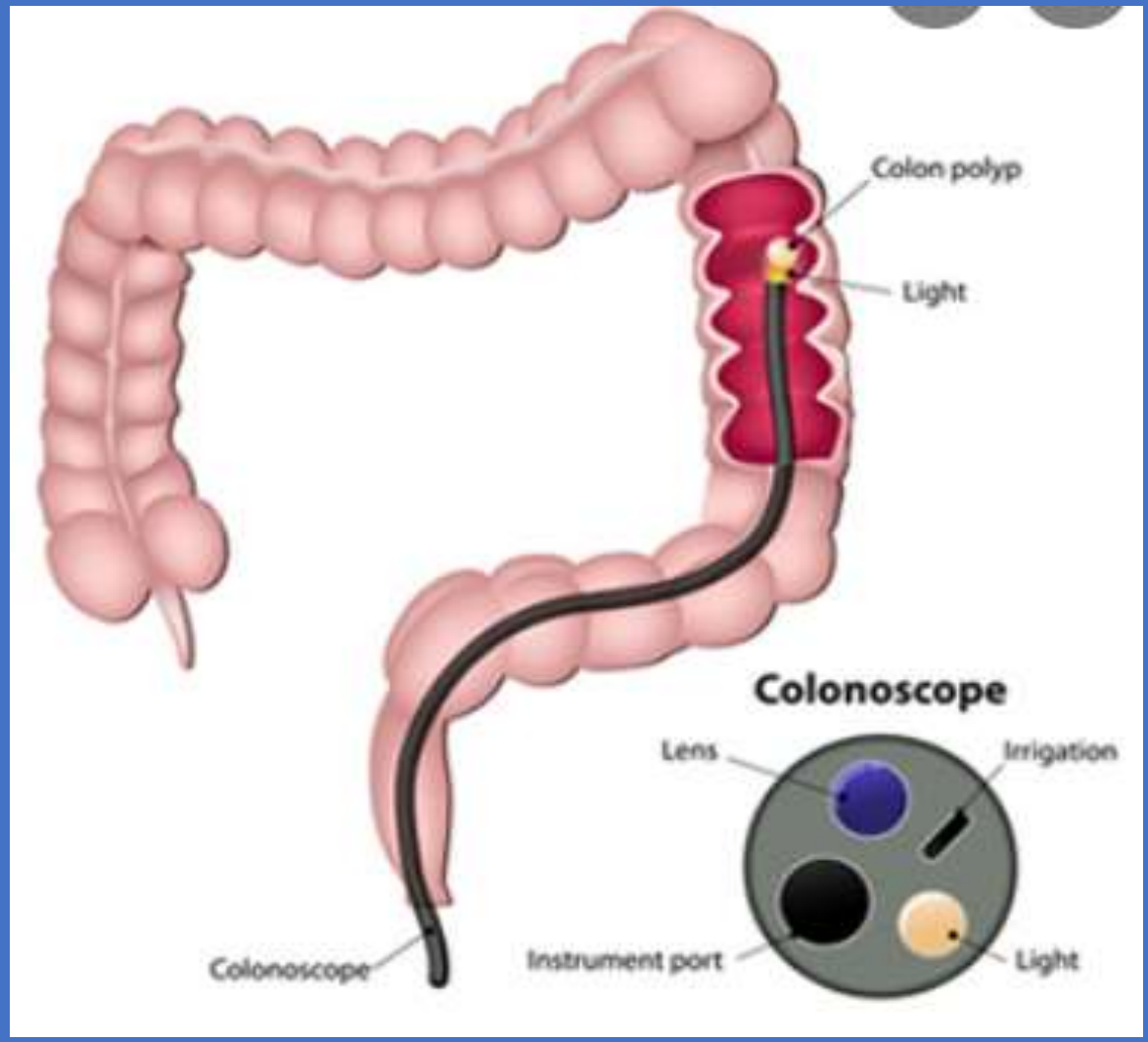
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Irrigation
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Instrument port
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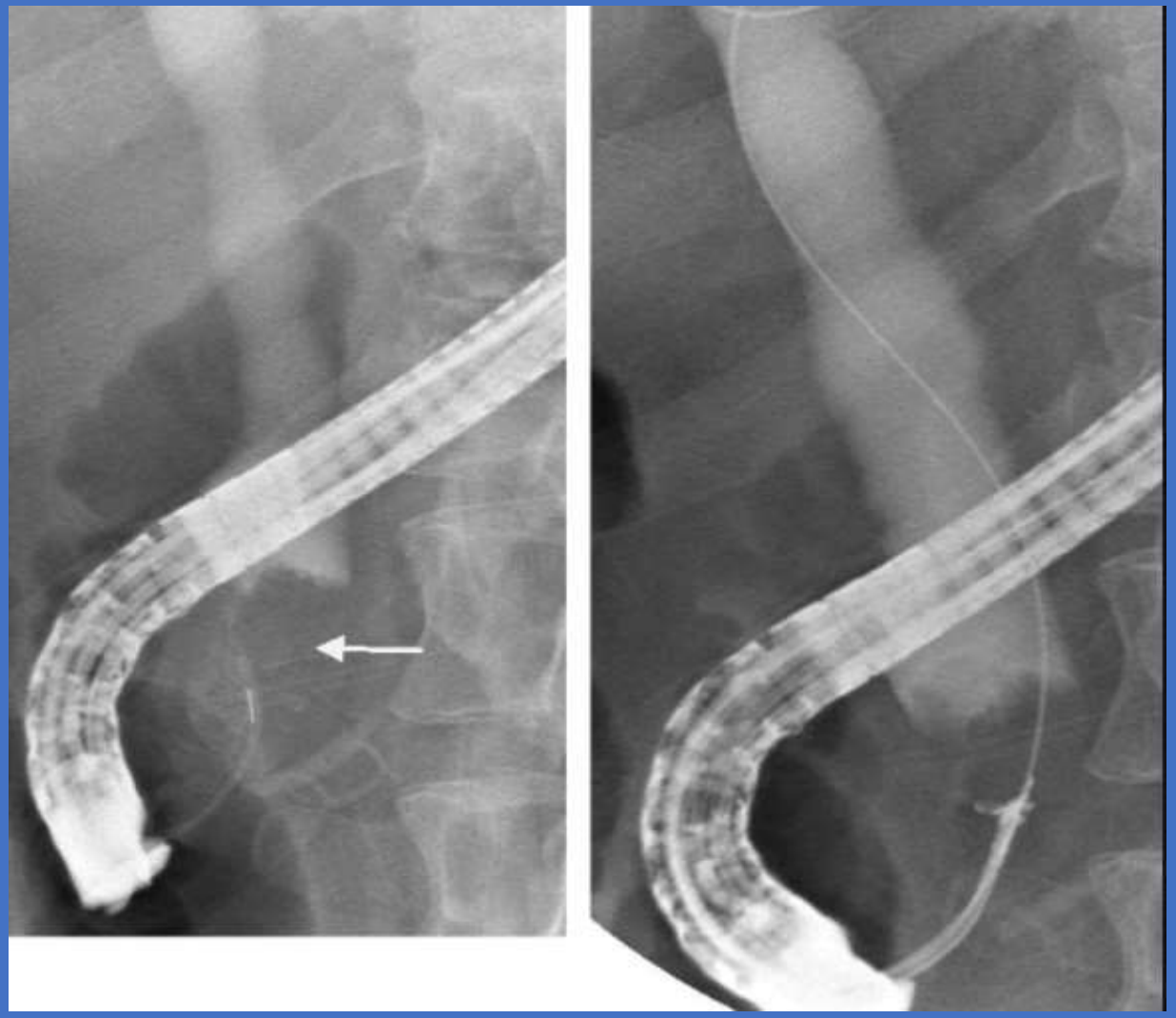
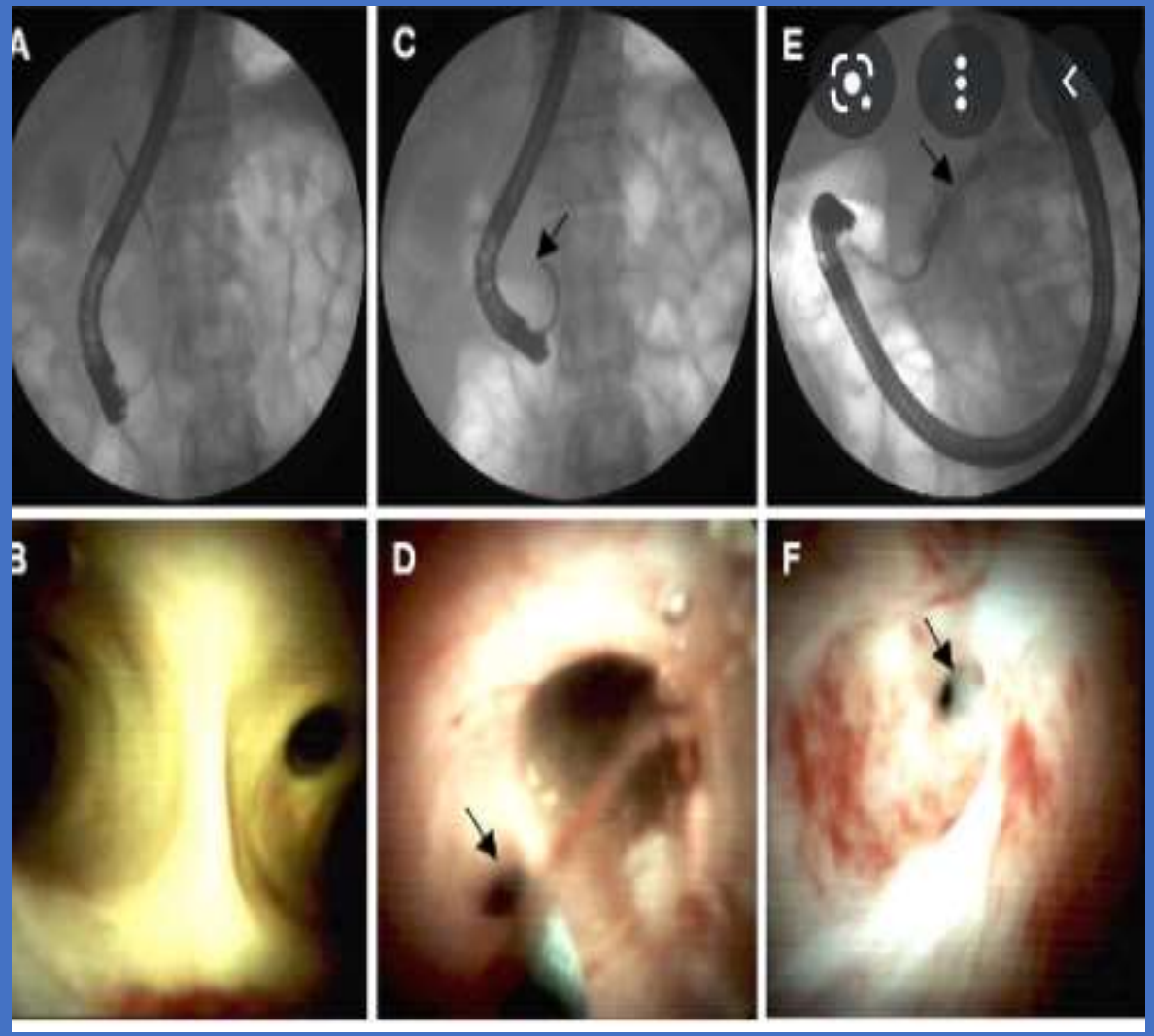
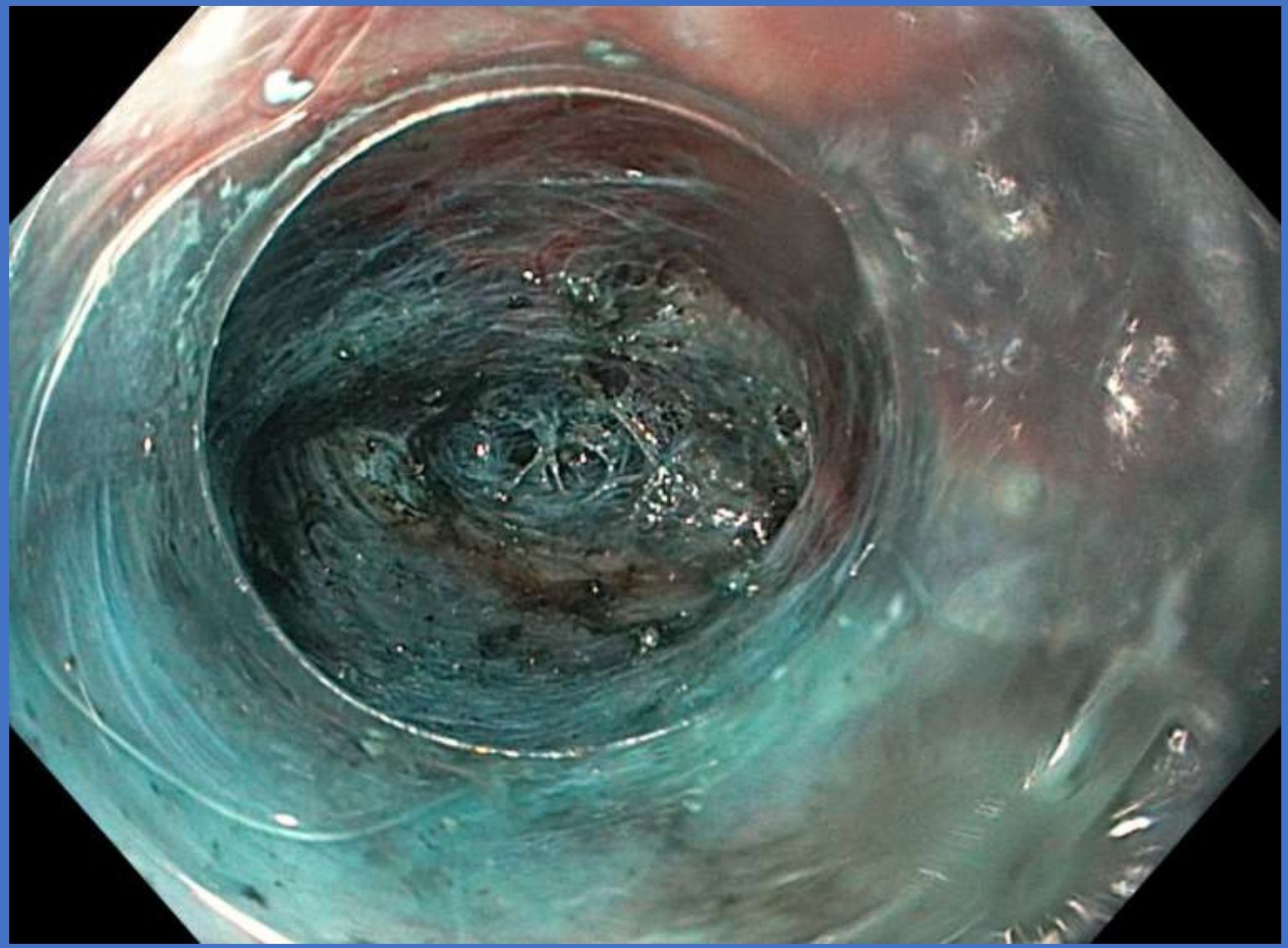
Second space





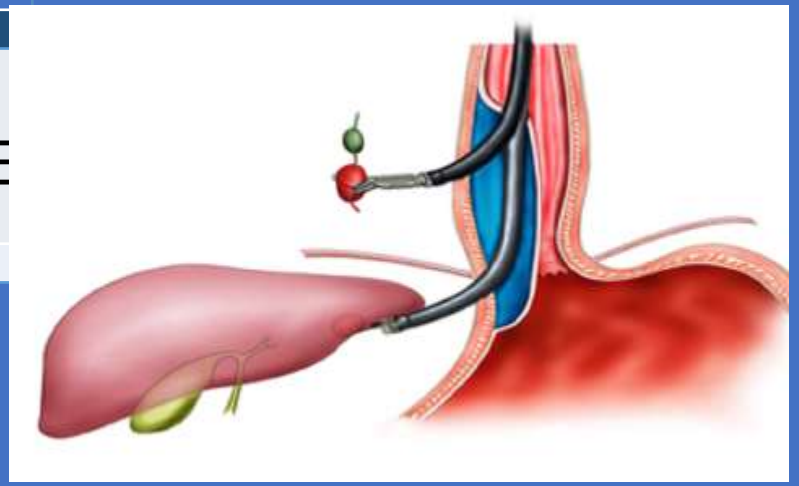
Third space

working inside the GIT tract wall ,Not the GIT tract lumen through creation of a tunnel in the submucosa



ESS = Endoscopic Submucosal Surgeries

- ESS
  - Muscle
    - Myotomy
      - POEM
      - G-POEM
    - Tumorectomy
      - STER
  - Mucosa
    - E
  - Outside GI wall



Werner and Rosch et al., Curr Treat Options Gastro 2016; 14:163-177

History of ESS

Myotomy

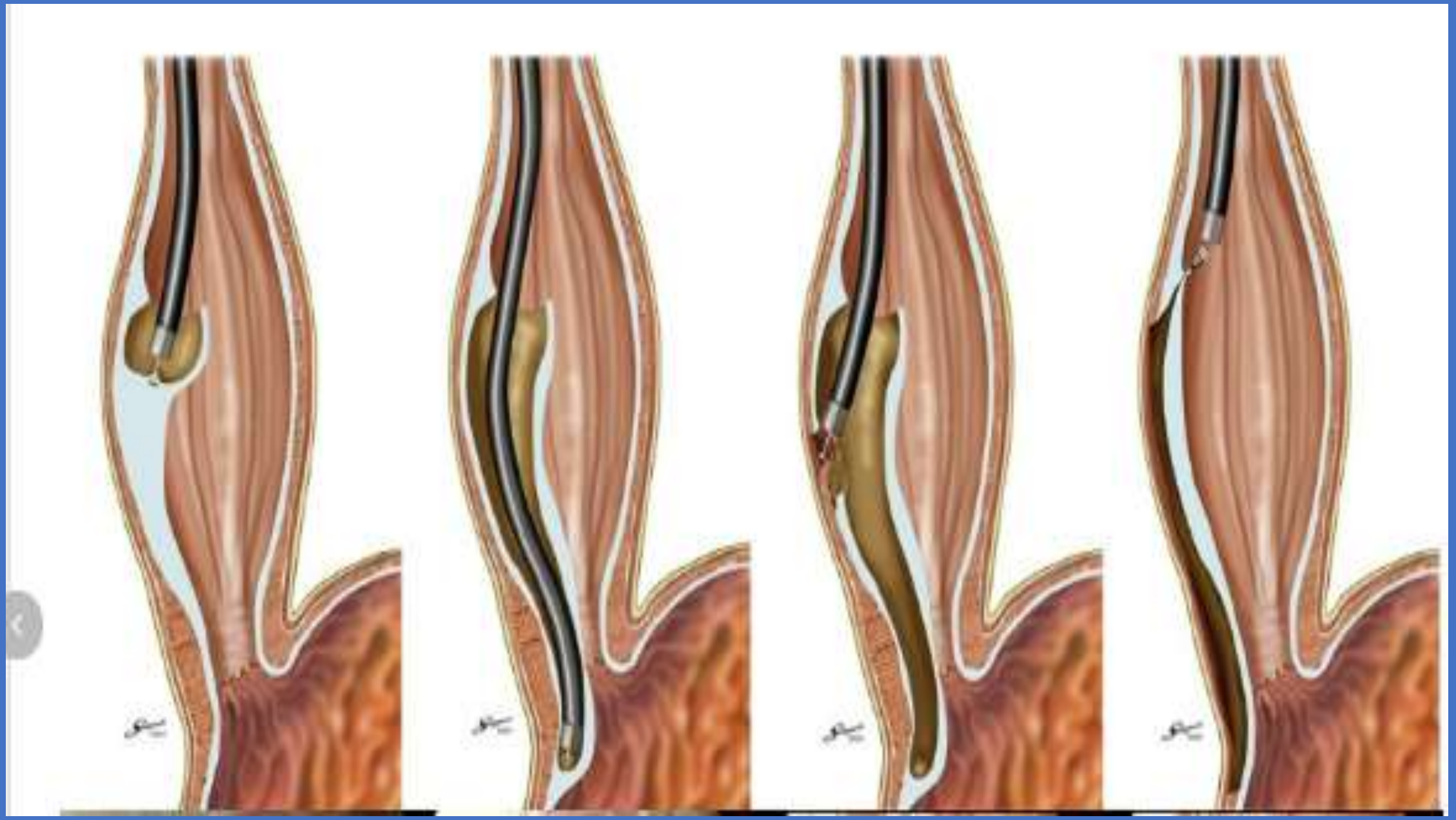
POEM

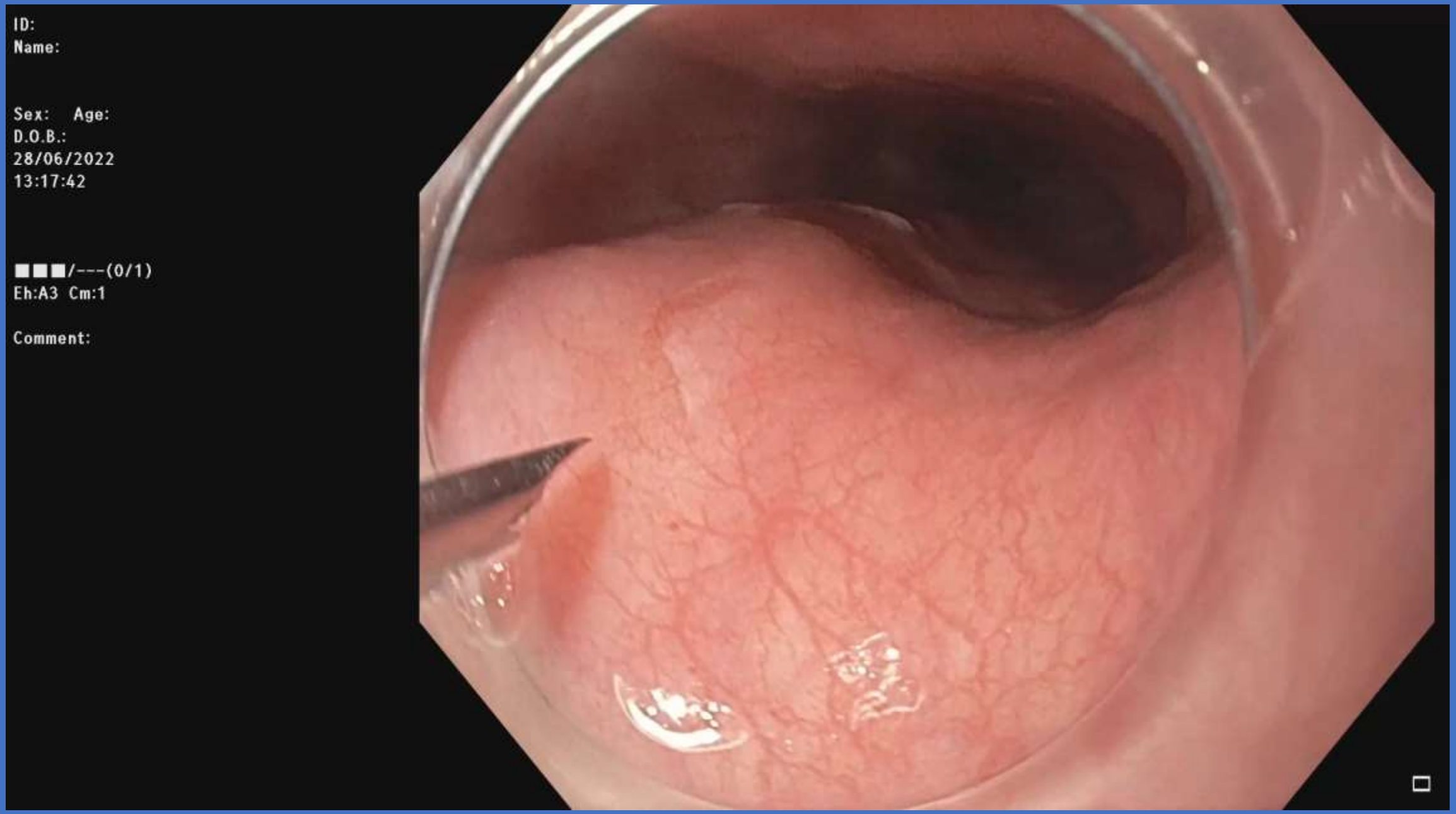
Inoue
(2010)

Peroral endoscopic myotomy (POEM) for esophageal achalasia*

Authors H. Inoue, H. Minami, Y. Kobayashi, Y. Sato, M. Kaga, M. Suzuki, H. Satodate, N. Odaka, H. Itoh, S. Kudo

Institution Digestive Disease Center, Showa University Northern Yokohama Hospital

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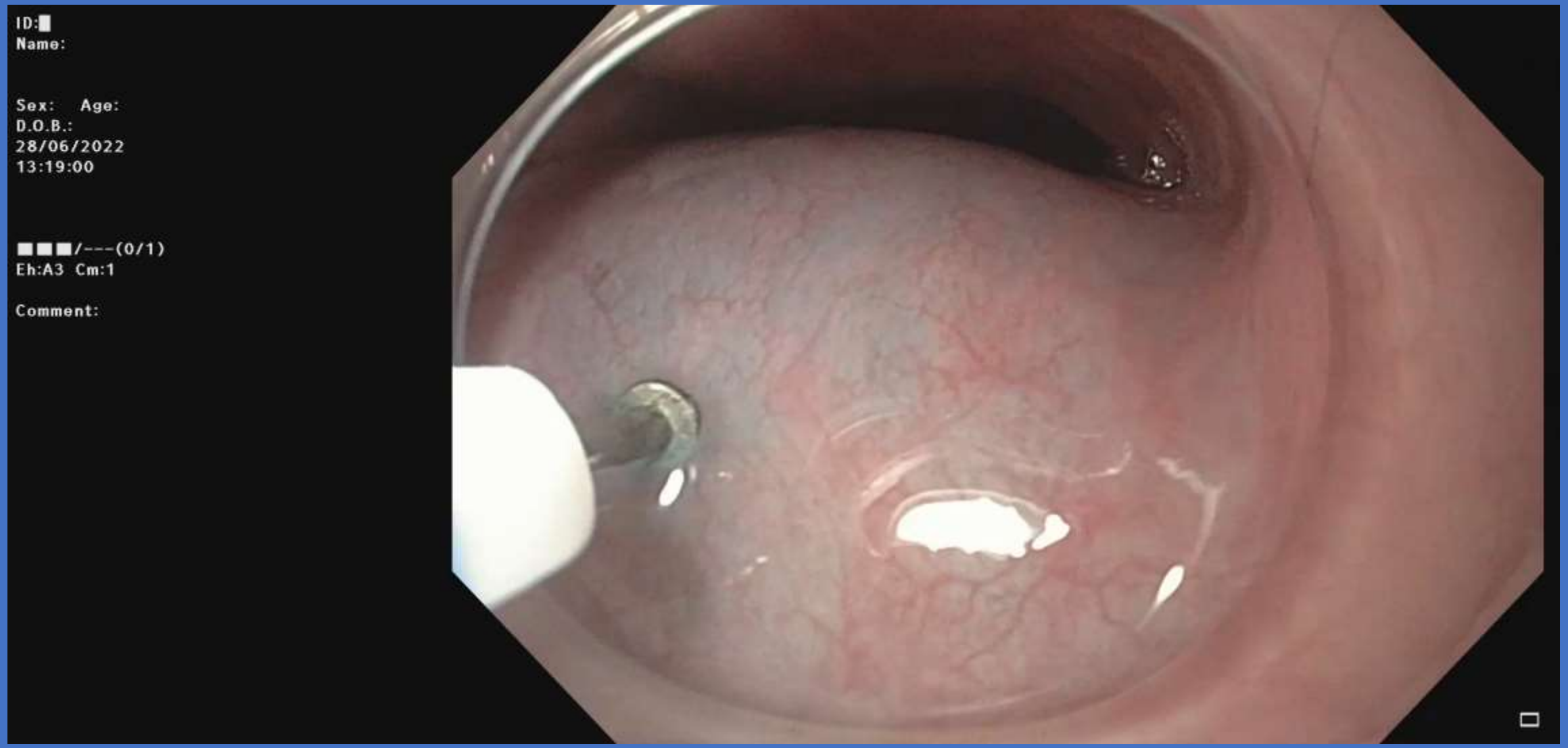
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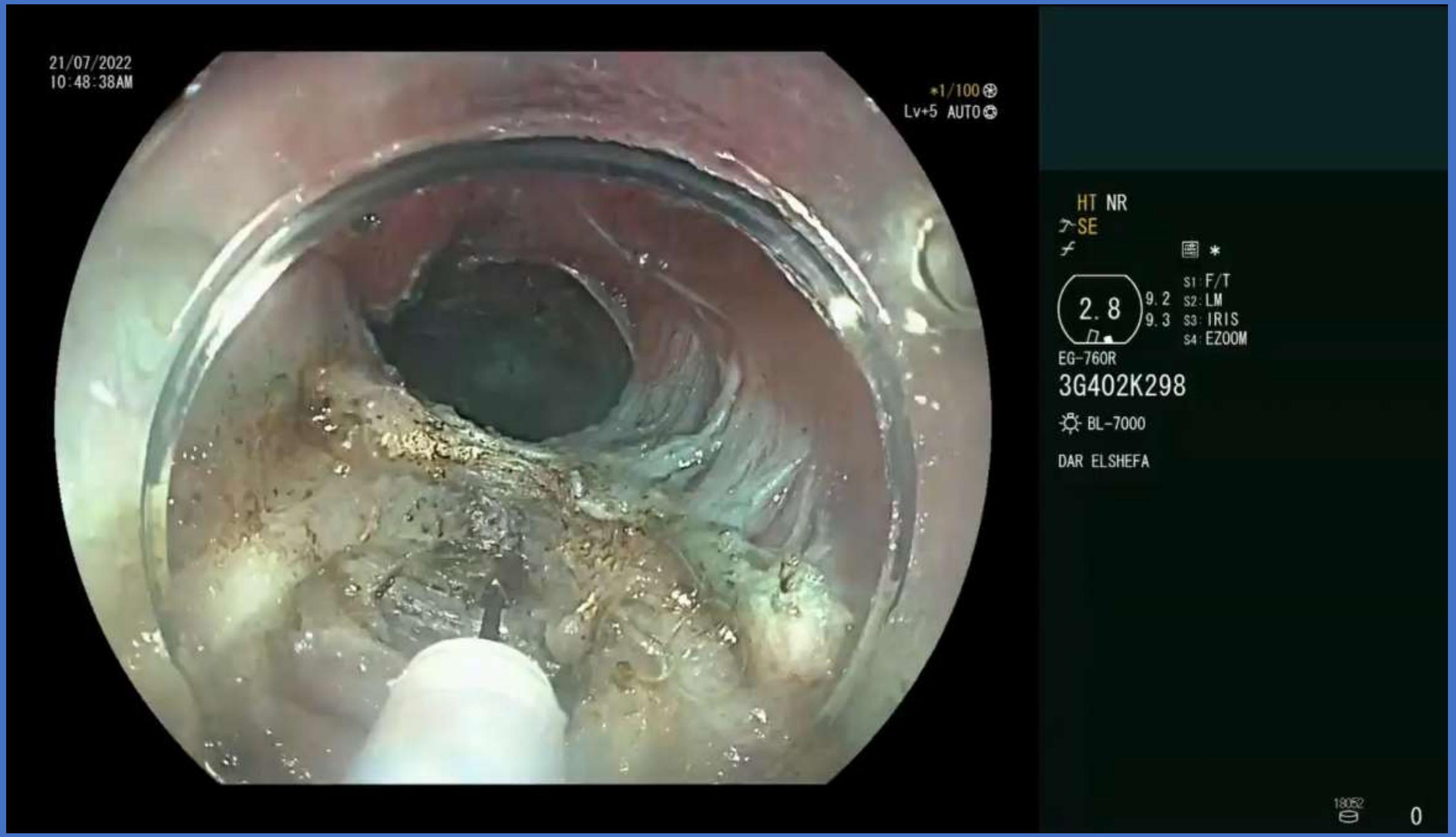
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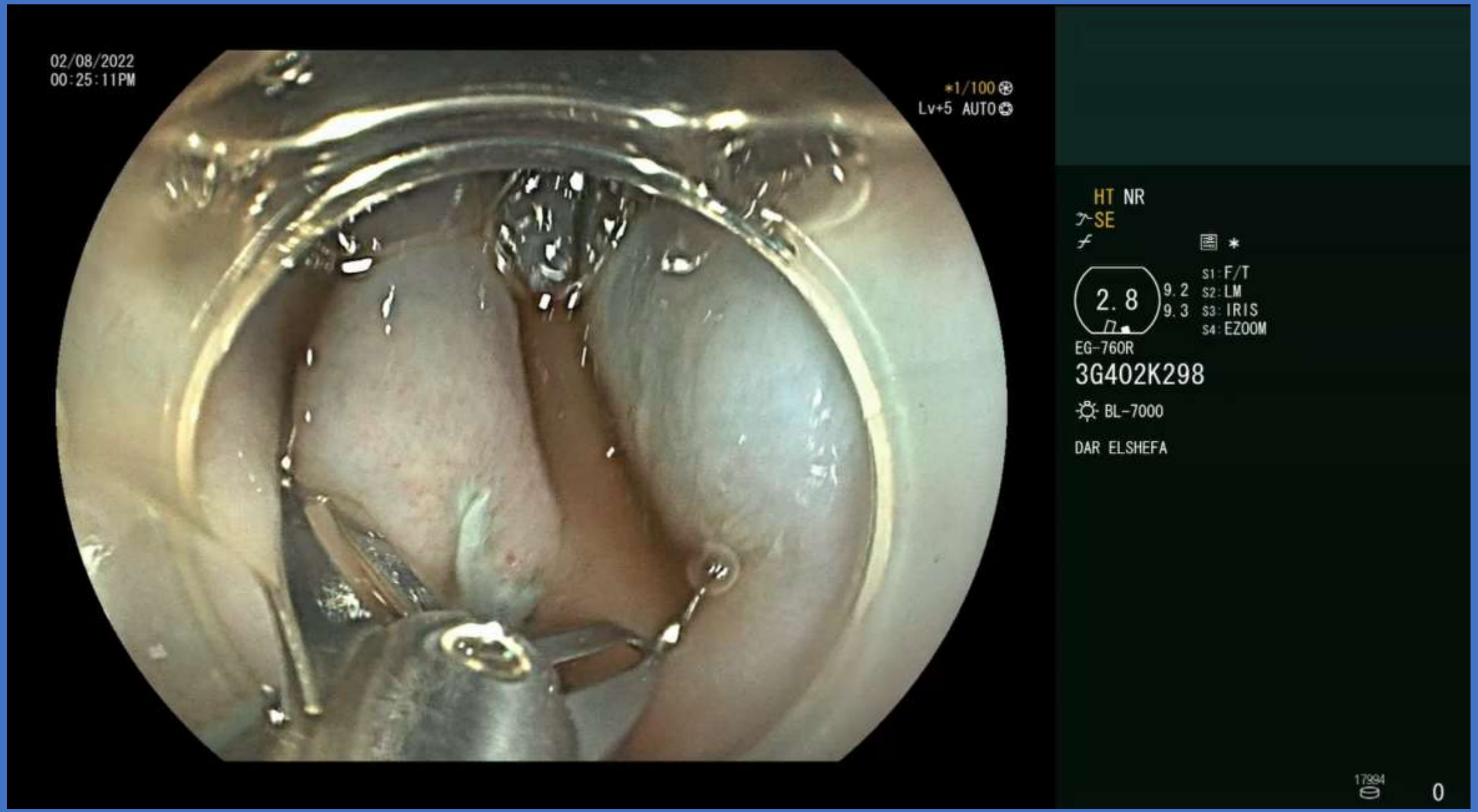
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How to implement

Achalasia

Type I
Type II
Type III

- Graduated balloon dilation
- Myotomy (Surgical, endoscopic)
- Botulism toxin injection

Other motility disorders

ACG Clinical Guidelines: Diagnosis and Management of Achalasia

Michael F. Vaezi, MD, PhD, MSc, FACG[1], John E. Pandolfino, MD, MS, FACG[2], Rena H. Yadlapati, MD, MHS (GRADE Methodologist)[3], Katarina B. Greer, MD, MS[4] and Robert T. Kavitt, MD, MPH[5]

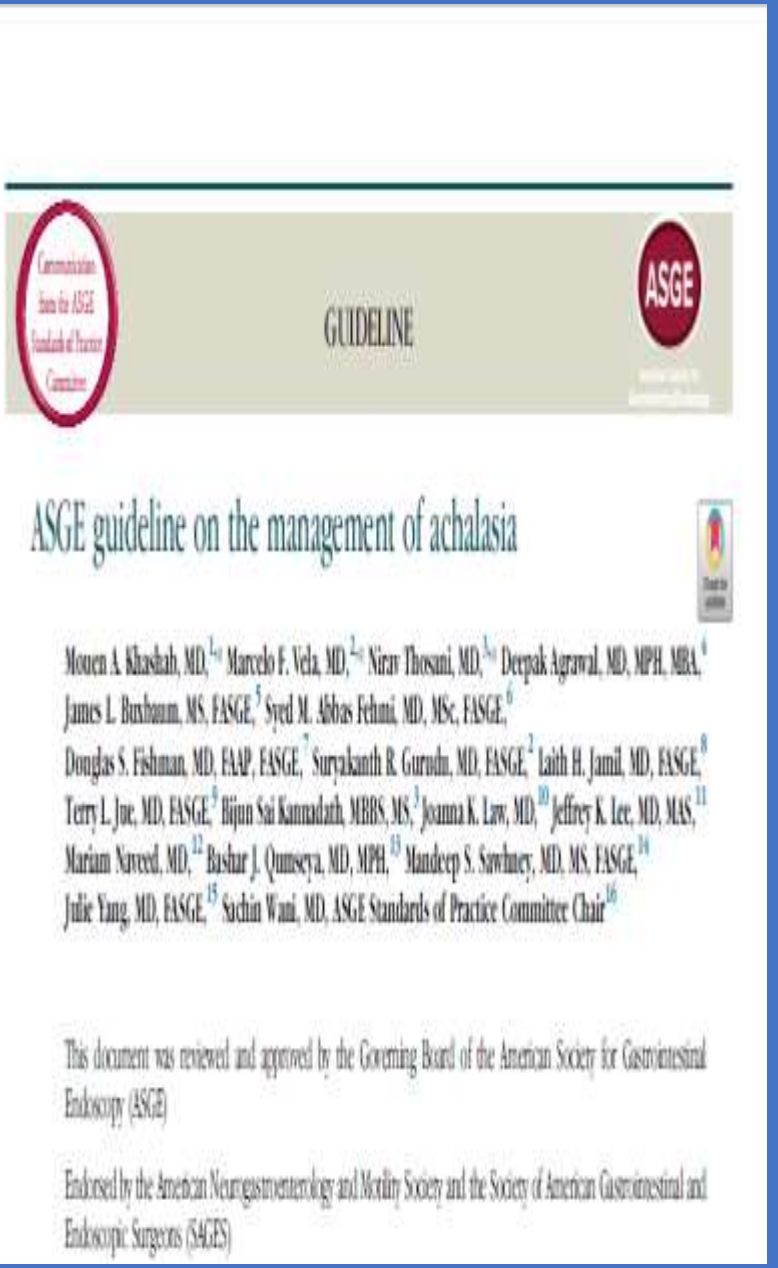
In patients with achalasia who are candidates for definite therapy:

- PD, LHM, and POEM are comparable effective therapies for type I or type II achalasia.
- POEM would be a better treatment option in those with type III achalasia.
- Botulinum toxin injection is reserved for those who cannot undergo the above definitive therapies.

We recommend that POEM and LHM result in comparable symptomatic improvement in patients with achalasia.	Moderate	Strong

Recommendations

1. Laparoscopic Heller myotomy, pneumatic dilation, and POEM are effective therapeutic modalities for patients with achalasia. Decision between these treatment options should depend on achalasia type, local expertise, and patient preference. ⊕⊕⊕⊕
2. We recommend against the use of botulinum toxin injection as definitive therapy for achalasia patients. Botulinum toxin injection may be reserved for patients who are not candidates for other definitive therapies. ⊕⊕⊕◯
3. We suggest POEM as the preferred treatment for management of patients with type III achalasia. ⊕◯◯◯
4. In patients with failed initial myotomy (POEM or laparoscopic Heller myotomy), we suggest pneumatic dilation or redo myotomy using either the same or an alternative myotomy technique (POEM or laparoscopic Heller myotomy). ⊕◯◯◯
5. We suggest that patients undergoing POEM are counseled regarding the increased risk of postprocedure reflux compared with pneumatic dilation and laparoscopic Heller myotomy. Based on patient preferences and physician expertise, postprocedure management options include objective testing for esophageal acid exposure, long-term acid suppressive therapy, and surveillance upper endoscopy. ⊕⊕◯◯
6. We recommend pneumatic dilation compared with botulinum toxin injection for patients with achalasia. ⊕⊕⊕⊕
7. We recommend that laparoscopic Heller myotomy and pneumatic dilation are comparable treatment options for management of patients with achalasia types I and II, and the treatment option should be based on shared decision-making between the patient and provider. ⊕⊕⊕◯
8. We suggest that POEM and laparoscopic Heller myotomy are comparable treatment options for management of patients with achalasia types I and II, and the treatment option should be based on shared decision-making between the patient and provider. ⊕⊕◯◯



GUIDELINE

ASGE guideline on the management of achalasia

Moneen A. Khashab, MD,[1,*] Marcelo F. Vela, MD,[2,*] Nirav Thosani, MD,[3,*] Deepak Agrawal, MD, MPH, MBA,[4] James L. Buxbaum, MS, FASGE,[5] Syed M. Abbas Fehmi, MD, MSc, FASGE,[6] Douglas S. Fishman, MD, FAAP, FASGE,[7] Suryakanth R. Gurudu, MD, FASGE,[2] Laith H. Jamil, MD, FASGE,[8] Terry L. Jue, MD, FASGE,[9] Bijun Sai Kannadath, MBBS, MS,[3] Joanna K. Law, MD,[10] Jeffrey K. Lee, MD, MAS,[11] Mariam Naveed, MD,[12] Bashar J. Qumseya, MD, MPH,[13] Mandeep S. Sawhney, MD, MS, FASGE,[14] Julie Yang, MD, FASGE,[15] Sachin Wani, MD, ASGE Standards of Practice Committee Chair[16]

This document was reviewed and approved by the Governing Board of the American Society for Gastrointestinal Endoscopy (ASGE)

Endorsed by the American Neurogastroenterology and Motility Society and the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES)

Endoscopic management of gastrointestinal motility disorders – part 1: European Society of Gastrointestinal Endoscopy (ESGE) Guideline

Recommendations	Strength	Certainty of evidence
We recommend that, in the treatment of achalasia, symptom relief should be regarded as the primary treatment aim	Expert opinion	
We recommend that improvement of objectively measured esophageal emptying should be regarded as an important additional treatment aim	Expert opinion	
Botulinum toxin therapy can be considered an effective and safe therapy for short-term symptom relief in esophageal achalasia	Conditional recommendation	Moderate
Graded pneumatic dilatation is an effective and relatively safe treatment for esophageal achalasia	Strong recommendation	Strong
Peroral endoscopic myotomy is an effective and relatively safe treatment for esophageal achalasia	Conditional recommendation	Moderate
Laparoscopic Heller myotomy (LHM) combined with an antireflux procedure is an effective and relatively safe therapy for achalasia	Conditional recommendation	Moderate
We suggest age and manometric subtype be taken into account when selecting a therapeutic strategy	Conditional recommendation	Moderate
Treatment decisions in achalasia should be made based on patient-specific characteristics, the patient's preference, possible side effects and/or complications, and a center's expertise. Overall, graded repetitive pneumatic dilation, LHM, and POEM have comparable efficacy	Strong recommendation	Moderate
Botulinum toxin therapy should be reserved for patients who are too unfit for more invasive treatments, or in whom a more definite treatment needs to be deferred	Conditional recommendation	Moderate
We suggest treating recurrent or persistent dysphagia after LHM with pneumatic dilation, POEM, or redo surgery	Conditional recommendation	Very low
We suggest treating recurrent or persistent dysphagia after POEM with either re-POEM, LHM, or pneumatic dilation	Conditional recommendation	Very low
We recommend follow-up endoscopy to screen for GERD in patients treated with myotomy without an antireflux procedure If reflux symptoms occur in the absence of reflux esophagitis, TBE, empiric PPI therapy, and/or 24-hour esophageal pH-(impedance) monitoring can be considered PPIs are the first-line treatment of GERD after achalasia treatment. We recommend lifelong PPI therapy in patients with esophagitis > grade A	Expert opinion	

Diseases of the Esophagus (2018) **31**, 1–29
DOI: 10.1093/dote/doy071

DISEASES OF THE ESOPHAGUS

ISDE The International Society for Diseases of the Esophagus

Guideline

- Myotomy superior to other treatment options in young age
- POEM is recommended for type II achalasia and other motility disorders need longer myotomy

Balloon dilation

Graduated Balloon dilation

3 sessions

30,
35,
40

How to choose

TYPE I

- BD (Only one time)
- POEM
- LAPAROSCOPIC MYOTOMY

How to choose

TYPE II

- BD
- POEM
- LAPAROSCOPIC MYOTOMY

After proper assessment


RT
RT
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RT
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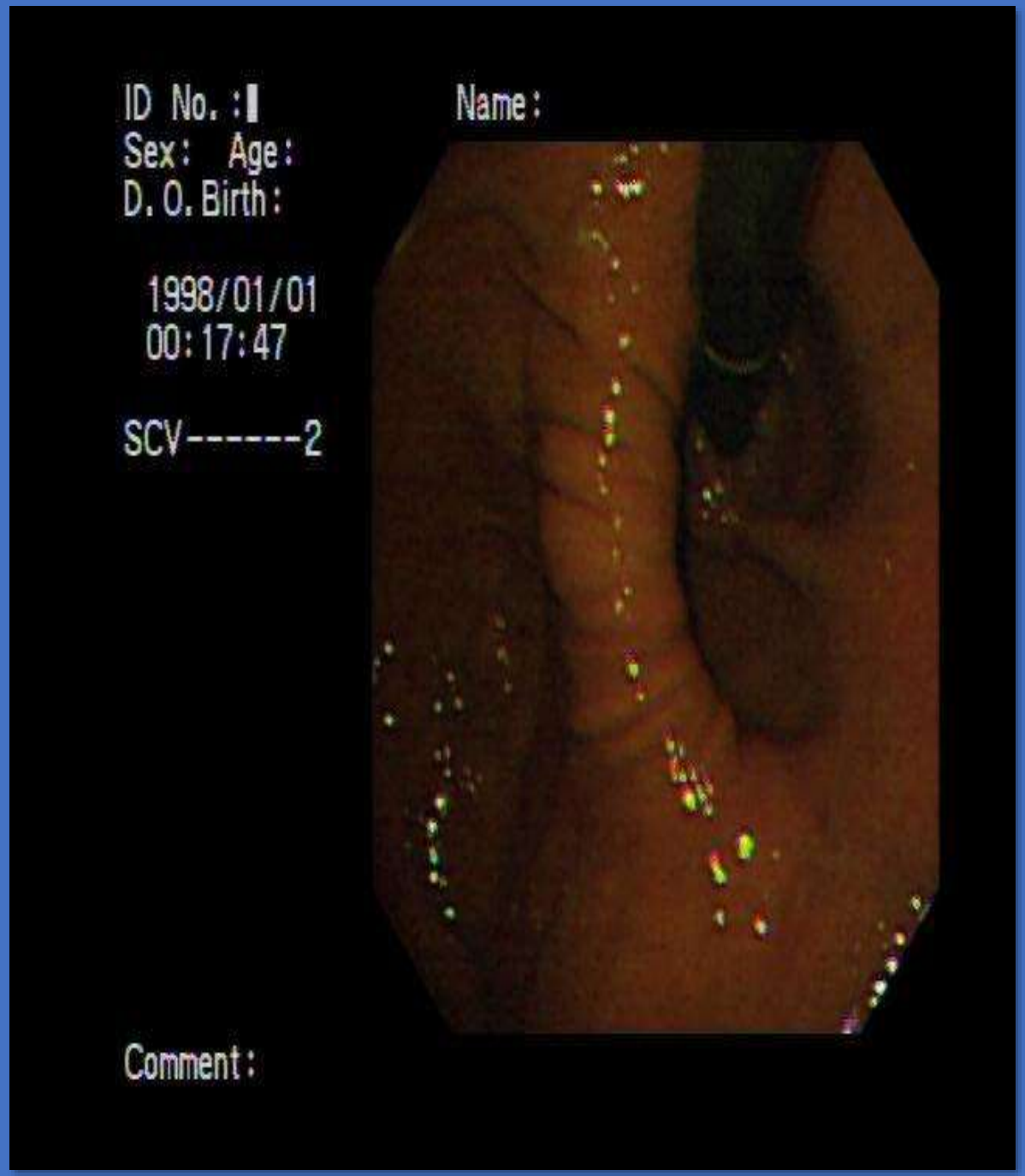
How to choose

TYPE III
Other motility disorders

- POEM (TAYLERD MYOTOMY)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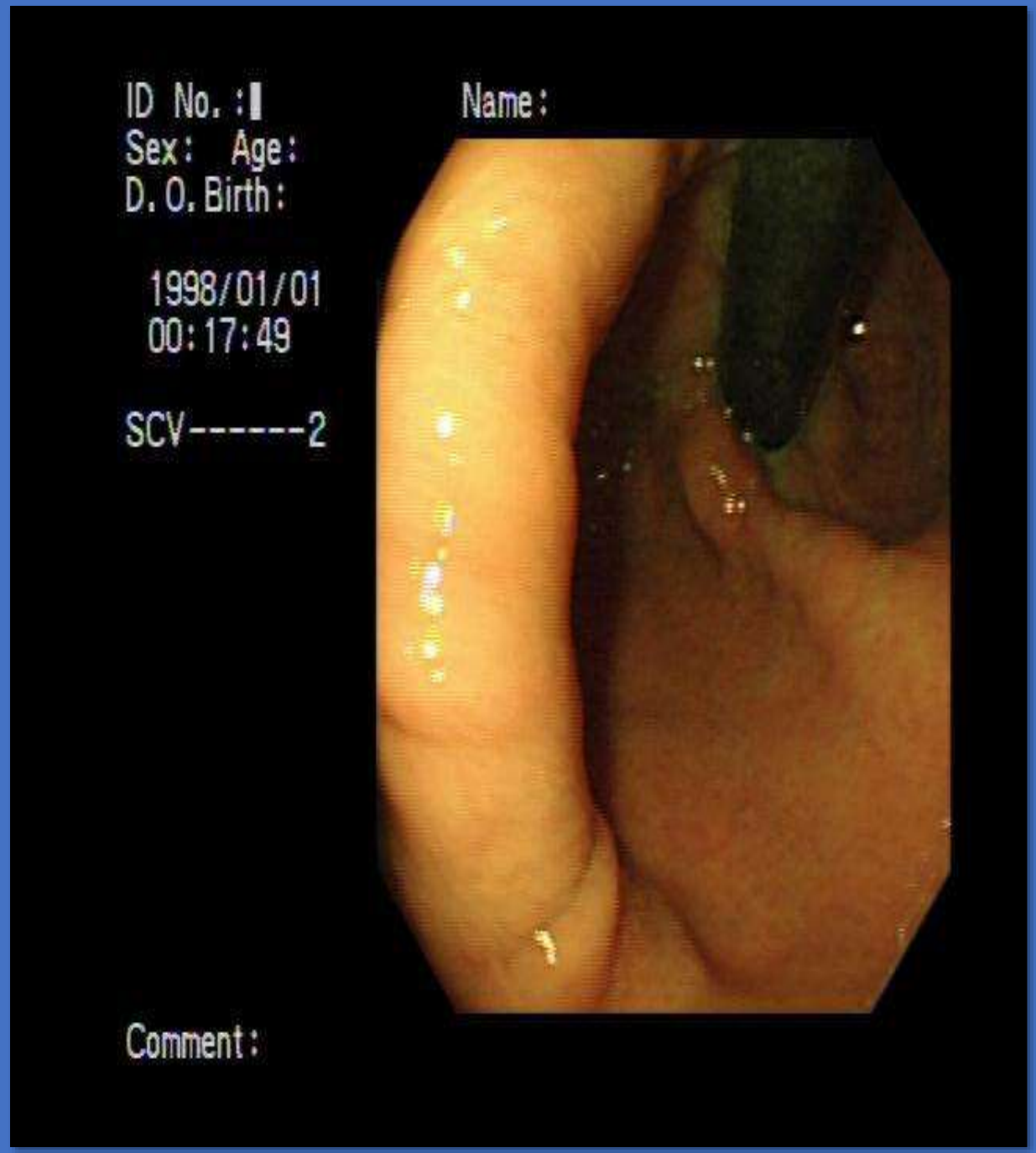
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Japanese Journal of Gastroenterology (2832-4870)

Peroral Endoscopic Myotomy in Patients with Type III Achalasia and Non Achalasia Esophageal Motility Disorders.

Ahmad Madkour[1], Ahmad F. Aboelezz[2], Ehab Nashaat[2], Hossam Abdelaziz[3], Sohayb Ibrahim[4], Mohamad Nabil[3]

ABSTRACT

Background : Achalasia is a disease characterized by

Limitations ?

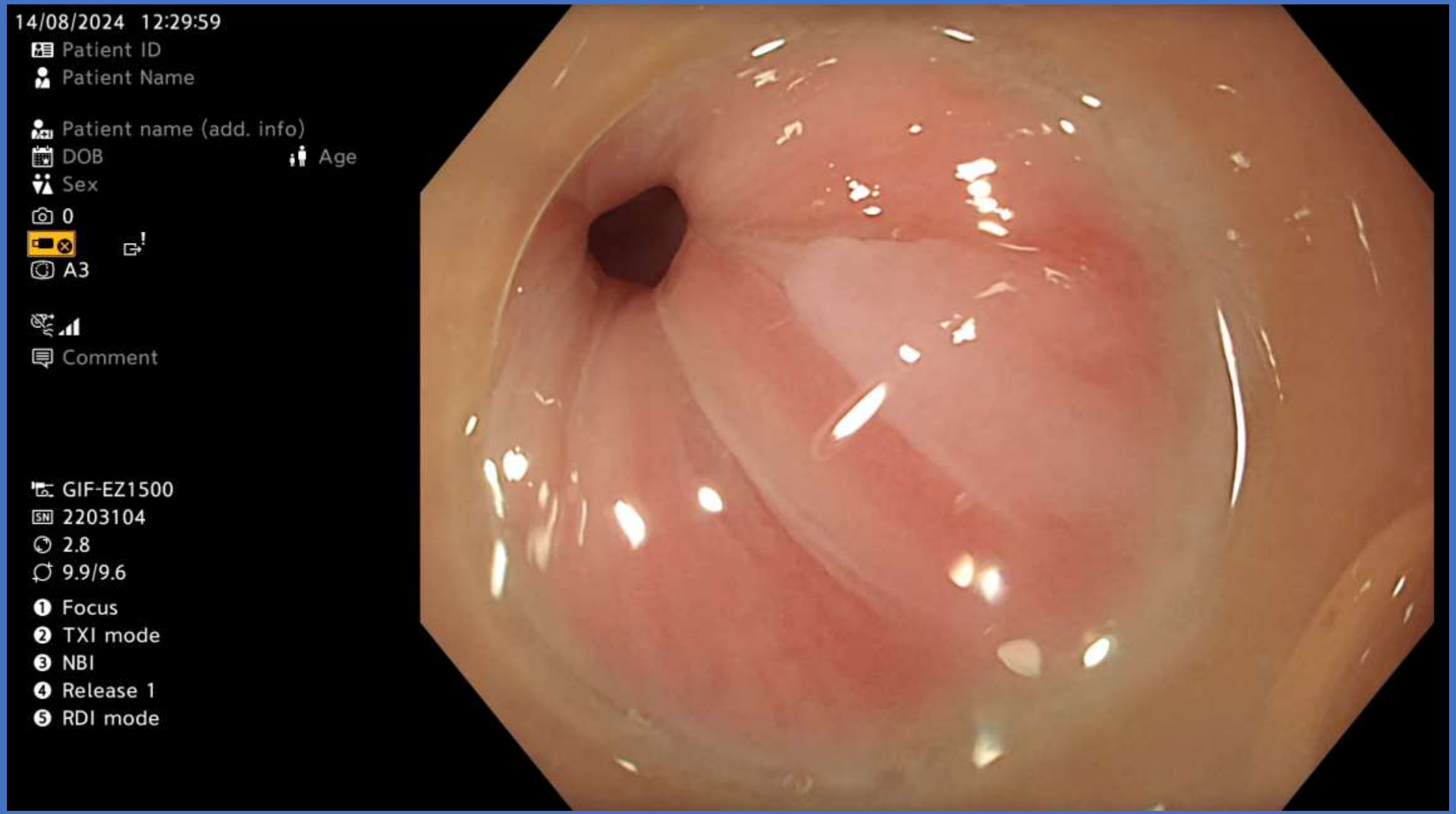
Previous interventions

Sever fibrosis

Intra –post procedure complications

Post POEM GERD

POEM-F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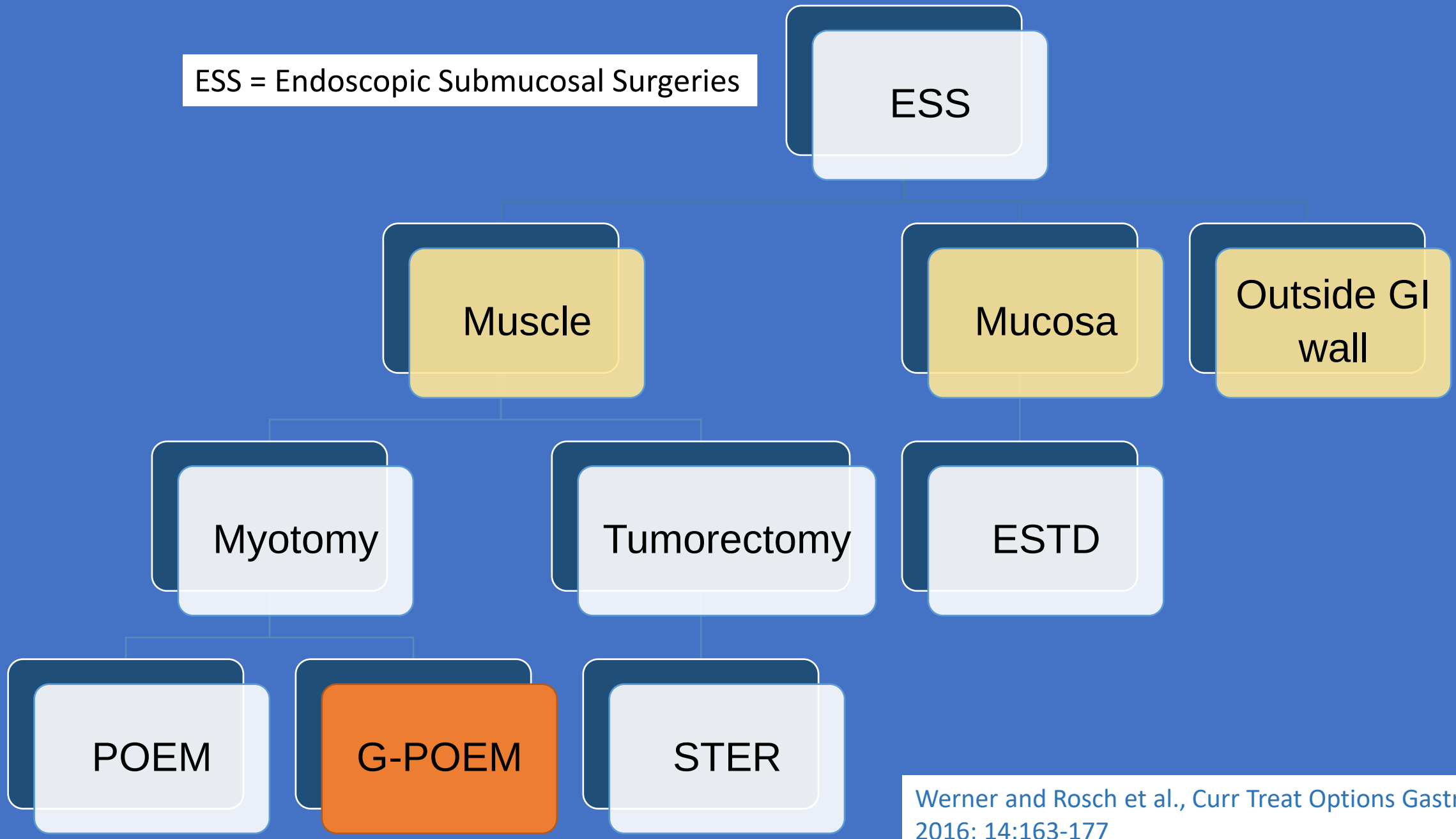
3 NBI
4 Release 1
5 RDI mode

ESS = Endoscopic Submucosal Surgeries



Werner and Rosch et al., Curr Treat Options Gastro 2016; 14:163-177

Myotomy

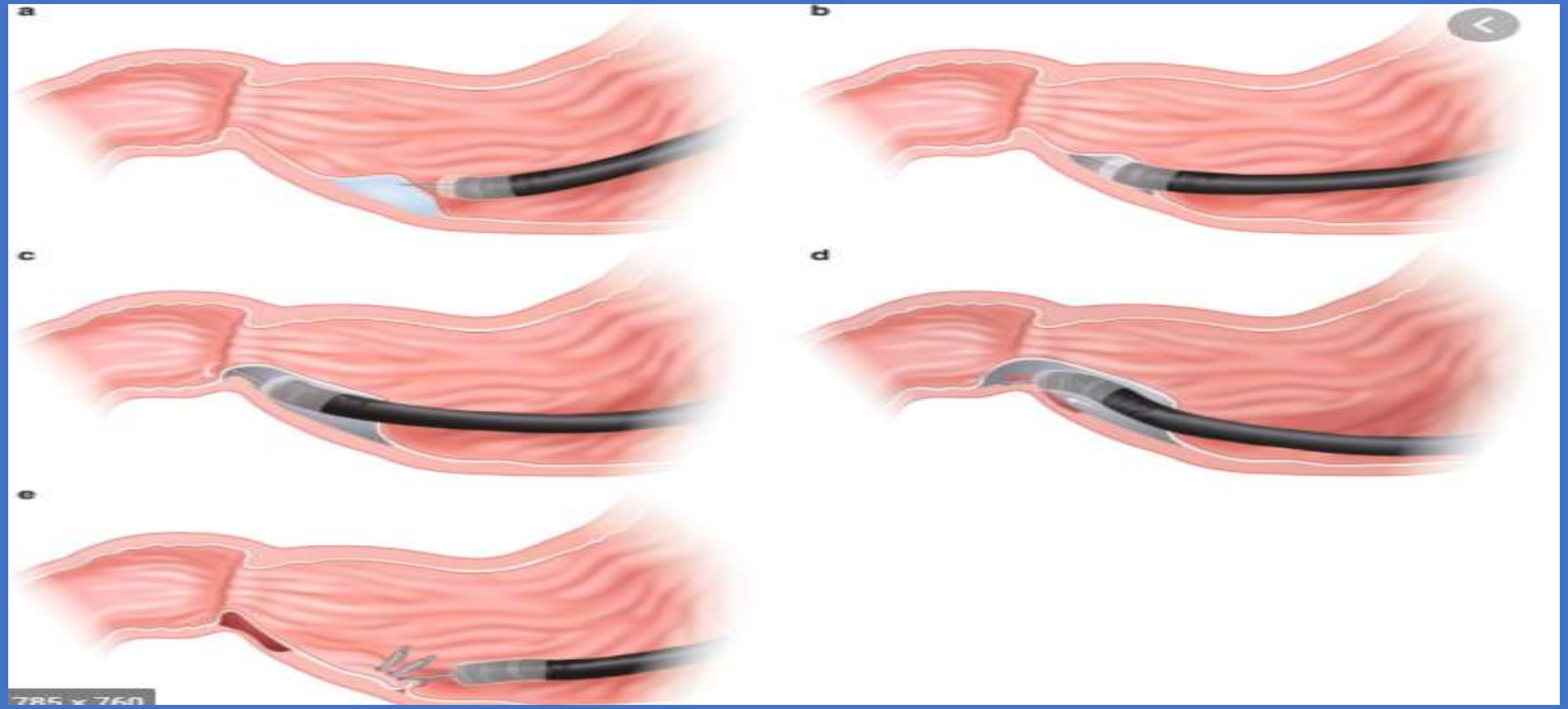
G-POEM

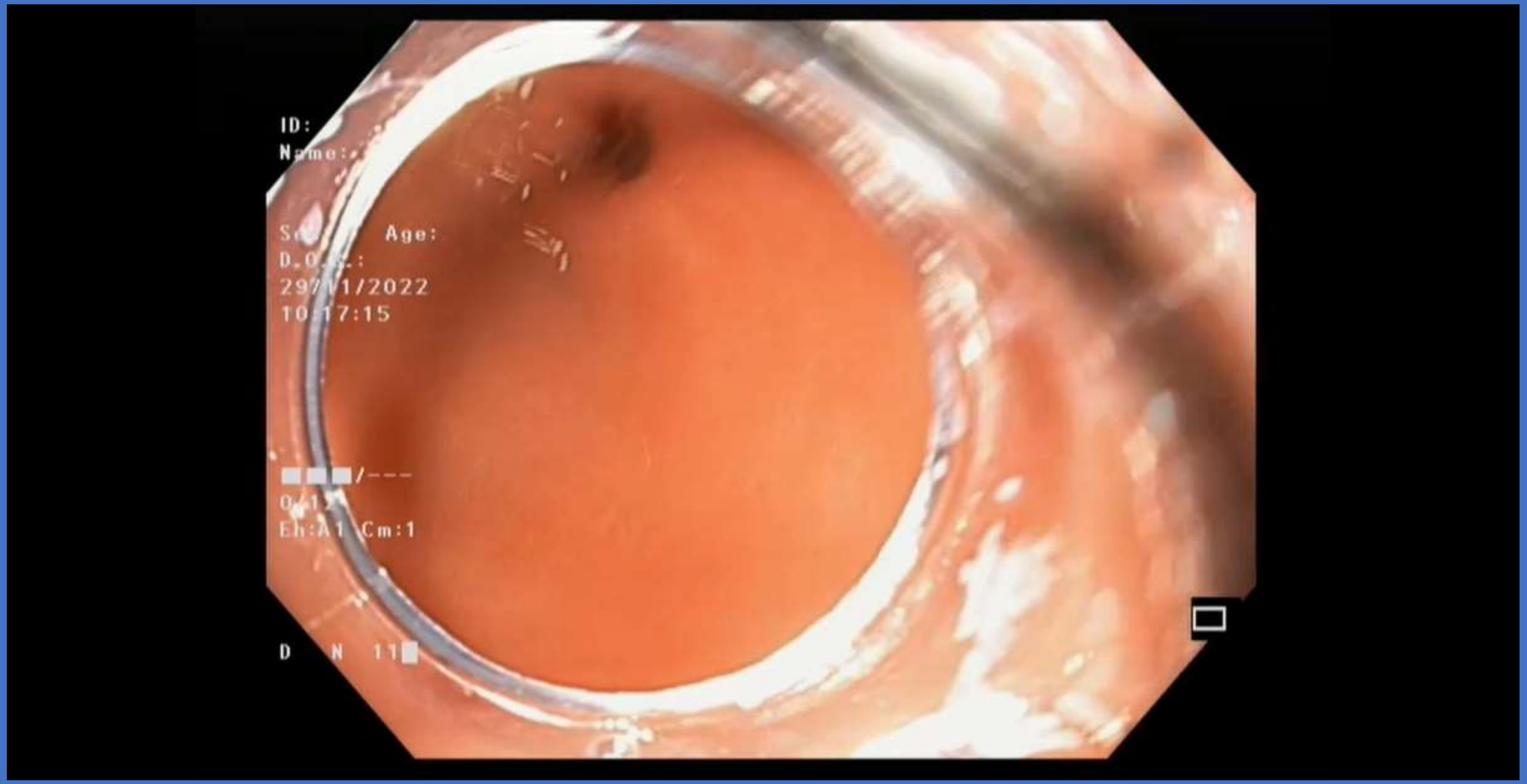
Khashab (2013)

THINKING OUTSIDE THE BOX

Gastric peroral endoscopic myotomy for refractory gastroparesis: first human endoscopic pyloromyotomy (with video)

G-POEM

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ORIGINAL ARTICLE: Clinical Endoscopy

Gastric peroral endoscopic myotomy in refractory gastroparesis: long-term outcomes and predictive score to improve patient selection

Amélie Labonde, MD,[1] Guillaume Lades, MD,[2] Antoine Debourdeau, MD,[3] Olivier Ragi, MD,[4] Lauriane Lehmann, MD,[5] Véronique Vitton, MD, PhD,[6] Marc Barthet, MD, PhD,[6] Romain Legros, MD,[1] Jérémie Albouys, MD, MSc,[1] Sophie Geyl, MD, MSc,[1] Véronique Loustaud-Ratti, MD, MSc,[1] Jacques Monteil, MD, PhD,[1] Sandra Gonzalez, MD,[7] Jean-Michel Gonzalez, MD, PhD,[6] Jérémie Jacques, MD, PhD[1]

Limoges, Montpellier, Lyon, Marseille, France

Conclusions: The clinical success of G-POEM for refractory gastroparesis was 65.2% at 36 months. Our predictive score offers an easy tool that needs to be confirmed in other studies. (Gastrointest Endosc 2022;96:500-8.)

Observational Study > Gut. 2022 Jan;71(1):25-33. doi: 10.1136/gutjnl-2020-322756. Epub 2021 Mar 19.

Gastric per-oral endoscopic myotomy (G-POEM) for refractory gastroparesis: results from an international prospective trial

Kia Vosoughi [# 1], Yervant Ichkhanian [# 1 2], Petros Benias [3], Larry Miller [3], A Aziz Aadam [4], Joseph R Triggs [4], Ryan Law [5], William Hasler [5], Nicole Bowers [5], Dalton Chaves [6], Alberto M Ponte-Neto [6], Peter Draganov [7], Dennis Yang [7], Maan El Halabi [8], Omid Sanaei [1 9], Olaya Isabella Brewer Gutierrez [1], Robert Stephen Bulat [1], John Pandolfino [4], Mouen Khashab [10]

Conclusion: G-POEM is a safe procedure, but showed only modest overall effectiveness in the treatment of refractory gastroparesis. Further studies are required to identify the best candidates for G-POEM; unselective use of this procedure should be discouraged.

Case 1

37 Male with recurrent vomiting diagnosed as HH

Underwent Nissan fundoplication

With worsen symptoms

Dysphagia, Weight loose 35 Kg

HRM

Type III Achalasia

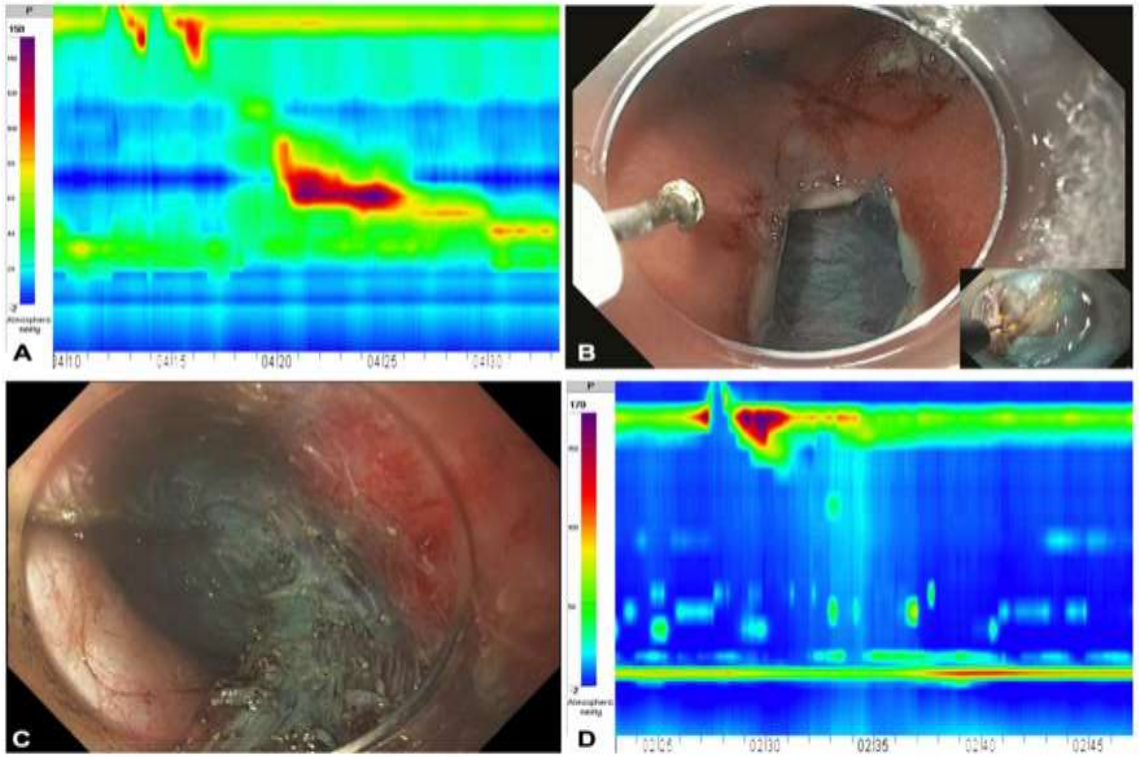
Upper endoscopy
stomach full with food

Sentegraphy

(Marked delay gastric empty)

Amy Tyberg, MD, FASGE, FACG, *Associate Editor for Focal Points*

Concomitant peroral endoscopic myotomy and gastric peroral endoscopic myotomy for persistent dysphagia and iatrogenic gastroparesis after laparoscopic fundoplication



A 46-year-old man presented with persistent dysphagia, vomiting, chest pain, and significant weight loss after laparoscopic fundoplication with evident postoperative esophageal motility disorder (hypercontractile jackhammer esophagus with an element of esophagogastric junction outflow obstruction resembling type III achalasia, with a mean integrated relaxation pressure of 19.8 mm Hg (**A**). He was scheduled for peroral endoscopic myotomy (POEM) as a

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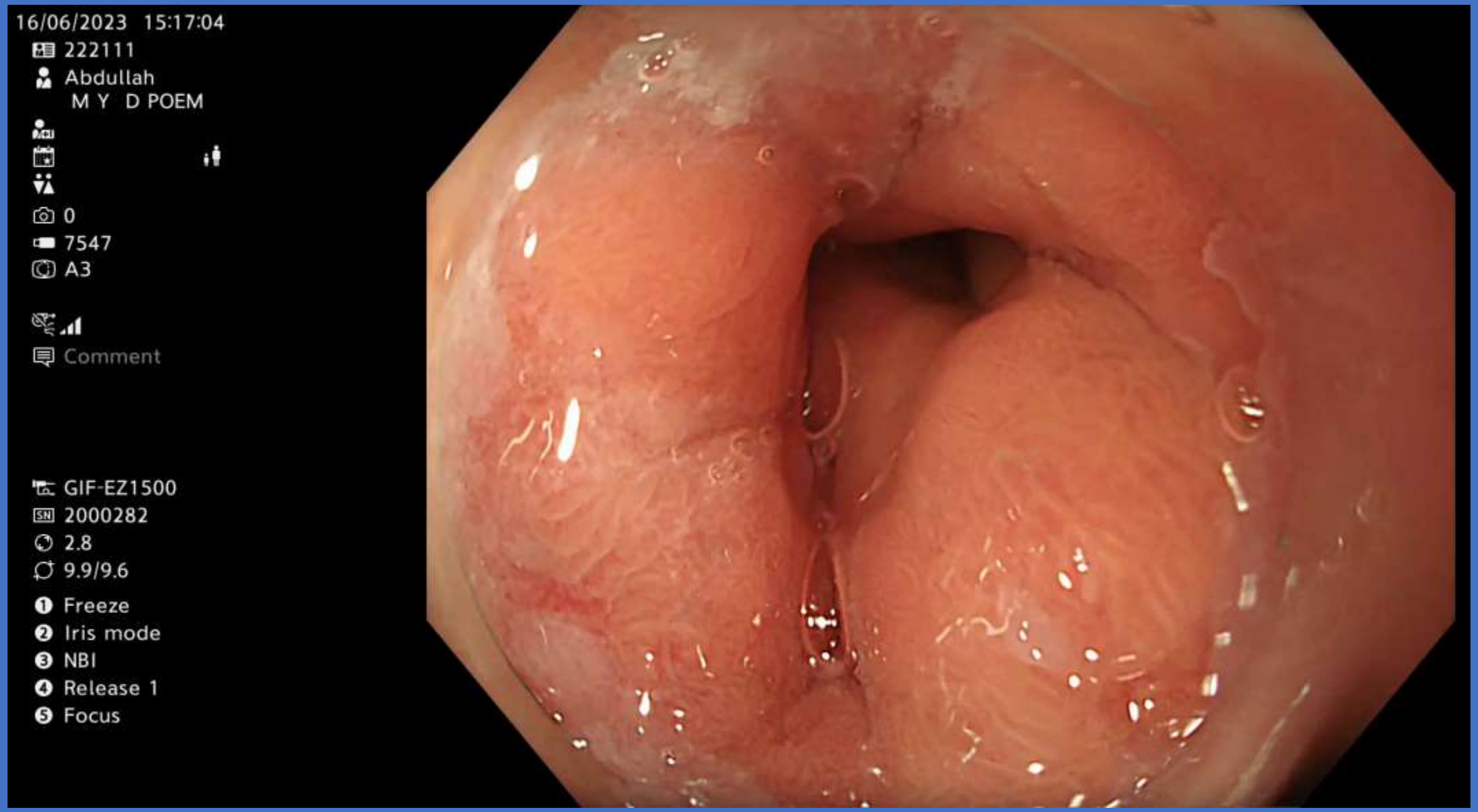
D-POEM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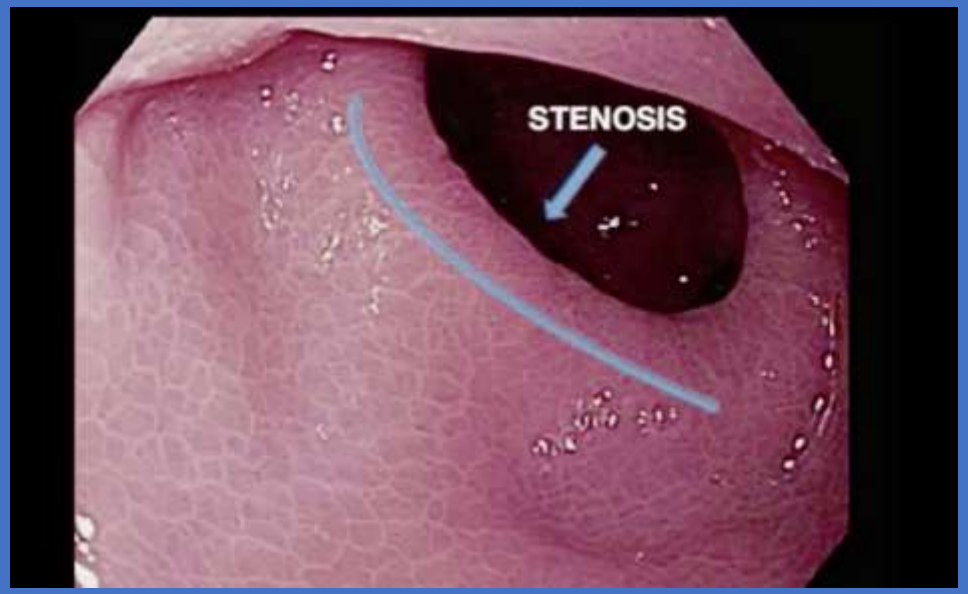
5 Focus

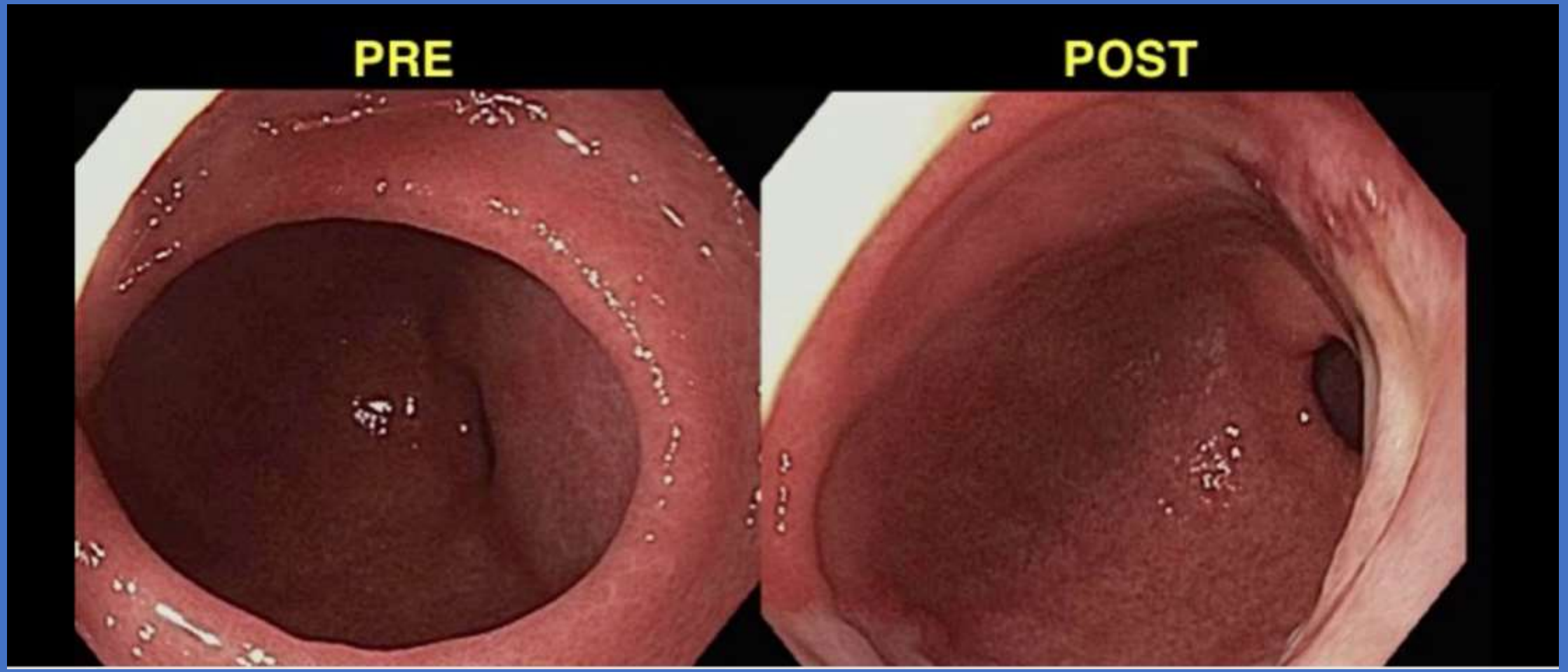
Innovative indications

Video GIE

Video Case Report

Endoscopic tunneled stricturotomy in the treatment of stenosis after sleeve gastrectomy




PRE
POST

STER

Tumorectomy

STER

Xu (2012)

CASE STUDIES

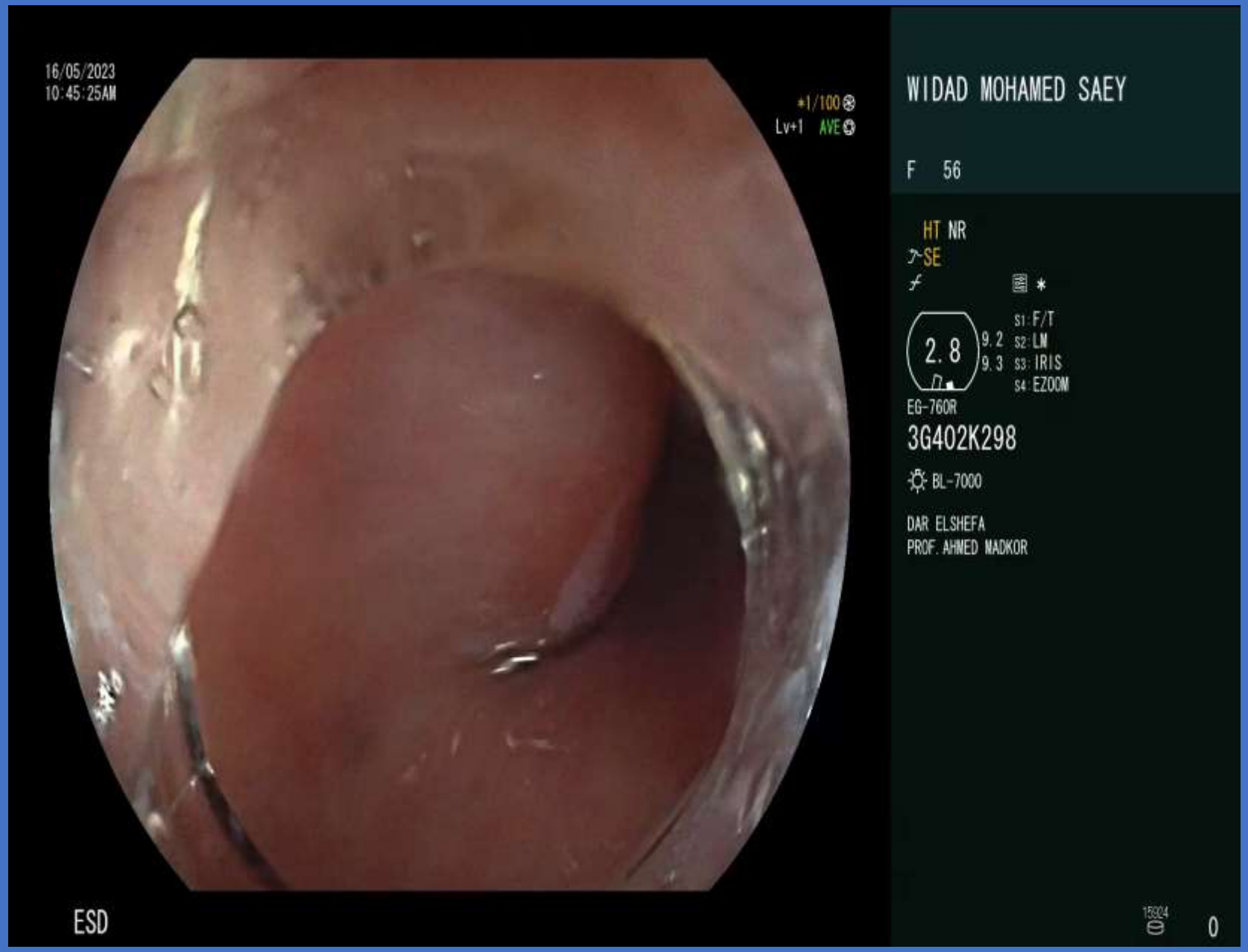
Submucosal tunneling endoscopic resection: a new technique for treating upper GI submucosal tumors originating from the muscularis propria layer (with videos)

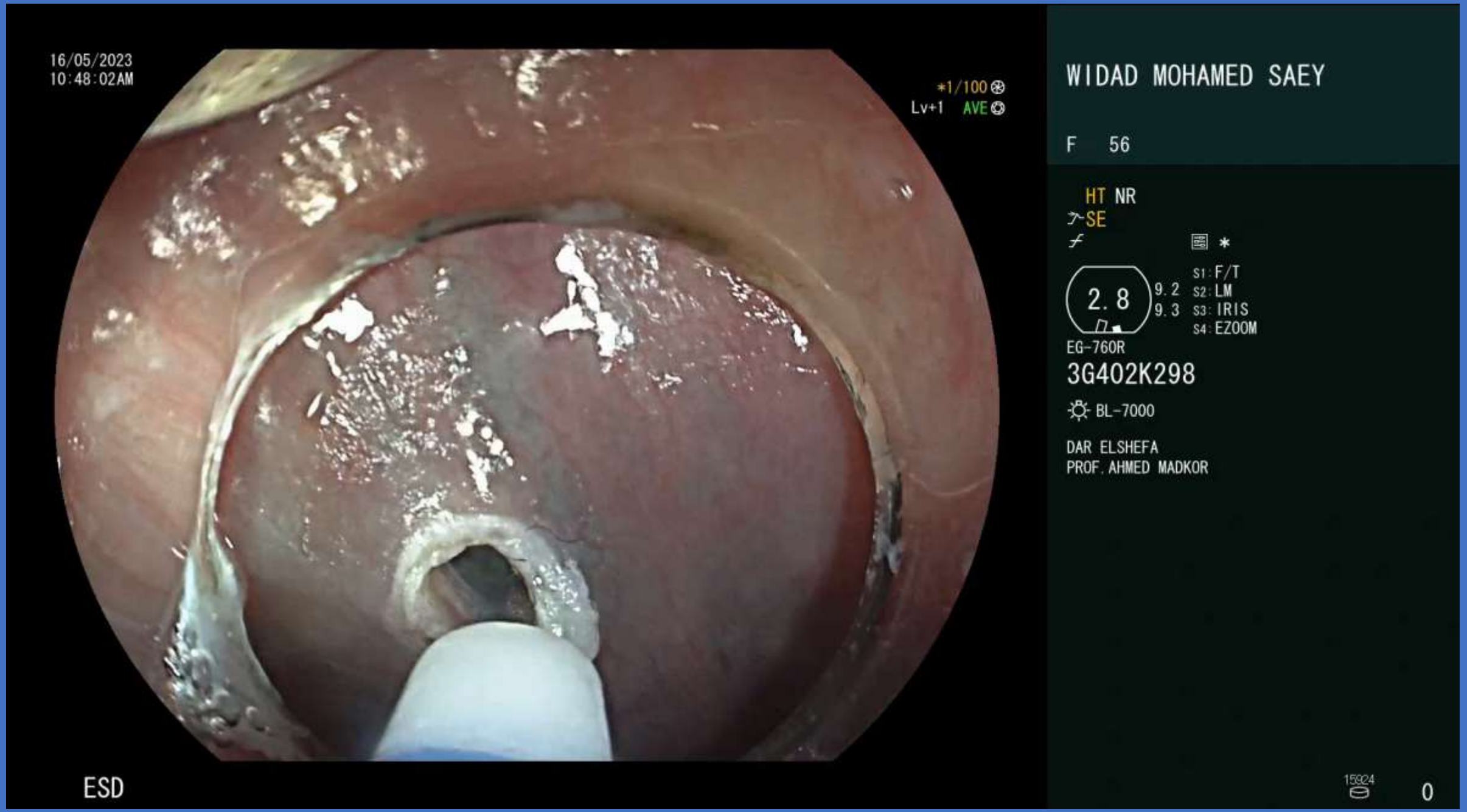
Mei-Dong Xu, MD, PhD,[1] Ming-Yan Cai, MD,[1] Ping-Hong Zhou, MD, PhD,[1] Xin-Yu Qin, MD, PhD,[2] Yun-Shi Zhong, MD, PhD,[1] Wei-Feng Chen, MD,[1] Jian-Wei Hu, MD,[1] Yi-Qun Zhang, MD, PhD,[1] Li-Li Ma, MD,[1] Wen-Zheng Qin, MD,[1] Li-Qing Yao, MD[1]

Shanghai, China

55 years old female with dysphagia and foreign body sensation

Upper esophageal SMT in anterior wall in front of aortic arch

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PROF.AHMED MADKOR
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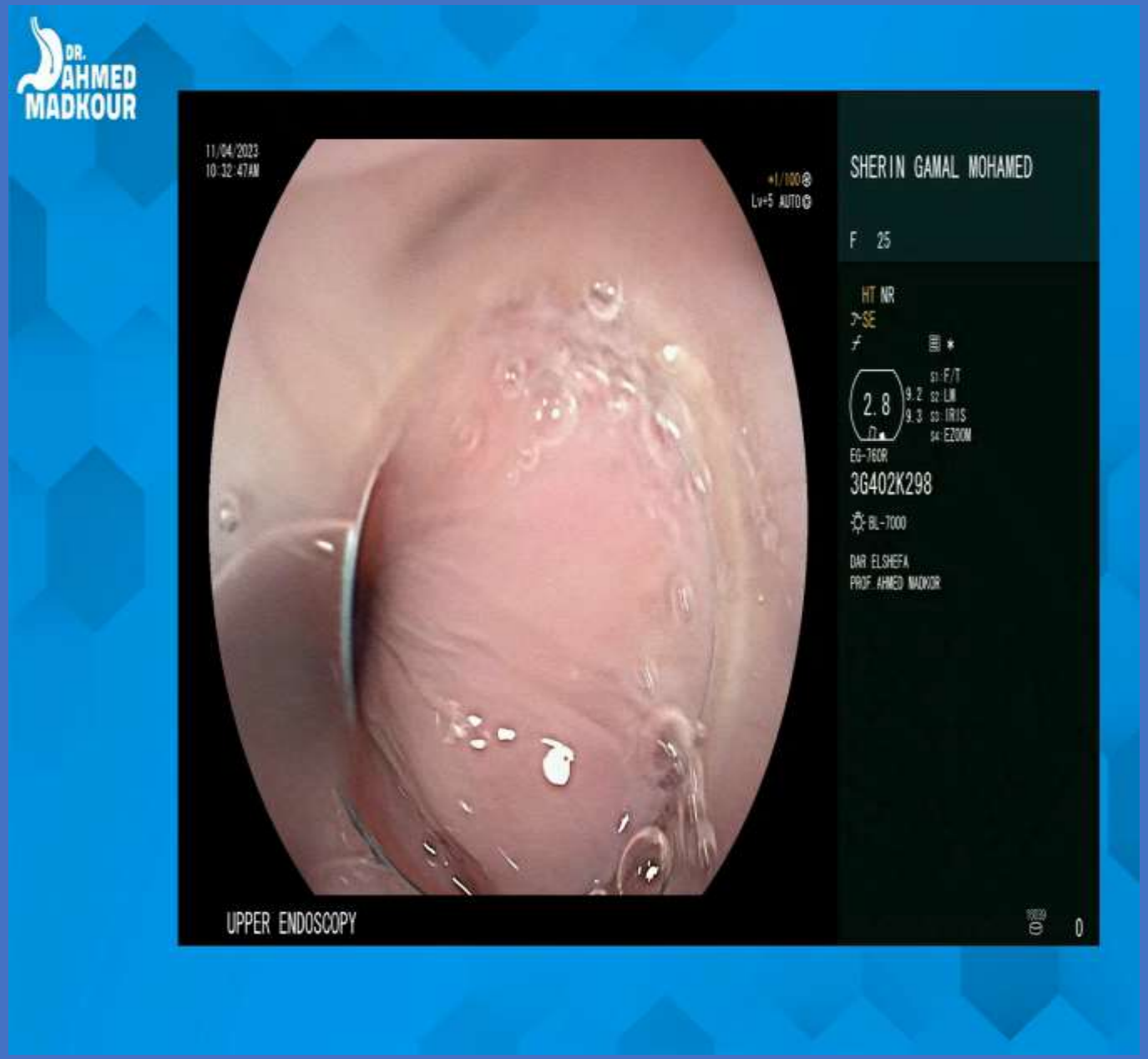
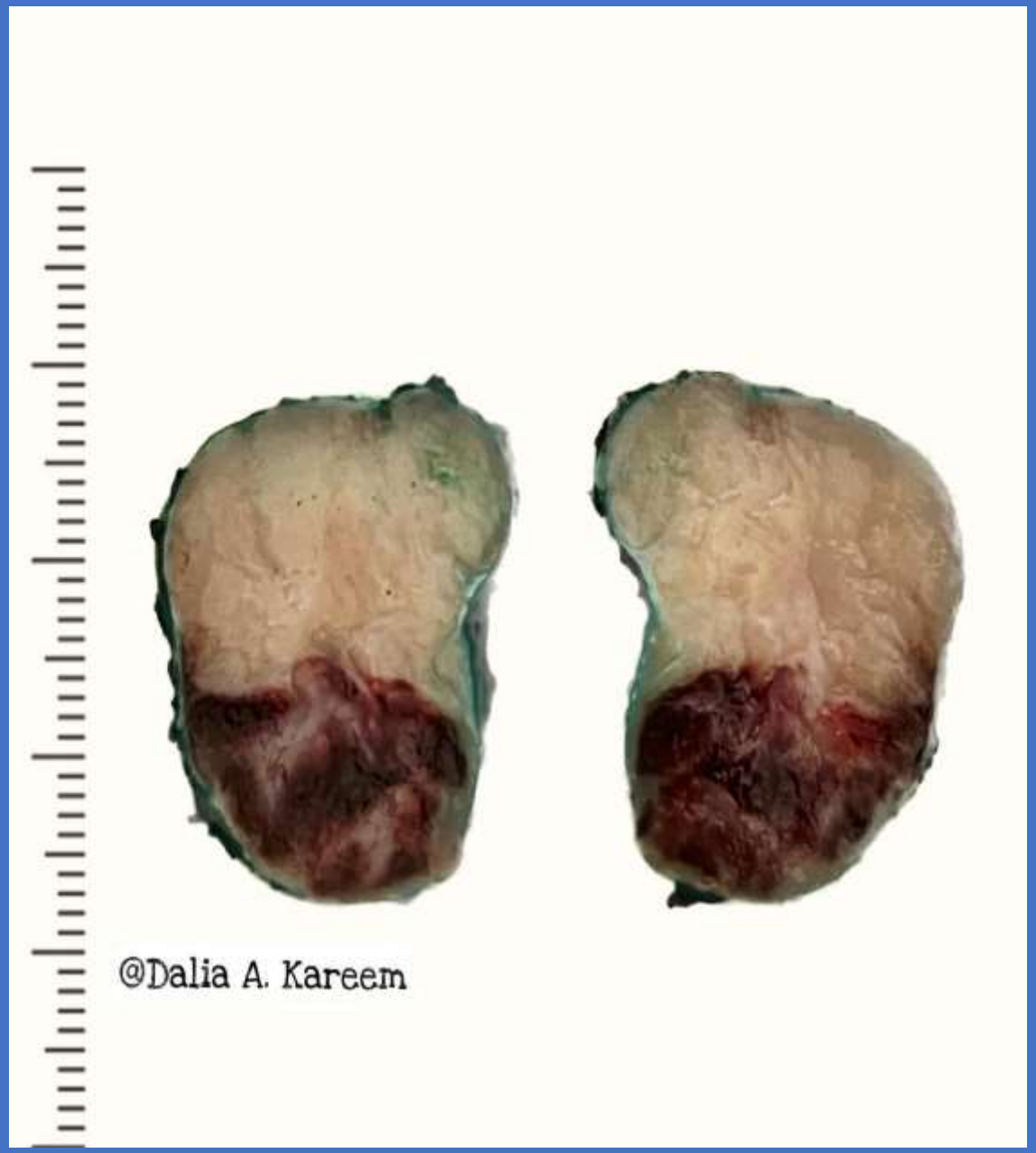
Case 1

27 years old female
With history of partial gastrectomy (GIST)

Now presented with this SMT below cardia



DR. AHMED MADKOUR


@Dalia A. Kareem

ELSEVIER

Gastrointestinal Endoscopy

Available online 29 October 2024

In Press, Journal Pre-proof ⓘ What's this?

FEASIBILITY OF SUBMUCOSAL TUNNELING ENDOSCOPIC RESECTION FOR A BLEEDING GASTROINTESTINAL STROMAL TUMOR

Ahmad Madkour MD [1], Ashraf Albreedy MD [2], Ahmed Elgammal MSc [3], Amr Elfouly MD [1], Dalia Abd El-Kareem MD [4], Hassan Atalla MD [5] ✉

GIE
Gastrointestinal Endoscopy

Case 2

Endoscopy news

OPEN ACCESS

Endoscopic transmural route for dissection of gastric submucosal tumors with extraluminal growth: experience in two cases

Xinyang Liu, Tianyin Chen, Jing Cheng, Pingting Gao, Quanlin Li, Weifeng Chen, Yiqun Zhang, Pinghong Zhou, Jianwei Hu

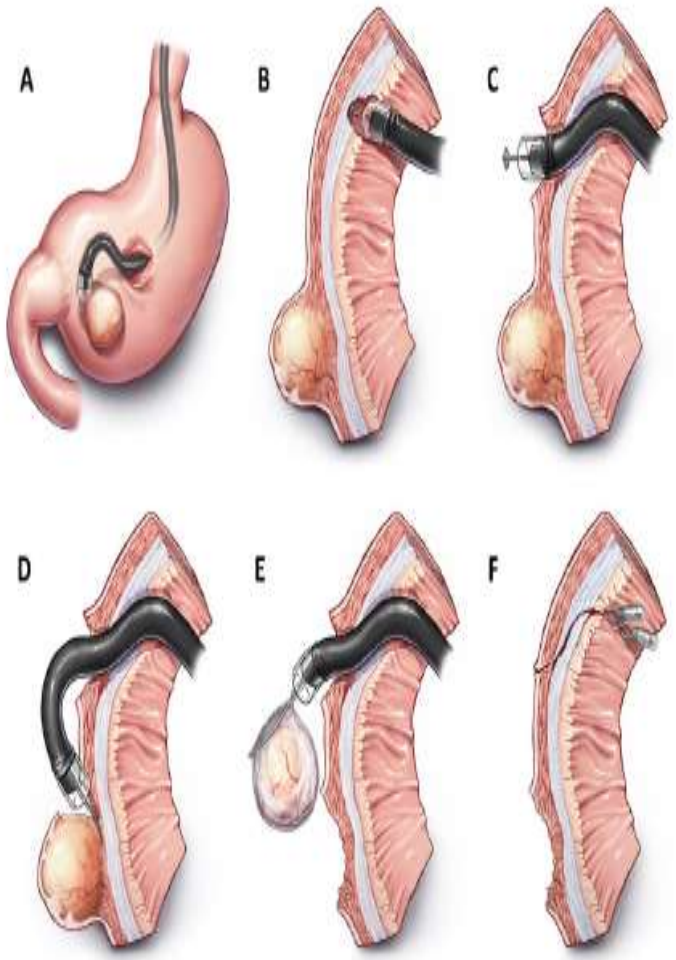
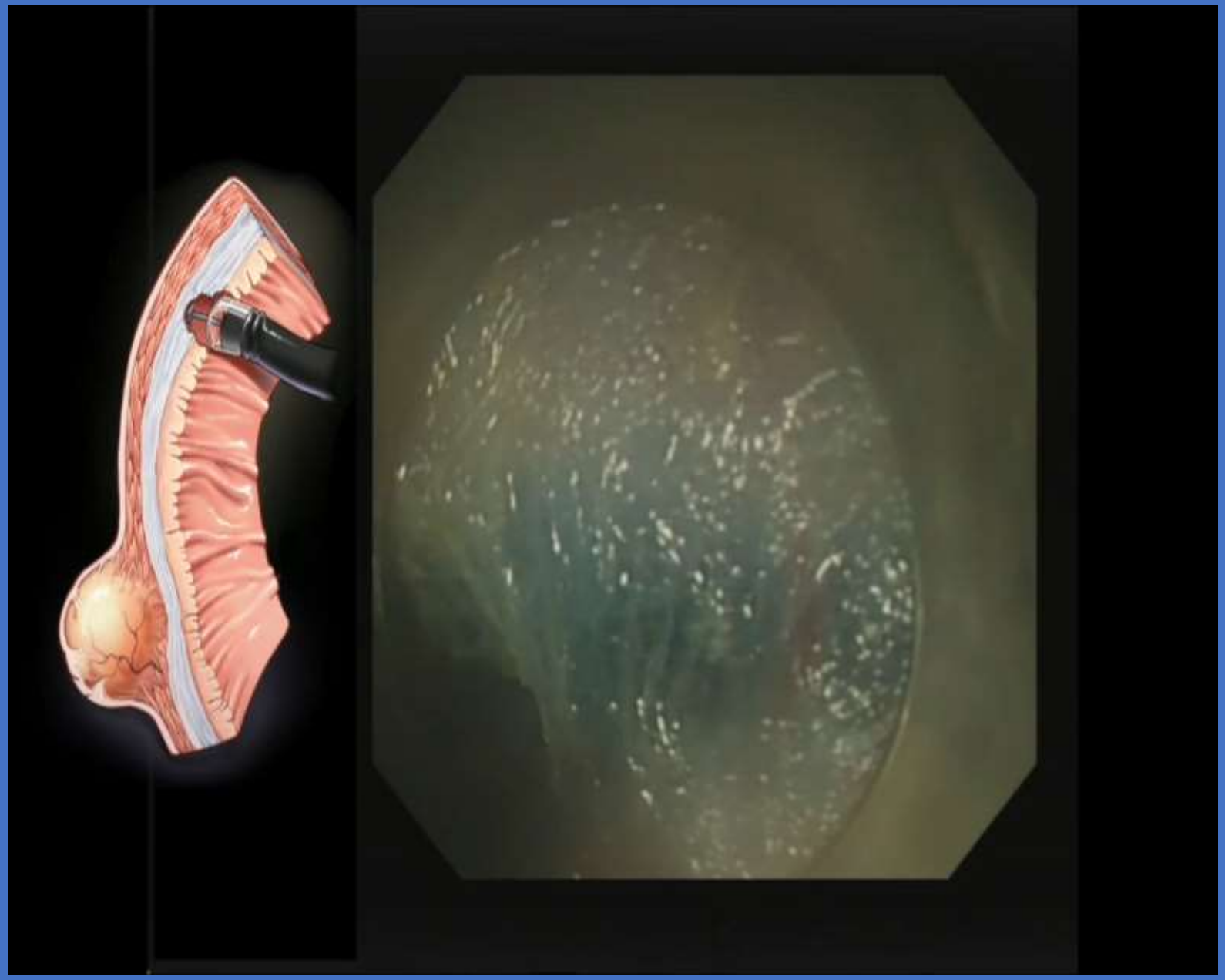


Figure 1 Endoscopic intraperitoneal subserosal dissection (EISD) illustrations. (A) EISD. (B) Mucosal incision. (C) Submucosal tunnelling. (D) Intraperitoneal subserosal dissection. (E) Lesion removal. (F) Mucosal closure.



ESD

Detect Lesion

Should we resect or refer to surgery

How to Resect?

Should we resect

All Adenomas

Intramucosal carcinomas

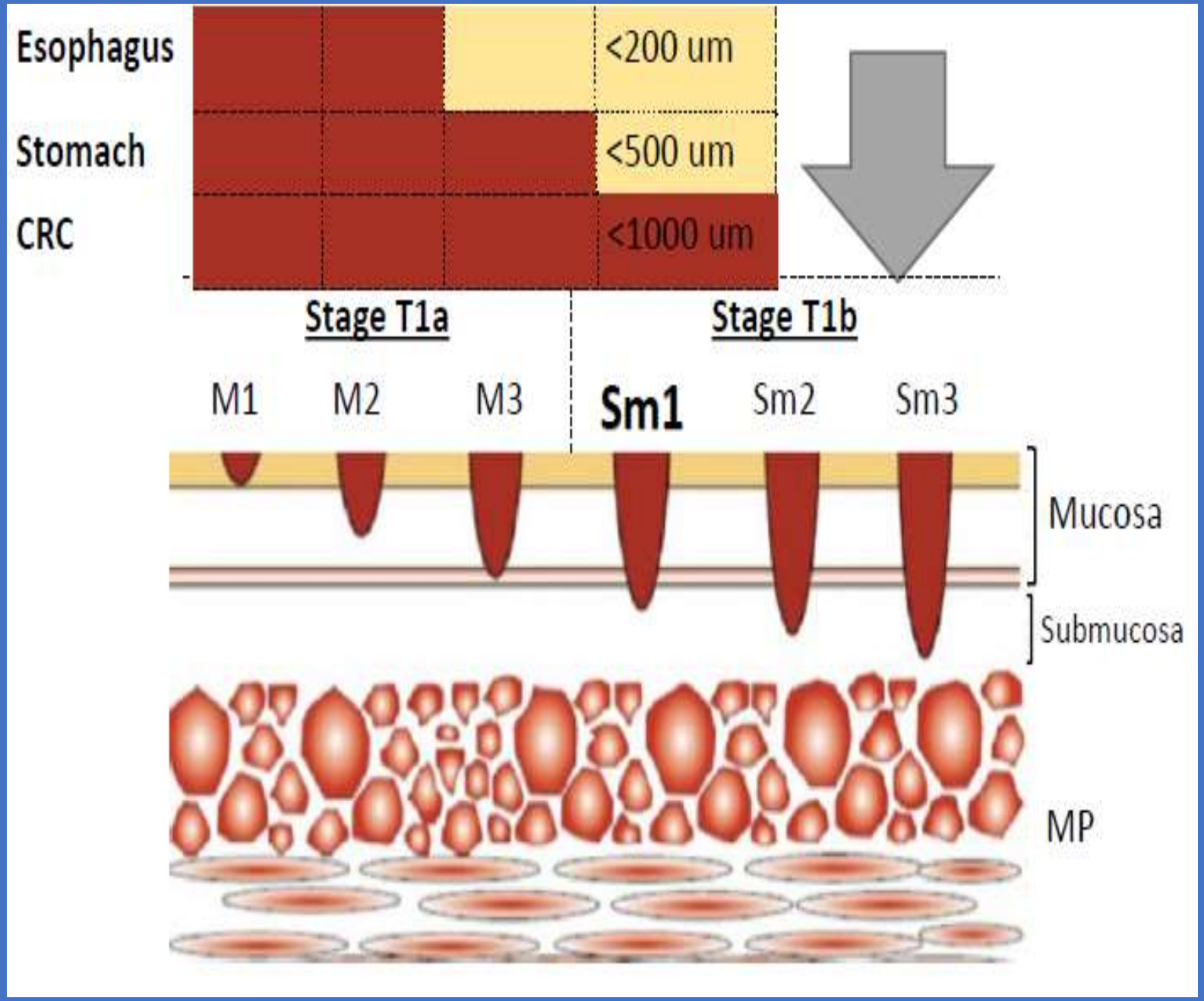
Adenocarcinoma?

Should we resect

Incidence of LN metastasis according to depth of invasion

Depth	Esophageal Lns	Gastric Lns	CRC Lns
m1	0%	0%	0%
m2	0%	0%	0%
m3	0-8%	0%	0%
Sm1	0-17%	0%	0%
	< 200 um	<500 um	Upper 1/3 1000um
Sm2	28%	14-20%	10%
Sm3	49%	19-24%	10%

We can resect
T1a and early T1b cancer
by endoscope



How to resect

- Cold Biopsy
- Cold Snare
- Hot Snare
- EMR
- ESD
- EFTR

How to choose between resection modalities

- Curative resection with low recurrence rate
- Less invasive
- Low complication

ESD

- Difficult to resect by other modality
- Risk of incomplete resection-recurrence by other modality

Esophagus

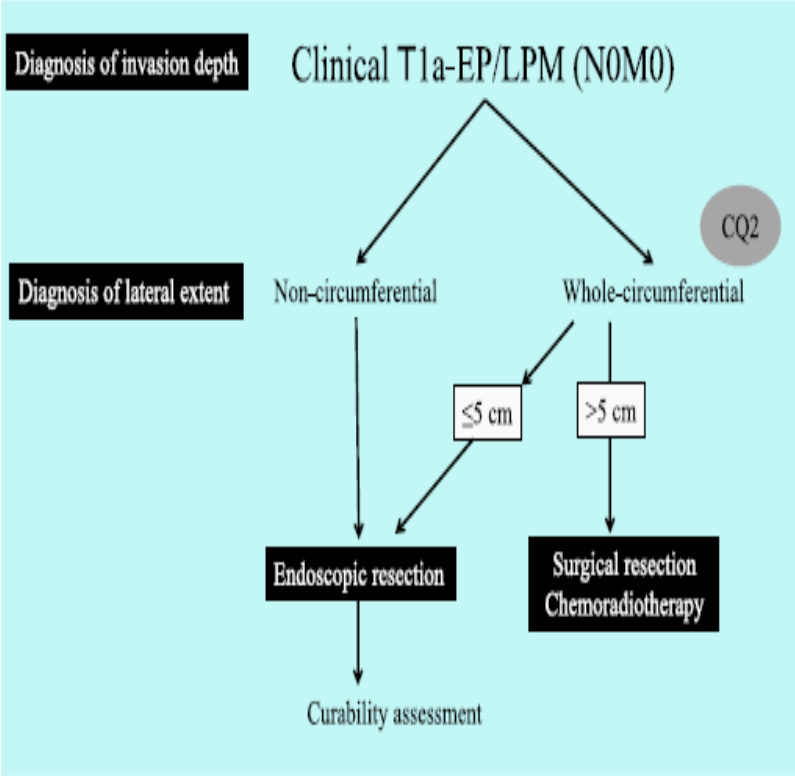
Digestive Endoscopy 2020; 32: 452–493 doi: 10.1111/den.13654

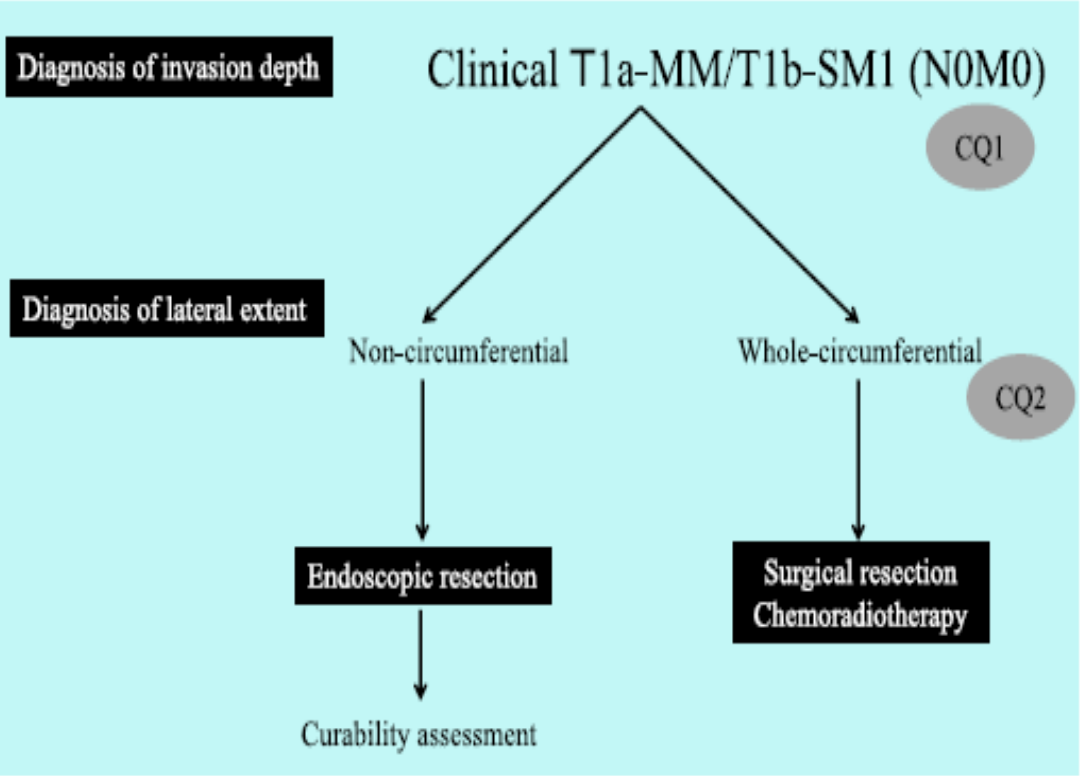
Guidelines

Endoscopic submucosal dissection/endoscopic mucosal resection guidelines for esophageal cancer

Ryu Ishihara, Miwako Arima, Toshiro Iizuka, Tsuneo Oyama, Chikatoshi Katada, Motohiko Kato, Kenichi Goda, Osamu Goto, Kyosuke Tanaka, Tomonori Yano, Shigetaka Yoshinaga, Manabu Muto, Hirofumi Kawakubo, Mitsuhiro Fujishiro, Masahiro Yoshida, Kazuma Fujimoto, Hisao Tajiri, Haruhiro Inoue and The Japan Gastroenterological Endoscopy Society Guidelines Committee of ESD/EMR for Esophageal Cancer

Japan Gastroenterological Endoscopy Society, Tokyo, Japan





Gastric

DEN Digestive Endoscopy
For Gastroenterologists and Endoscopic Surgeons

Guidelines | Free Access

Guidelines for endoscopic submucosal dissection and endoscopic mucosal resection for early gastric cancer (second edition)

Depth of invasion	Ulceration	Differentiated type		Undifferentiated type	
		≤ 2 cm	> 2 cm	≤ 2 cm	> 2 cm
cT1a (M)	UL0	★	■	■	
	UL1	≤ 3 cm	> 3 cm		
		■			
cT1b (SM)					

★ Absolute indications for EMR/ESD

■ Absolute indications for ESD

□ Relative indications

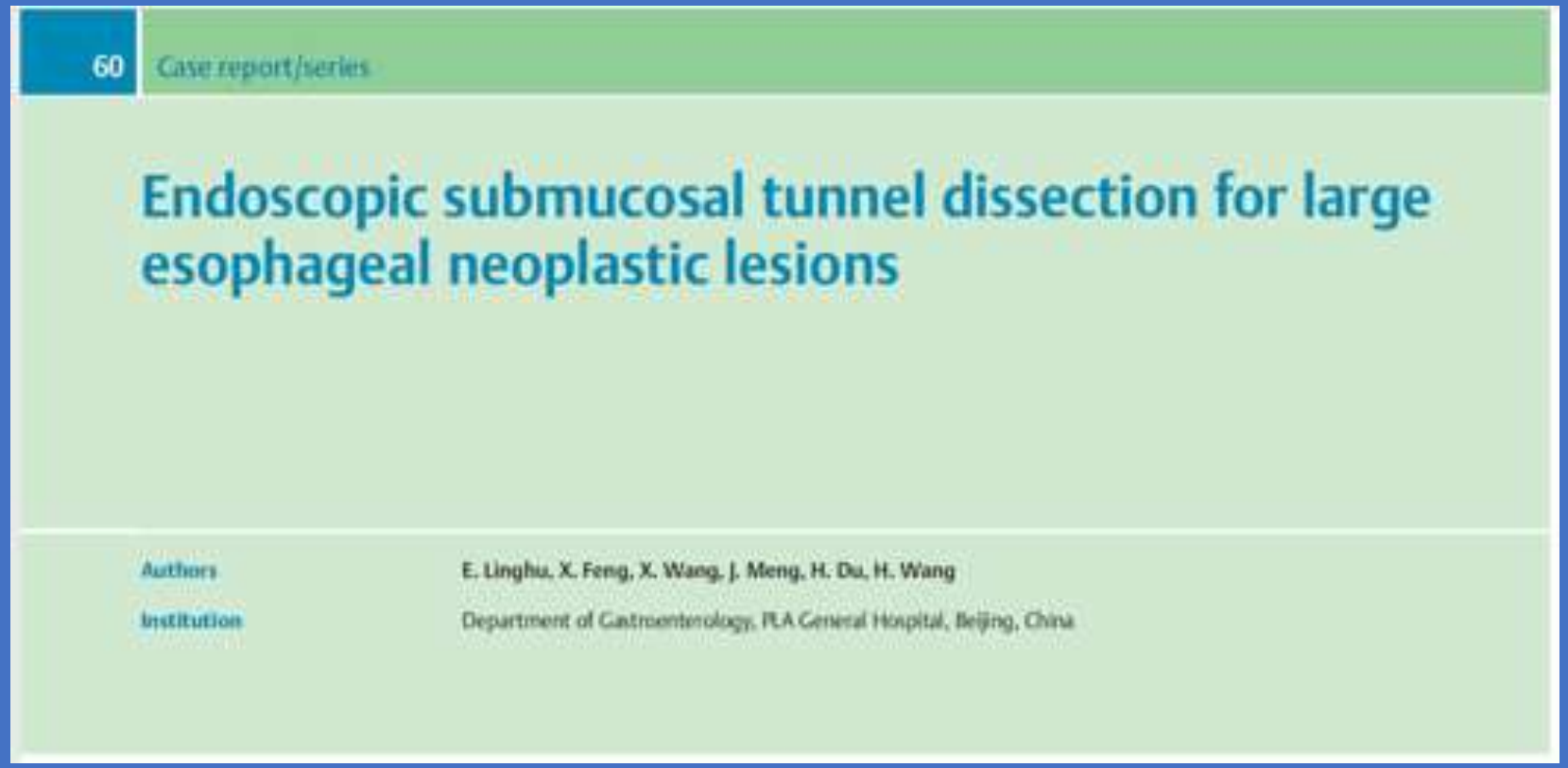
- Suspected SMI
- Undifferentiated type
- More than 3 Cm
- Ulcerated

ESTD

Mucosa

Linghu (2013)

ESTD



ESTD

Zhai YQ *et al*. ESTD for large superficial esophageal neoplasms

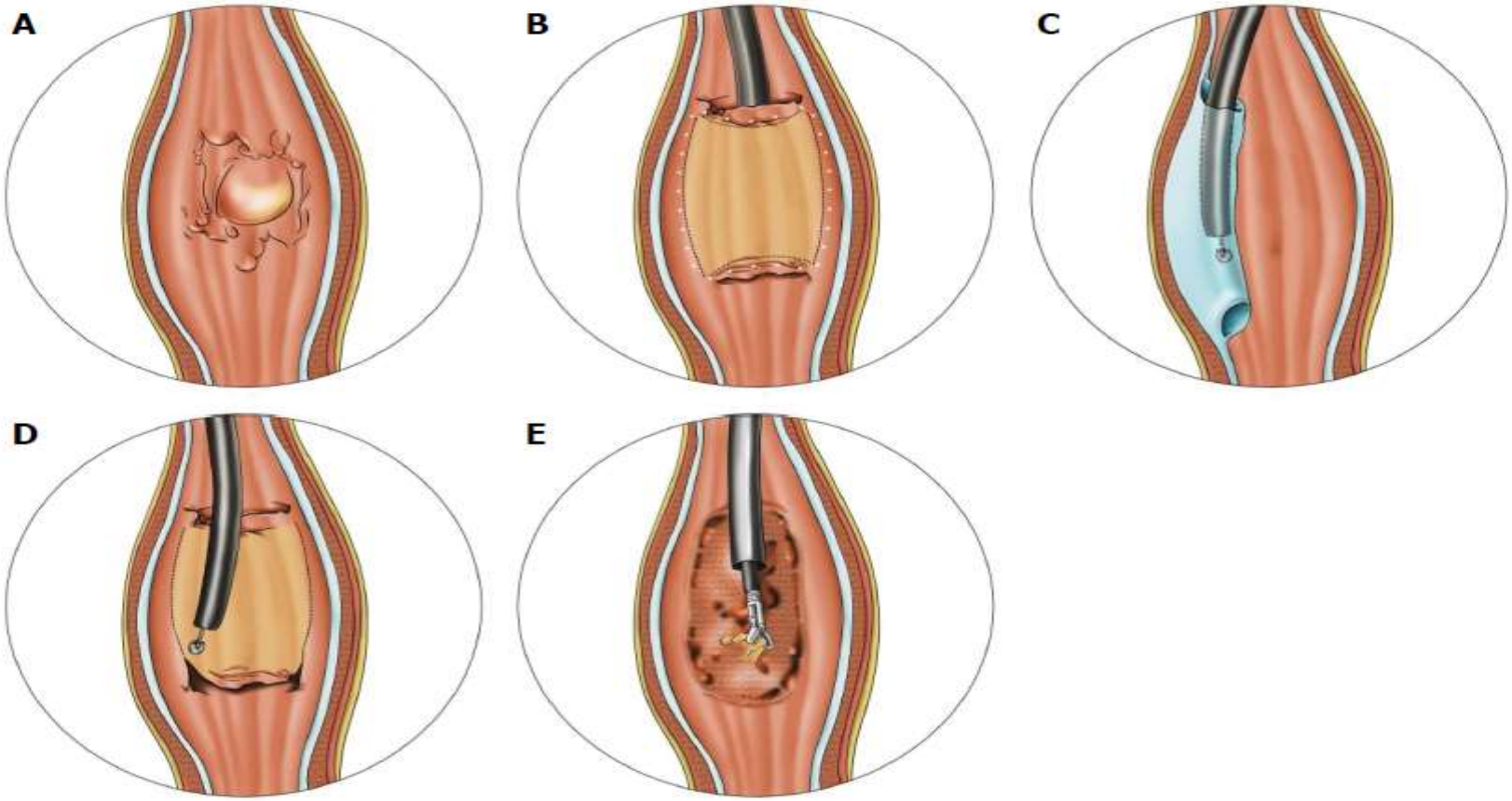
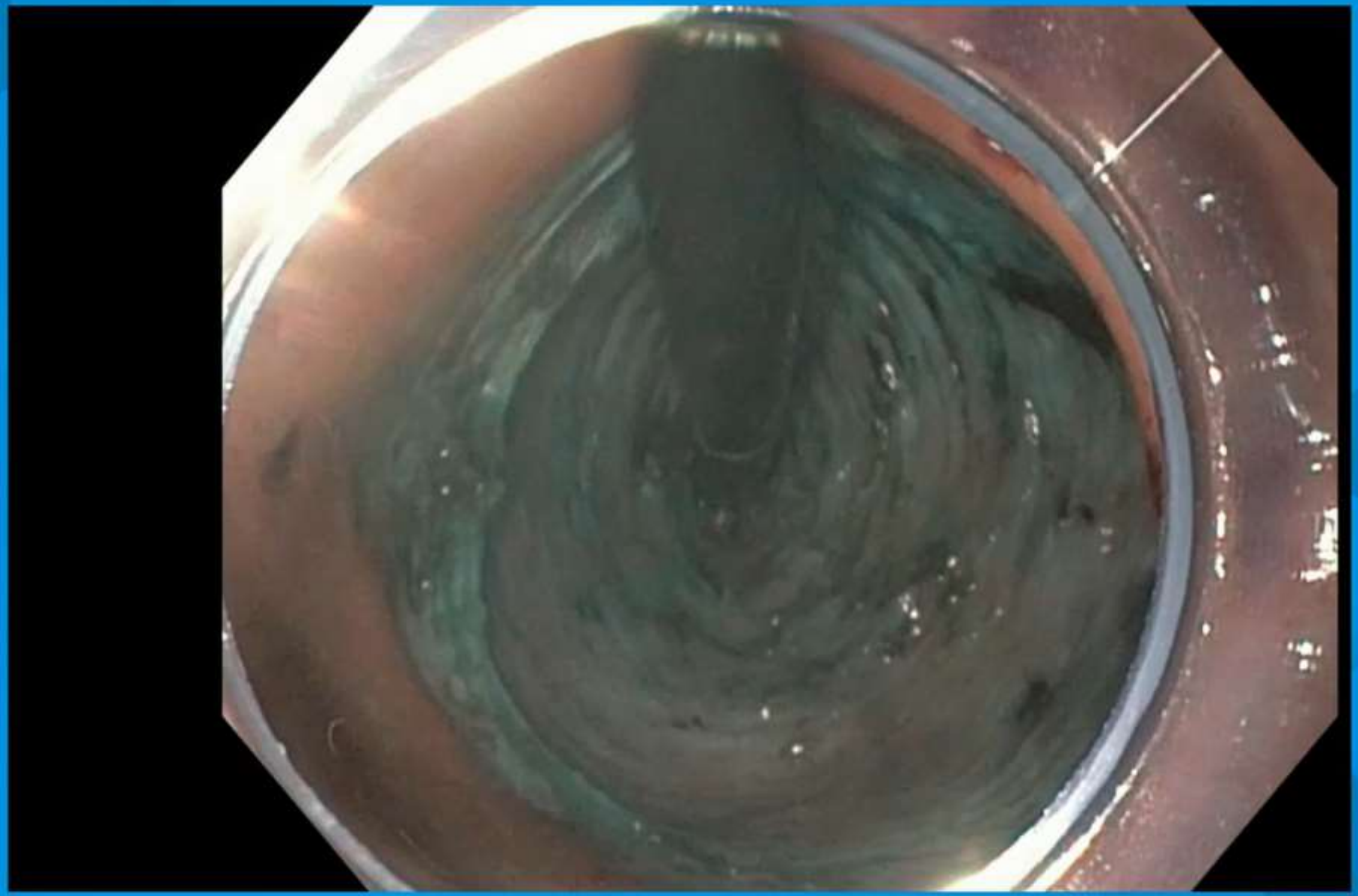
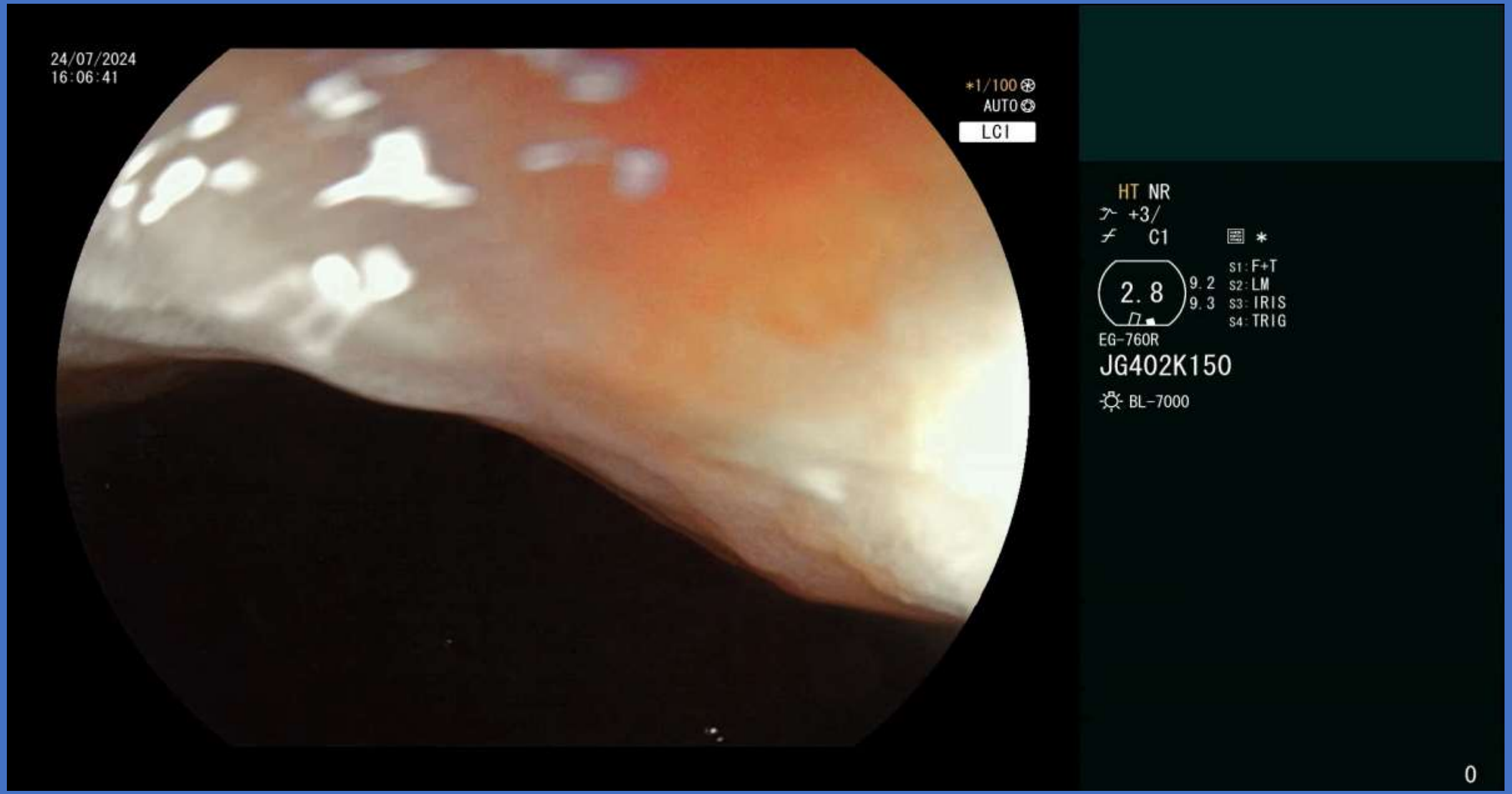


Figure 2 Schema of endoscopic submucosal tunnel dissection. A: Evaluating and delineating the neoplasm; B: After marking the lesion margin, mucosal incision was performed in the anal-oral sequence; C: A submucosal tunnel was created from the oral to anal side; D: Lateral resection with an insulated-tip knife for complete removal of the lesion; E: Preventive coagulation on artificial ulcer.

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BL-7000
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Colon

EMR Or ESD ?

Original Research | January 2024

Endoscopic En Bloc Versus Piecemeal Resection of Large Nonpedunculated Colonic Adenomas

A Randomized Comparative Trial

Jérémie Jacques, MD, PhD, Marion Schaefer, MD, Timothée Wallenhorst, MD, ... See More

Author, Article, and Disclosure Information

https://doi.org/10.7326/M23-1812

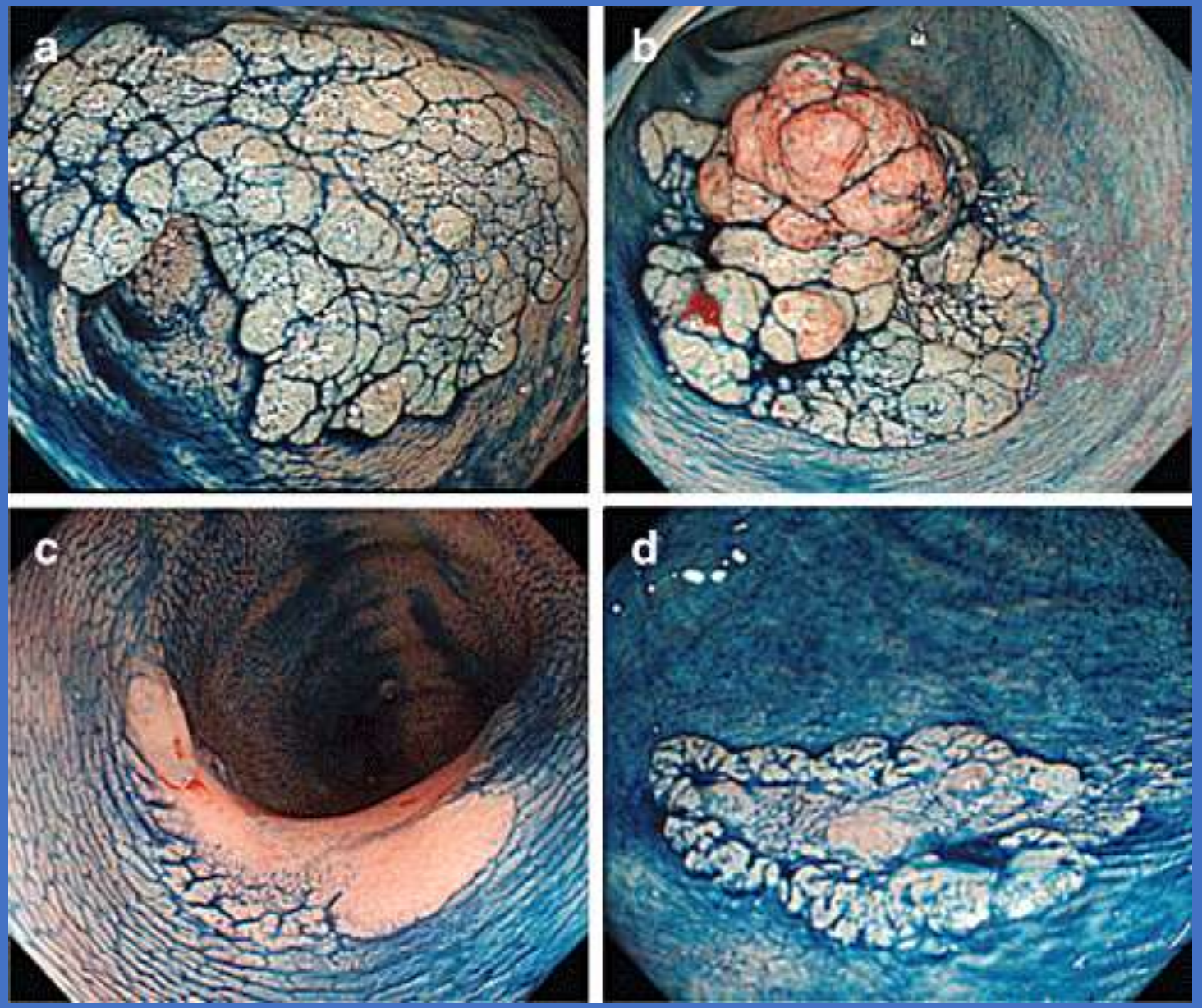
Eligible for CME Point-of-Care

- Prospective randomized trial
- 360 patients with colorectal lesions more than 2.5 cm randomized into two groups
- Recurrence during 6 months in EMR group was (5.1 %) and in ESD group (0.6%)

When to Choose EMR

When there is minimal risk of Submucosal invasion

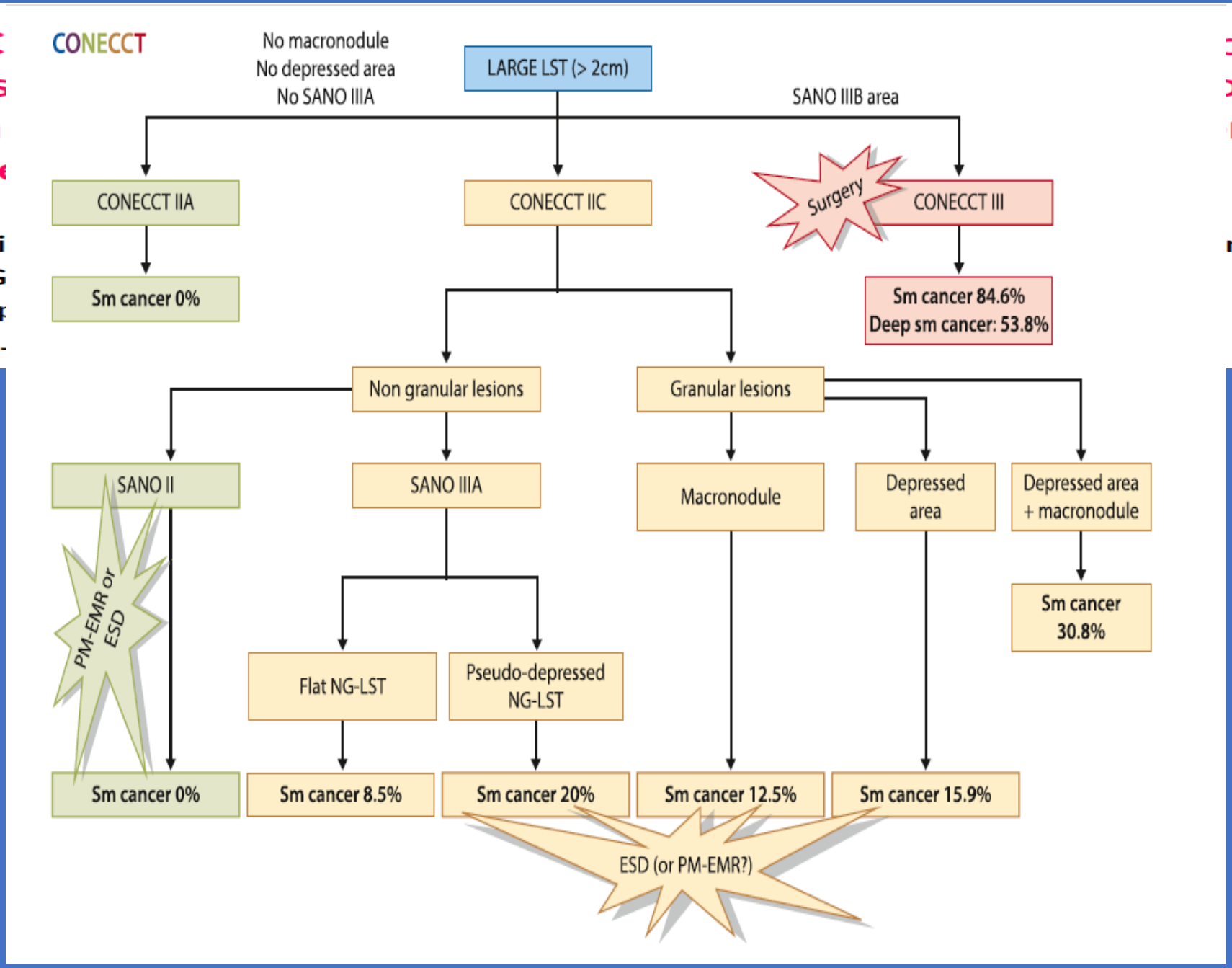
How to suspect submucosal invasion in LST



- A- 1%
- B-11 %
- C- 6%
- D-35 %

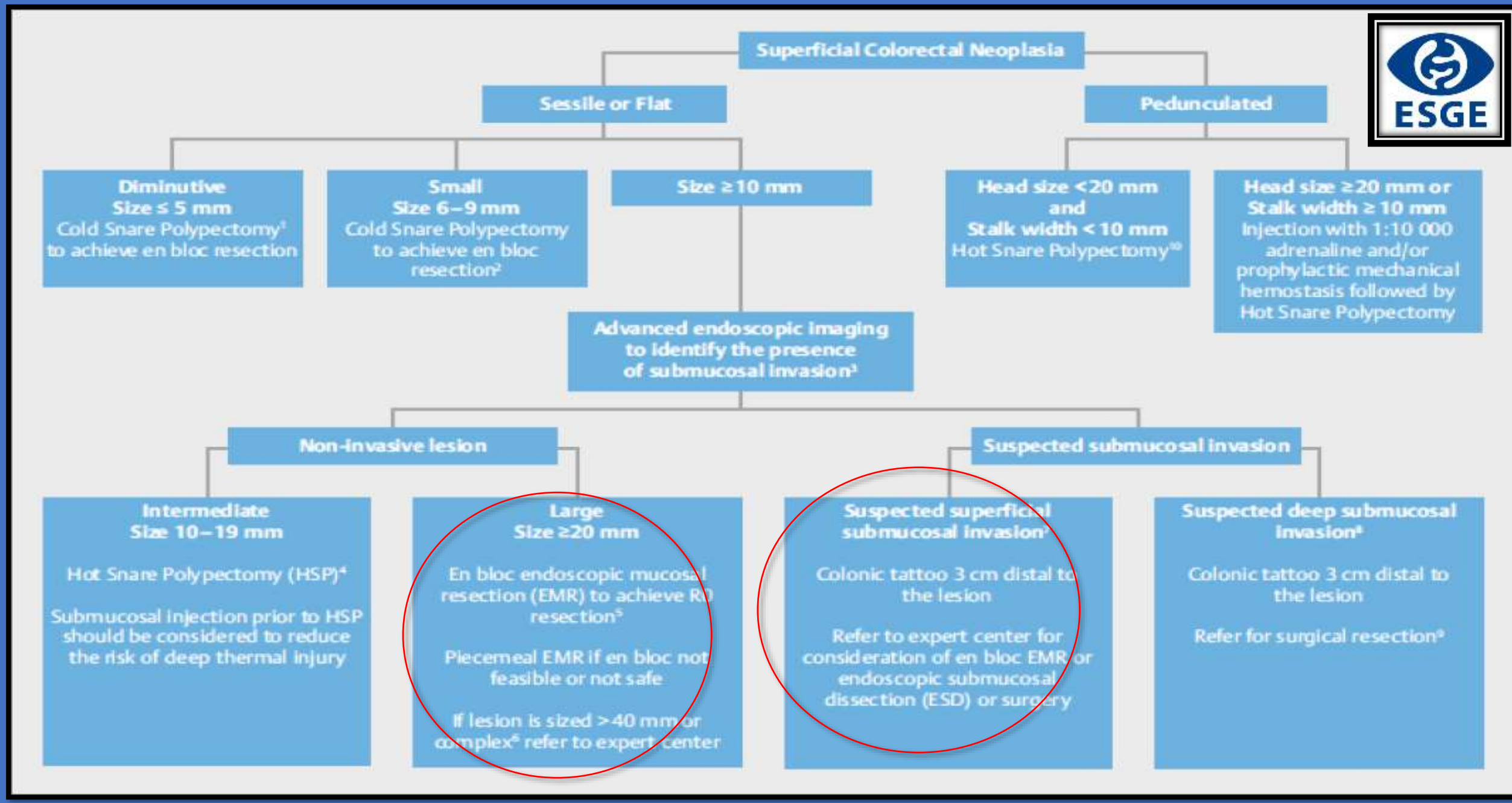
The C
Choos
latera
prospe

Clementi
Sophie G
Hugo Lep
Jeremie



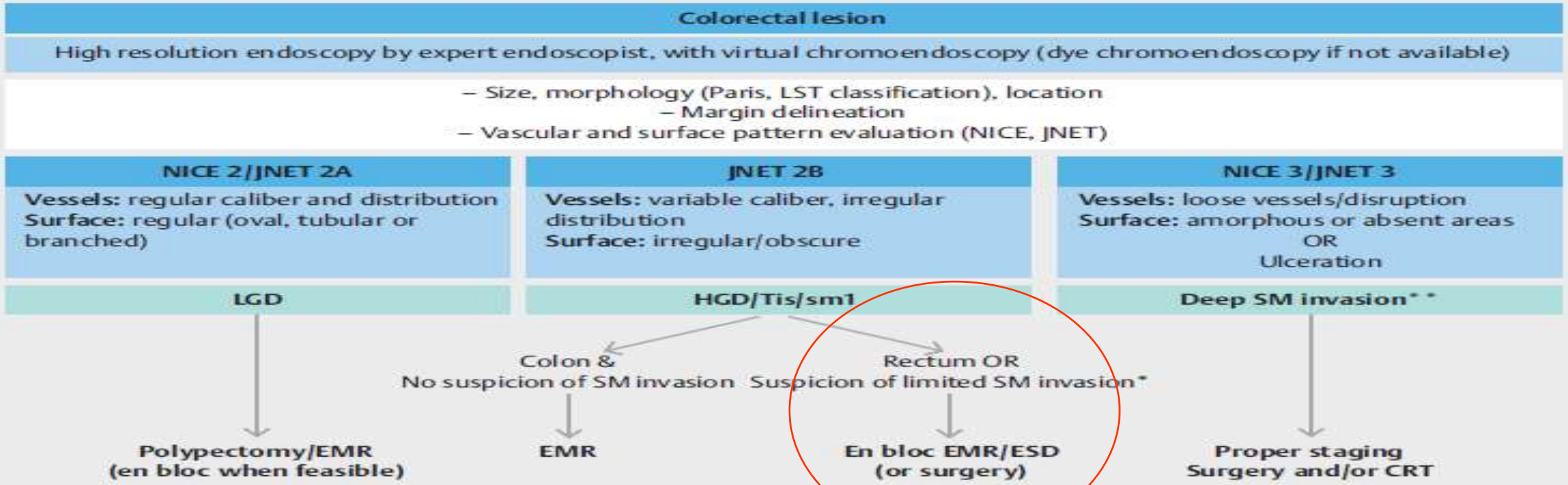
Decision depends not only on scientific background

But also on facility and Availability of different services


Superficial Colorectal Neoplasia
Sessile or Flat
Pedunculated
Diminutive
Size ≤ 5 mm
Cold Snare Polypectomy[1] to achieve en bloc resection
Small
Size 6–9 mm
Cold Snare Polypectomy to achieve en bloc resection[2]
Size ≥10 mm
Head size <20 mm and Stalk width < 10 mm
Hot Snare Polypectomy[10]
Head size ≥20 mm or Stalk width ≥ 10 mm
Injection with 1:10 000 adrenaline and/or prophylactic mechanical hemostasis followed by Hot Snare Polypectomy
Advanced endoscopic imaging to identify the presence of submucosal invasion[3]
Non-invasive lesion
Suspected submucosal invasion
Intermediate
Size 10–19 mm
Hot Snare Polypectomy (HSP)[4]
Submucosal injection prior to HSP should be considered to reduce the risk of deep thermal injury
Large
Size ≥20 mm
En bloc endoscopic mucosal resection (EMR) to achieve R0 resection[5]
Piecemeal EMR if en bloc not feasible or not safe
If lesion is sized >40 mm or complex[6] refer to expert center
Suspected superficial submucosal invasion[7]
Colonic tattoo 3 cm distal to the lesion
Refer to expert center for consideration of en bloc EMR or endoscopic submucosal dissection (ESD) or surgery
Suspected deep submucosal invasion[8]
Colonic tattoo 3 cm distal to the lesion
Refer for surgical resection[9]

Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022

ESGE



► **Fig. 4** Endoscopic submucosal dissection (ESD) for superficial colorectal lesions: a decision algorithm. CRT, chemoradiotherapy; EMR, endoscopic mucosal resection; EUS, endoscopic ultrasonography; HGD, high grade dysplasia; JNET, Japan NBI Expert Team; LGD, low grade dysplasia; LST, laterally spreading tumor; MRI, magnetic resonance imaging; NICE, NBI International Colorectal Endoscopic.

DEN Digestive Endoscopy
For Gastroenterologists and Endoscopic Surgeons

Guidelines | Free Access

Japan Gastroenterological Endoscopy Society guidelines for colorectal endoscopic submucosal dissection/endoscopic mucosal resection

Shinji Tanaka, Hiroshi Kashida, Yutaka Saito, Naohisa Yahagi, Hiroo Yamano, Shoichi Saito, Takashi Hisabe, Takashi Yao, Masahiko Watanabe, Masahiro Yoshida, Yusuke Saitoh ... See all authors

First published: 30 September 2019 | https://doi.org/10.1111/den.13545 | Citations: 104

These guidelines have been published in *Gastroenterol. Endosc.* 2019; 61: 1321-44 (in Japanese).

Table 2. Indications for endoscopic submucosal dissection of colorectal tumors

Lesions for which endoscopic en bloc resection is required
1) Lesions for which en bloc resection with snare EMR is difficult to apply
LST-NG, particularly LST-NG (PD)
Lesions showing a VI-type pit pattern
Carcinoma with shallow T1 (SM) invasion
Large depressed-type tumors
Large protruded-type lesions suspected to be carcinoma†
2) Mucosal tumors with submucosal fibrosis‡
3) Sporadic tumors in conditions of chronic inflammation such as ulcerative colitis
4) Local residual or recurrent early carcinomas after endoscopic resection

Egypt

Colon

LGD
HGD

EMR

Risky for SMI

ESD
FTRD

Rectum

LGD

En-block EMR

HGD, Risk of SMI

ESD

Exceptions
and other indications

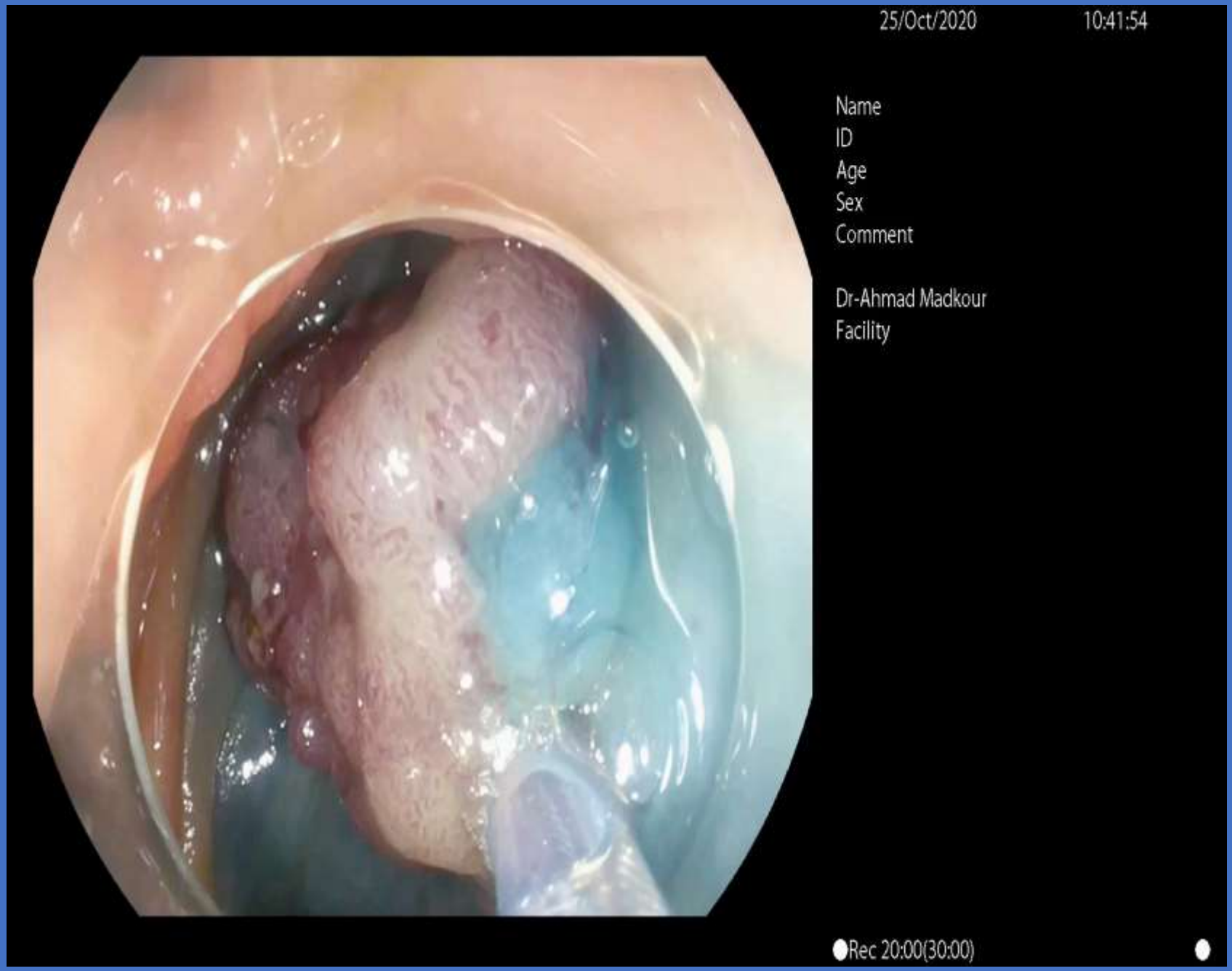
- Recurrent lesions after EMR
- IBD
- NET

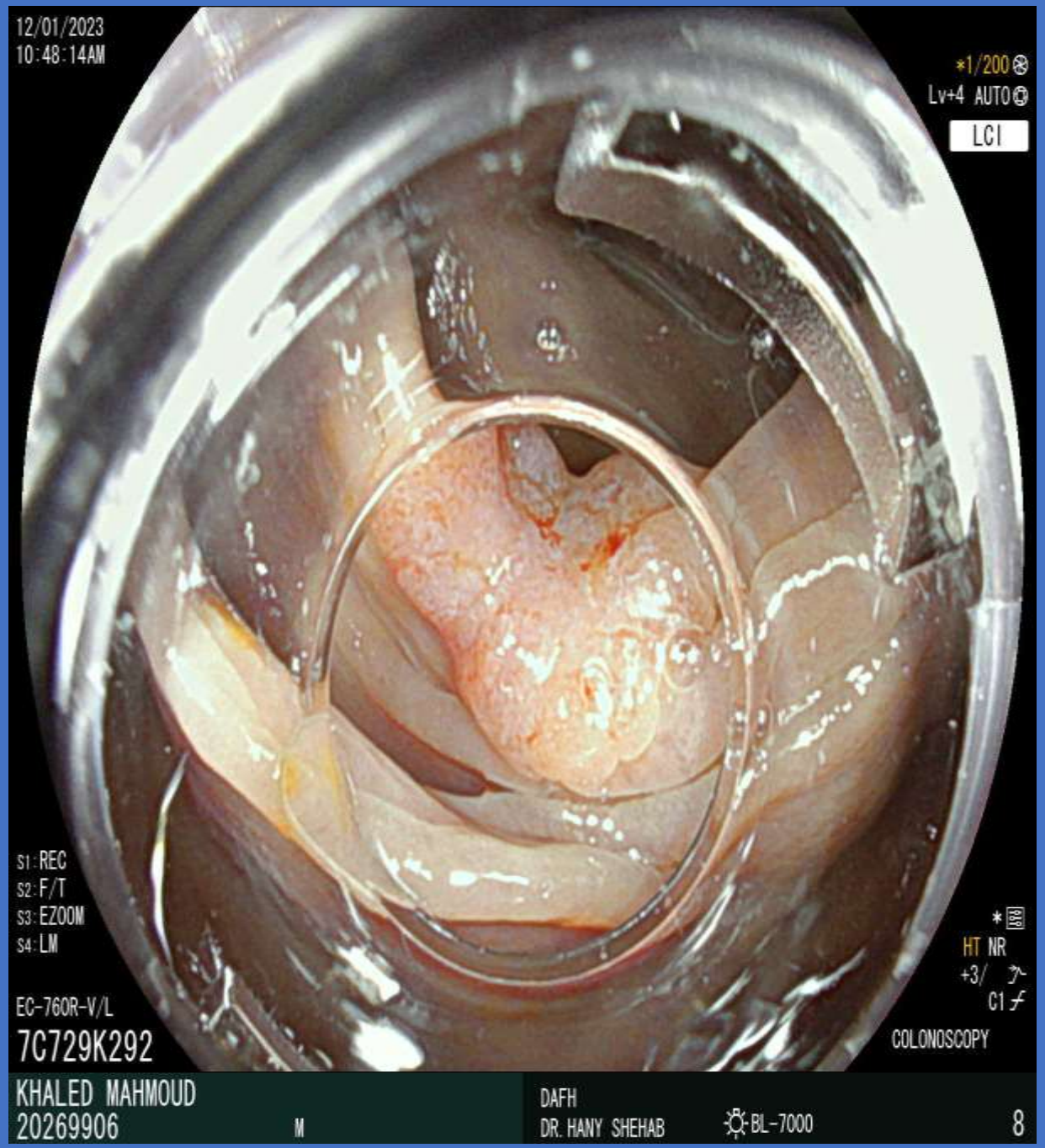
- ESD
- Precut EMR
- EFTRD

36 years old man with change in bowel habits
Colonoscopy showed LST –G homogenous type in caecum
No signs of HGD or SMI

Colon	LGD HGD	EMR
	Risky for SMI	ESD FTRD
Rectum	LGD	En-block EMR
	HGD, Risk of SMI	ESD

36 years old man with change in bowel habits
Colonoscopy showed LST –G homogenous type in caecum
No signs of HGD or SMI

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DR. HANY SHEHAB
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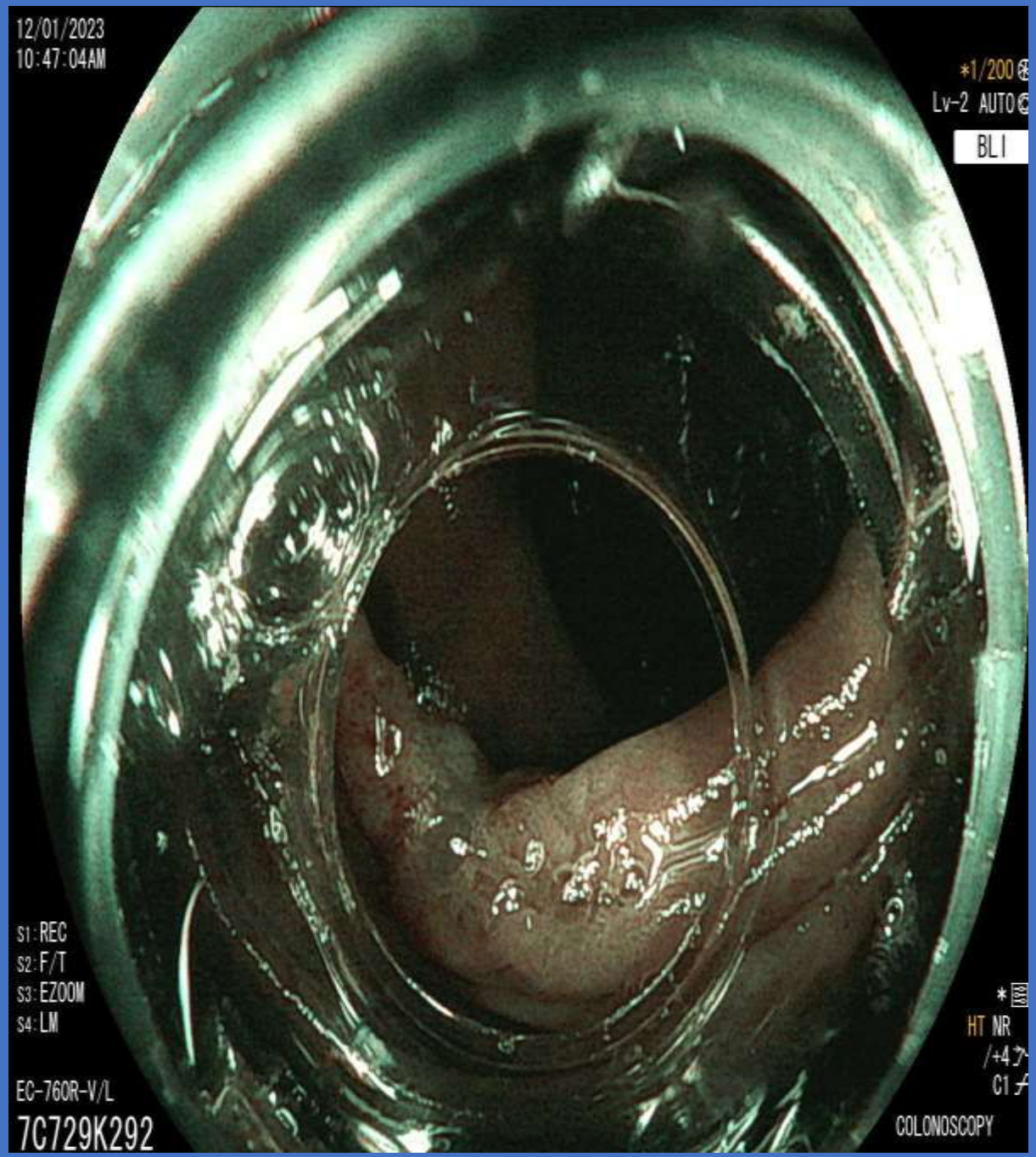
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colon

LGD
HGD

EMR

Risky for SMI

ESD
FTRD

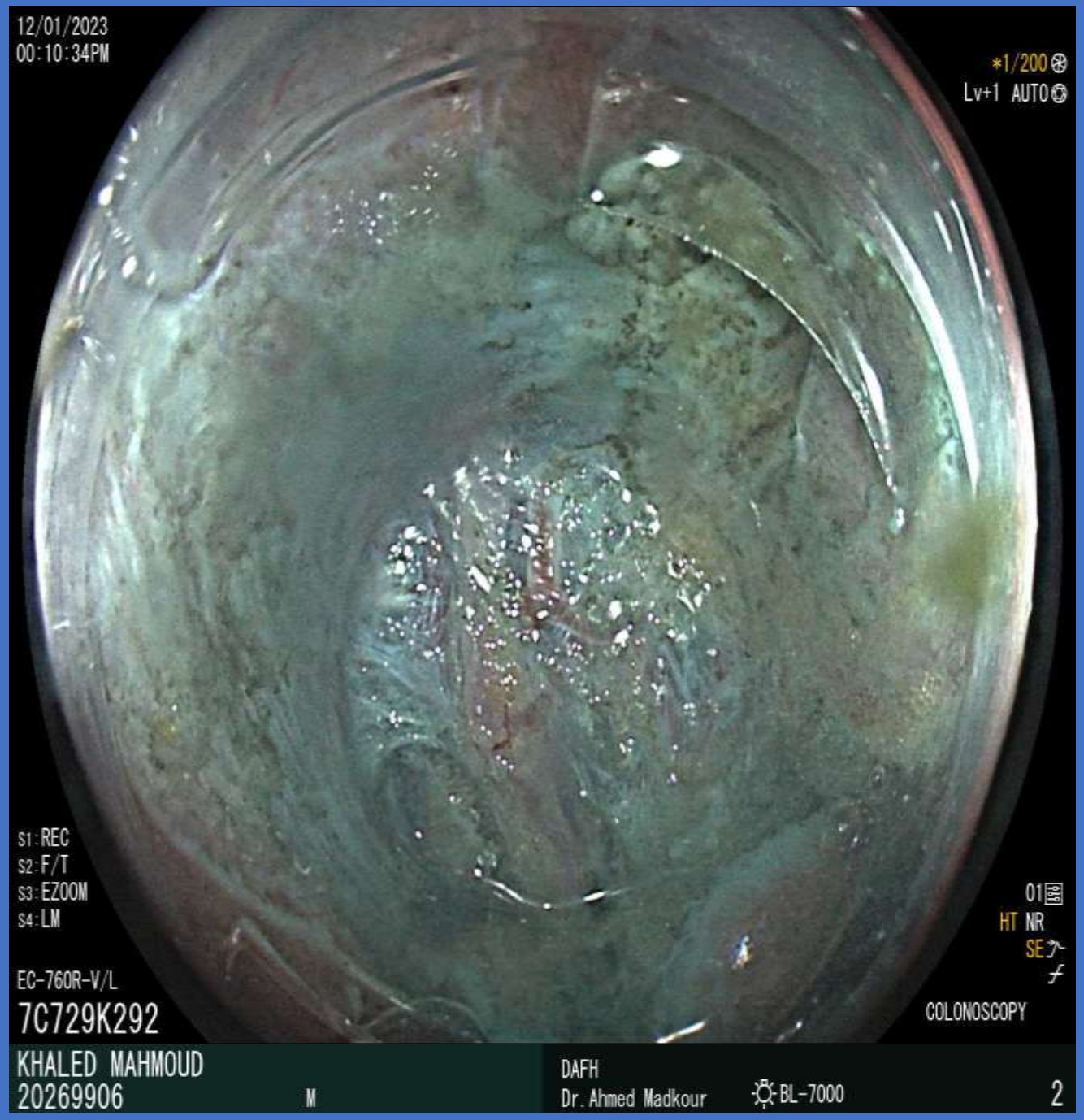
Rectum

LGD

En-block EMR

HGD, Risk of SMI

ESD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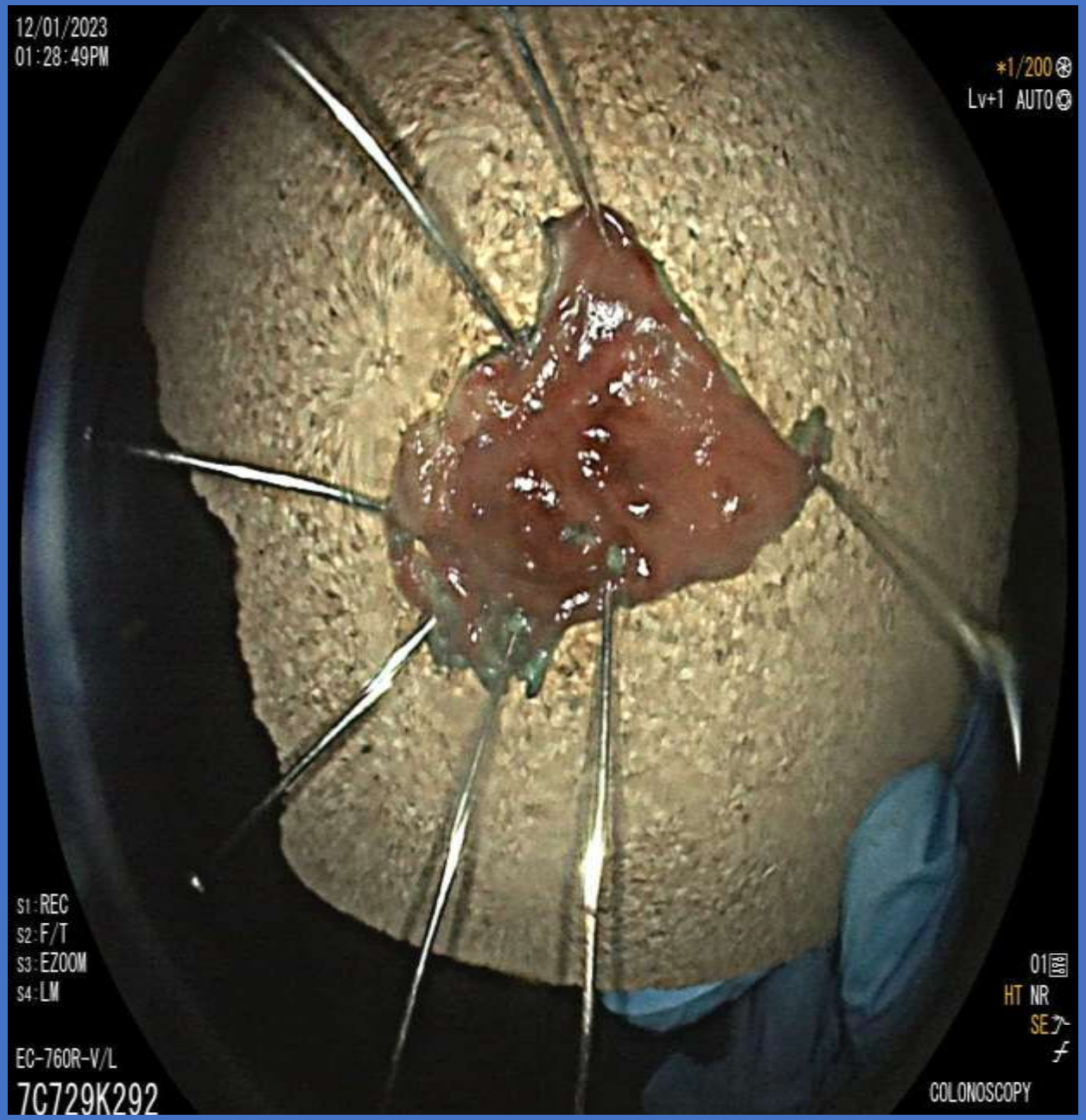
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COLONOSCOPY

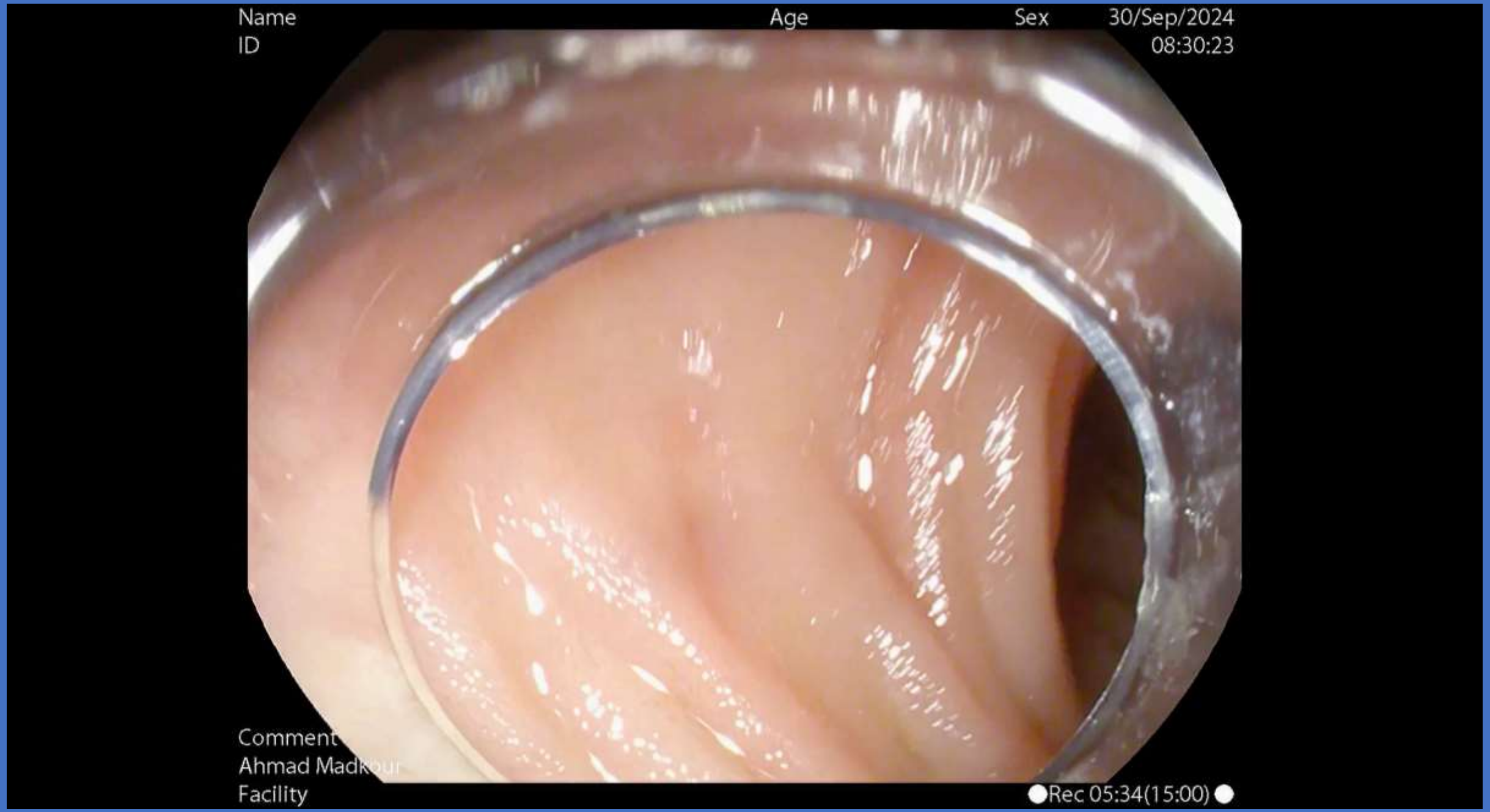
A & B: **INVASIVE MODERATELY DIFFERENTIATED ADENOCARCINOMA, GRADE 2, ON TOP OF TUBULAR ADENOMA** (MAXIMAL DEPTH OF SUBMUCOSAL INVASION OF 150µ MICRONS) - **pT1-sm1**

NEGATIVE LYMPHOVASCULAR SPACE INVASION. NEGATIVE FOR PERINEURAL INVASION. NEGATIVE FOR TUMOR BUDDING

FREE LATERAL MARGINS. FREE INKED DEEP MARGIN (COMPLETELY EXCISED)

C: **NORMAL COLONIC MUCOSA / LATERAL MARGINS FREE OF NEOPLASIA**

Dalia Abd El Kareem, M.D.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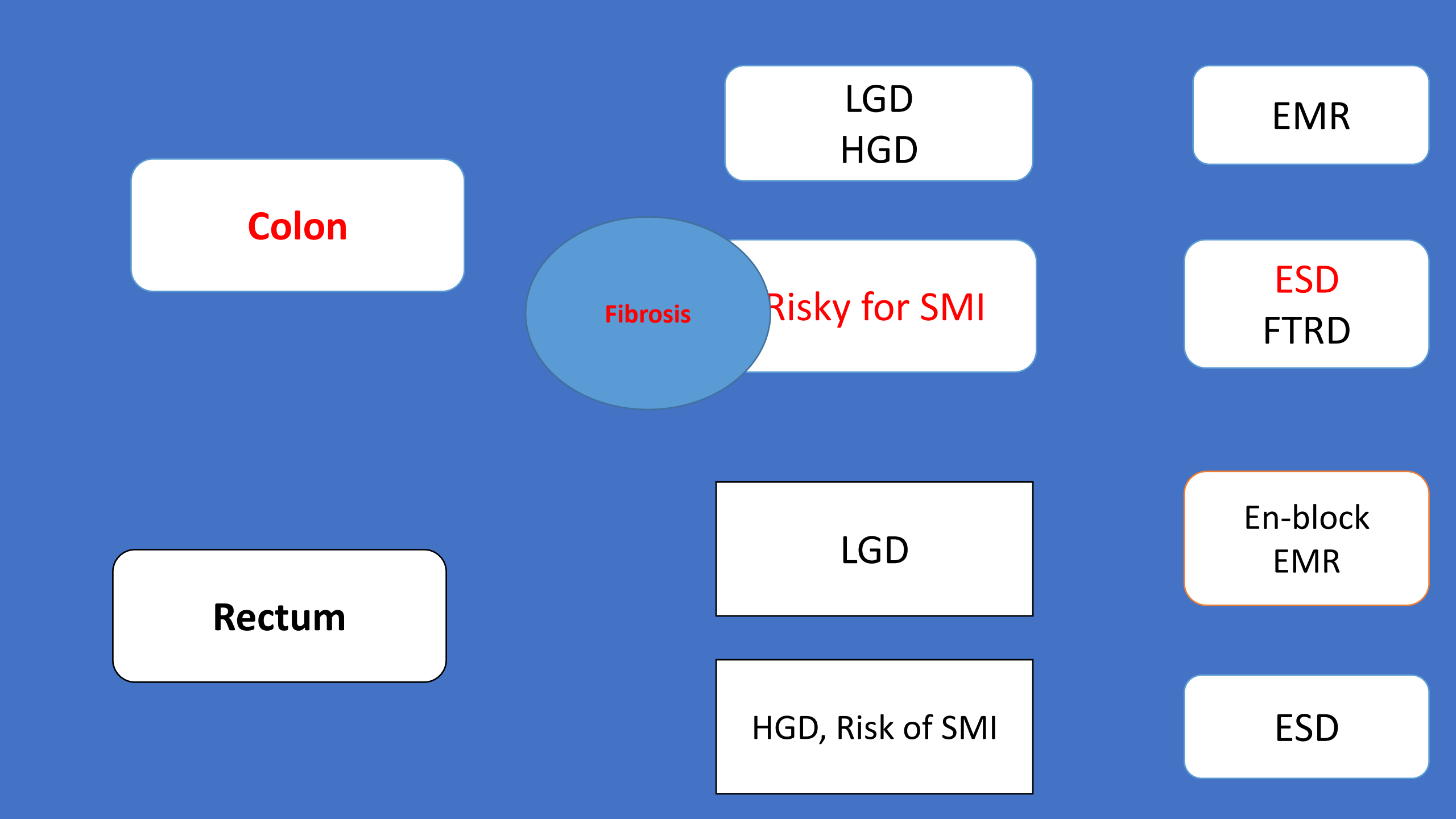
Colon
LGD
HGD
EMR
Fibrosis
Risky for SMI
ESD
FTRD
Rectum
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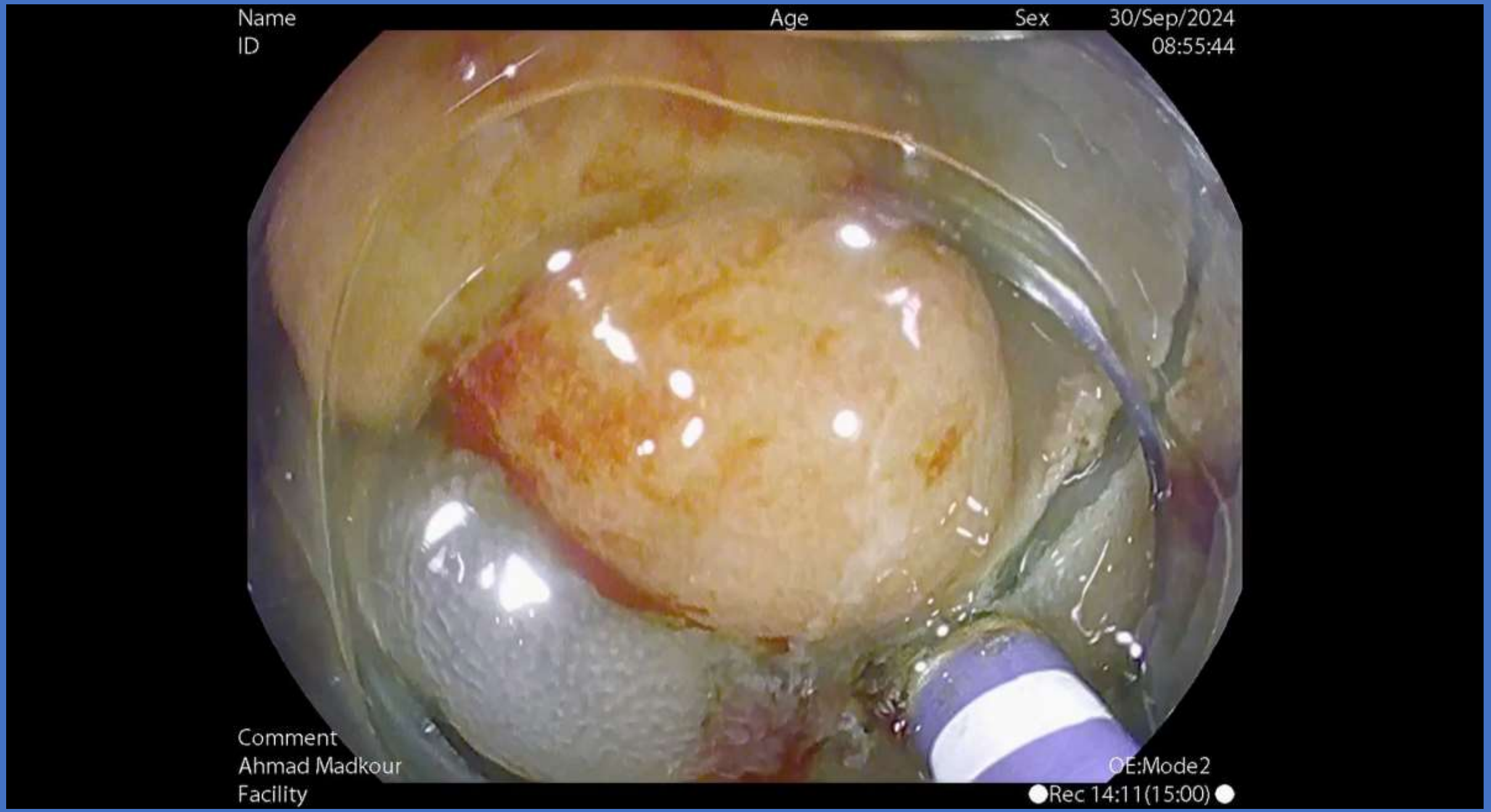
En-block
EMR
HGD, Risk of SMI
ESD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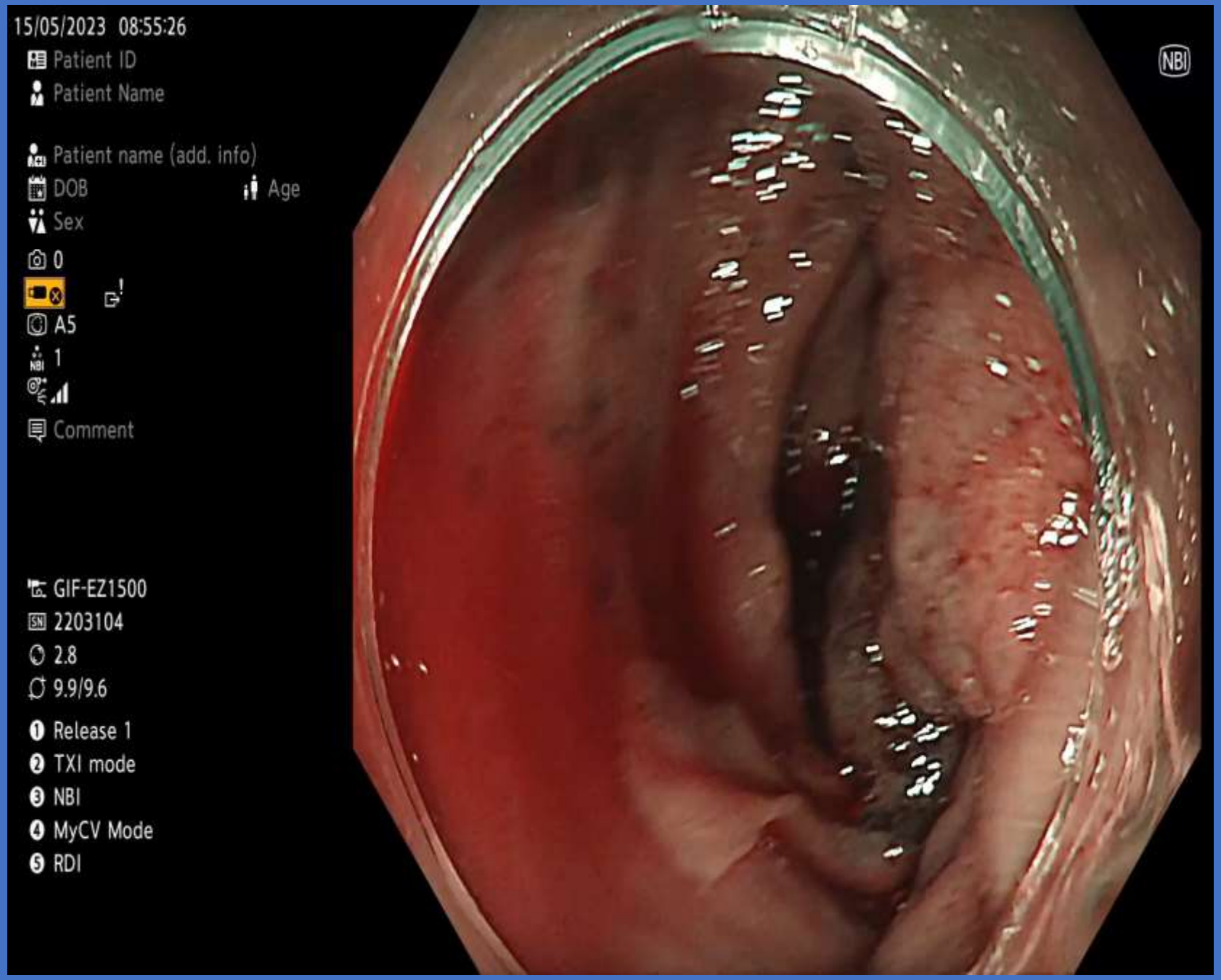
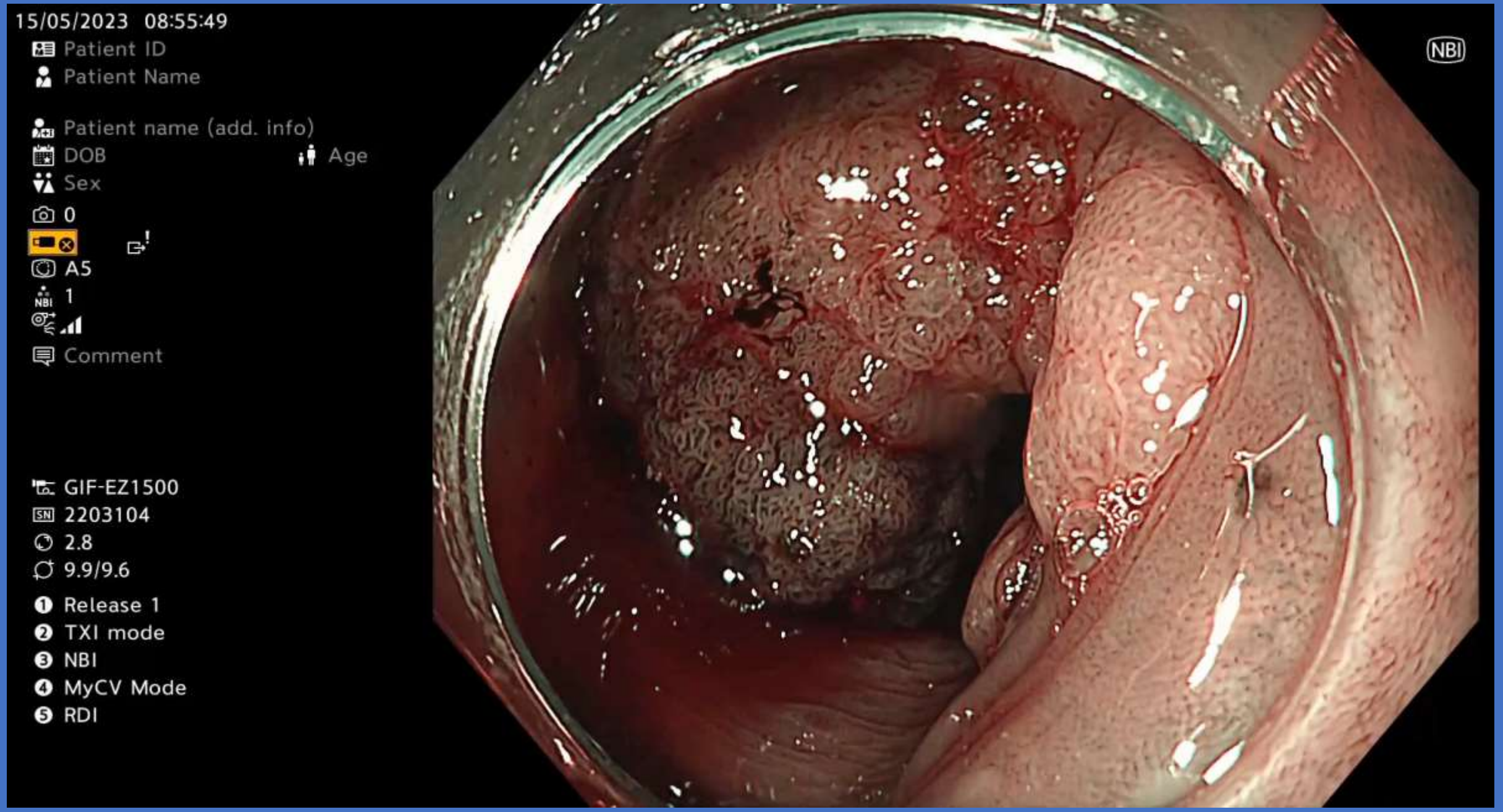
42 years old female with change bowel habits
Colonoscopy showed sigmoid colon LST with dominant nodule



Colon	LGD HGD	EMR
	Risky for SMI	ESD FTRD
Rectum	LGD	En-block EMR
	HGD, Risk of SMI	ESD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1 Release 1
2 TXI mode
3 NBI
4 MyCV Mode
5 RDI
NBI

Perineural invasion is absent.
No necrosis.

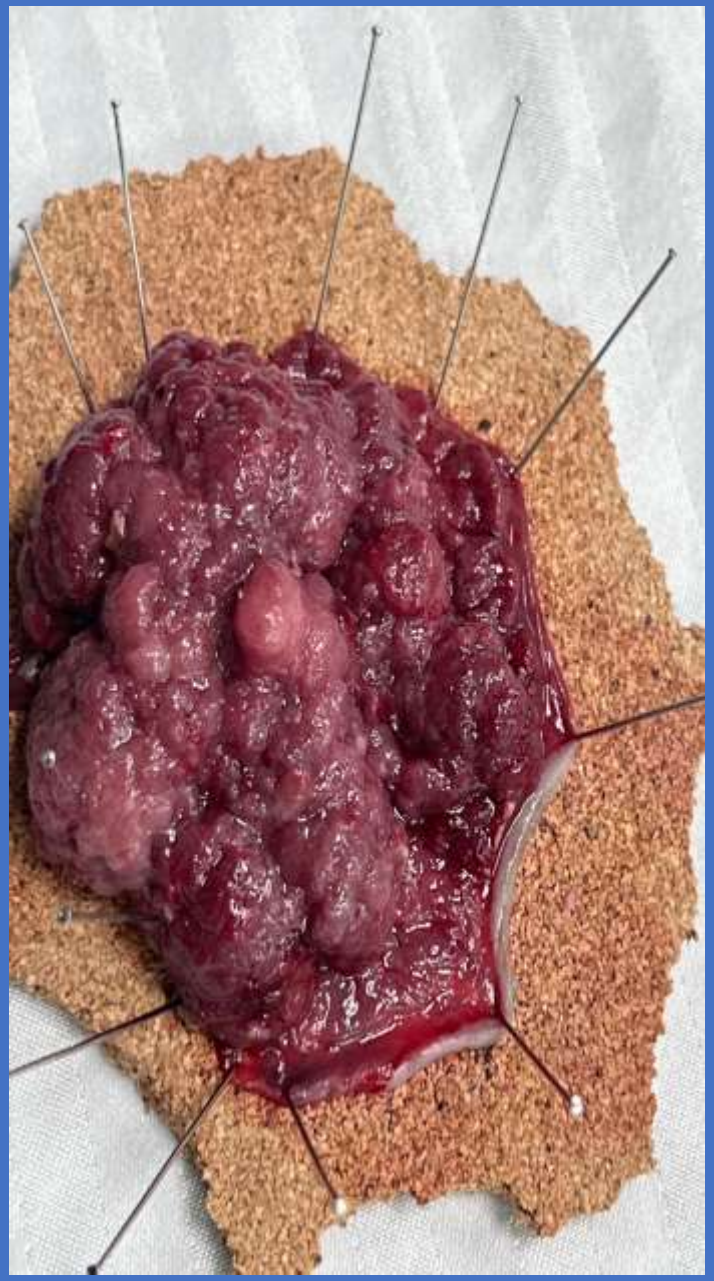
Diagnosis :

Rectal LST, Referred blocks (Biopsy), INFILTRATING ADENOCARCINOMA, GRADE II ON TOP OF TUBULOVILLOUS ADENOMA WITH HIGH GRADE DYSPLASIA, FREE SURGICAL MARGIN AT SIDE AND DEPTH OF RESECTION.
- TUMOR STAGE: pT1.

Prof. Dr. Shady Elia Anis

Prof. Dr. Elia Anis Ishak

Colon	LGD HGD	EMR
	Risky for SMI	ESD FTRD
Rectum	LGD	En-block EMR
	HGD, Risk of SMI	ESD

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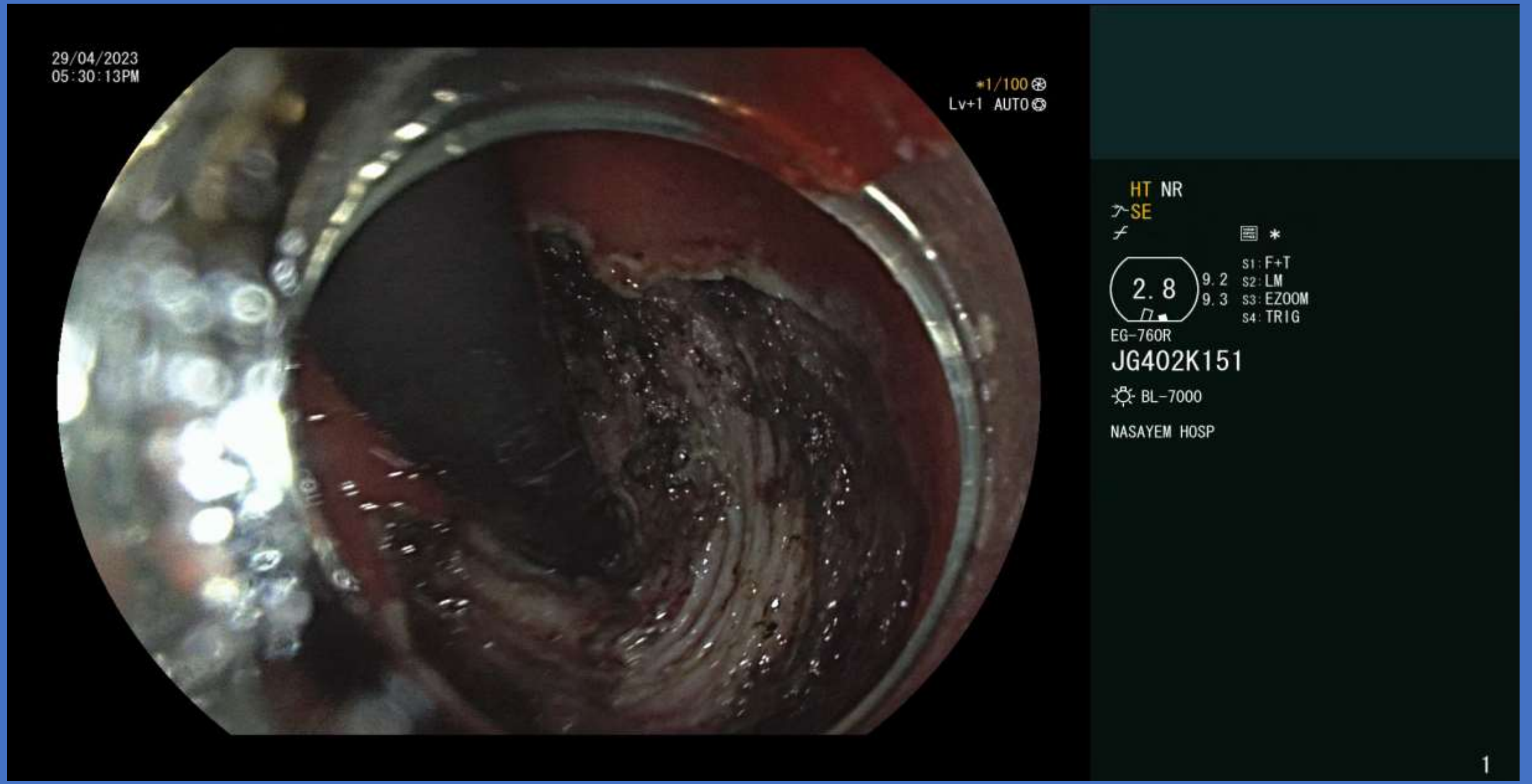
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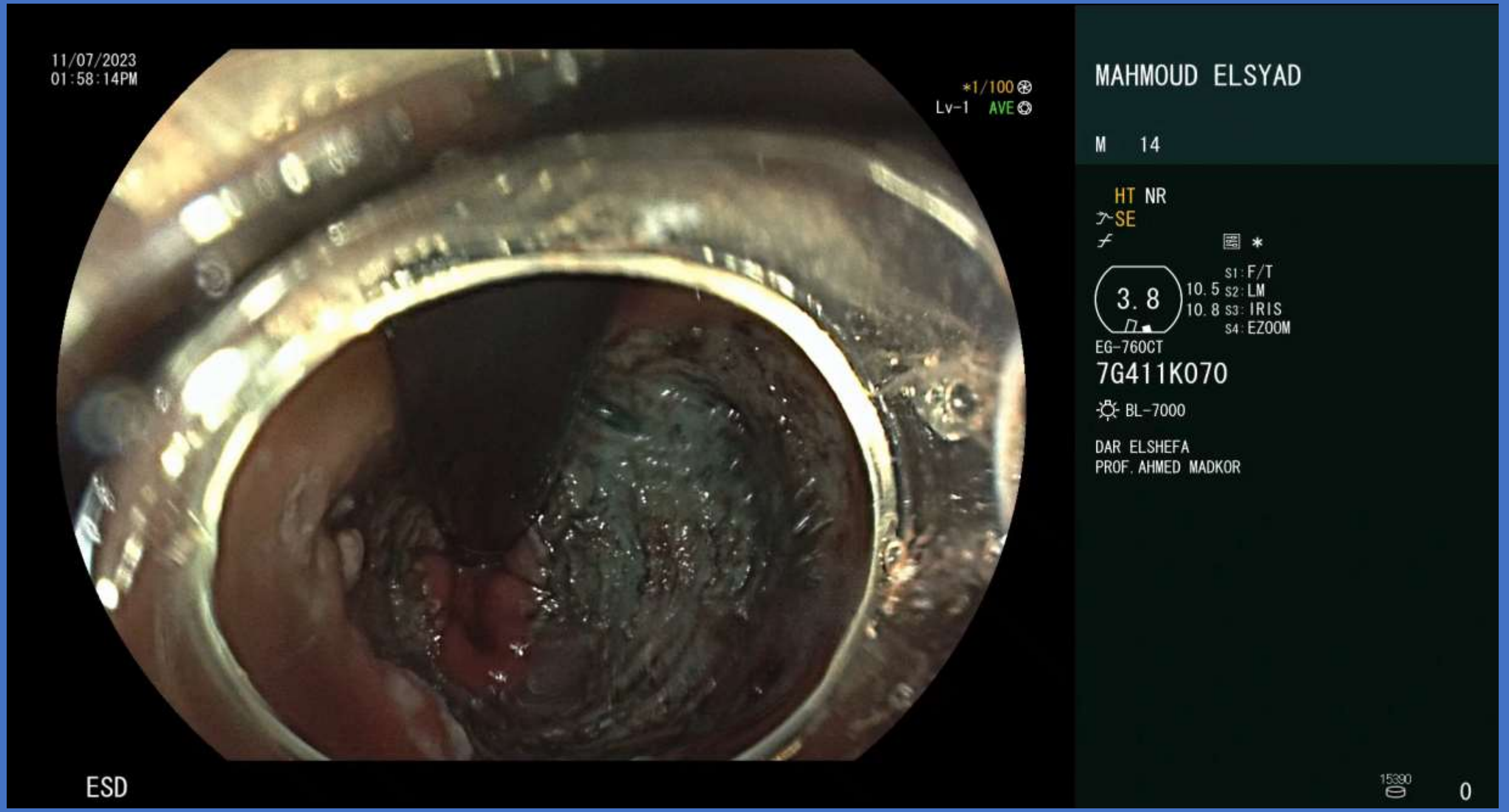
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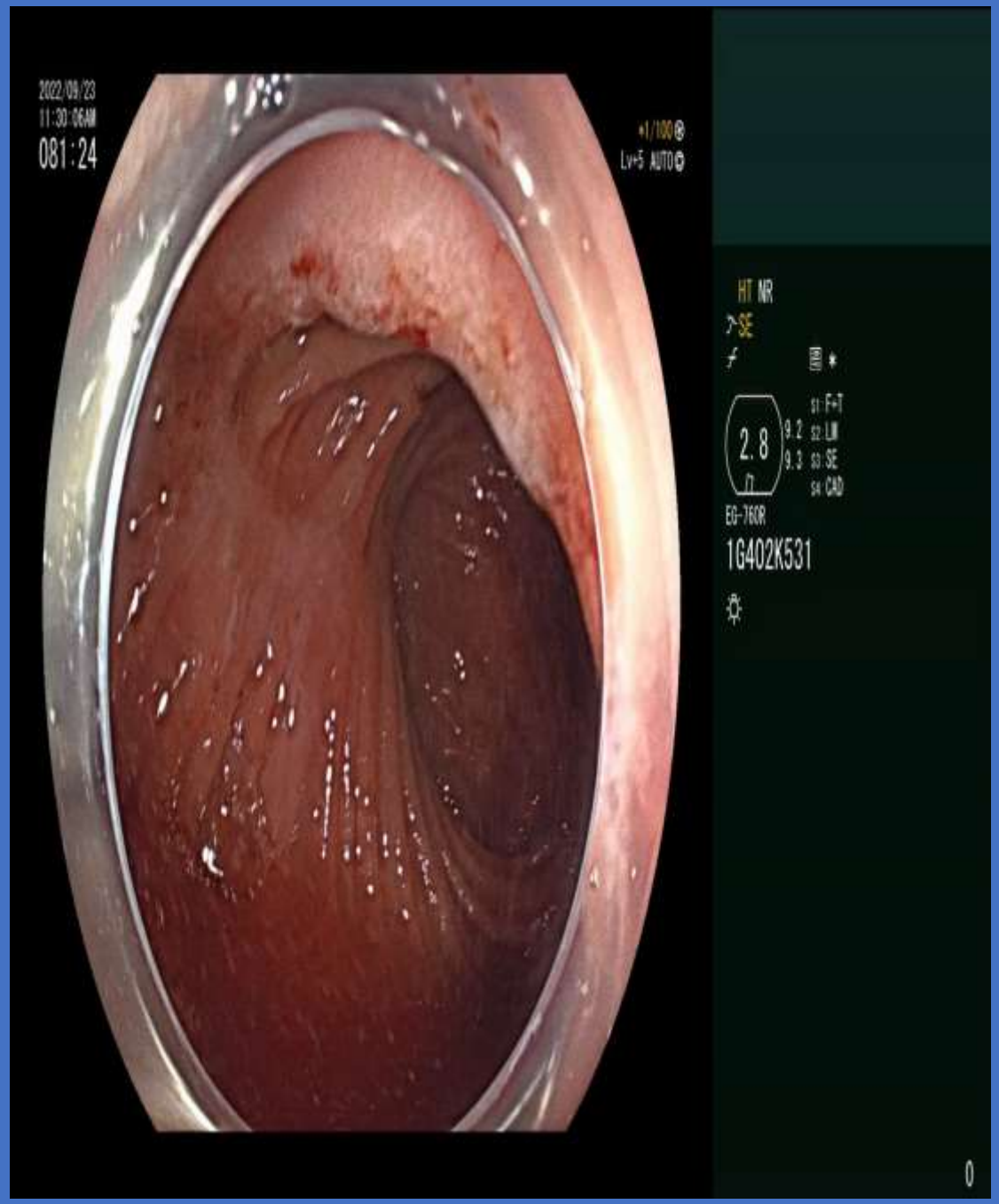
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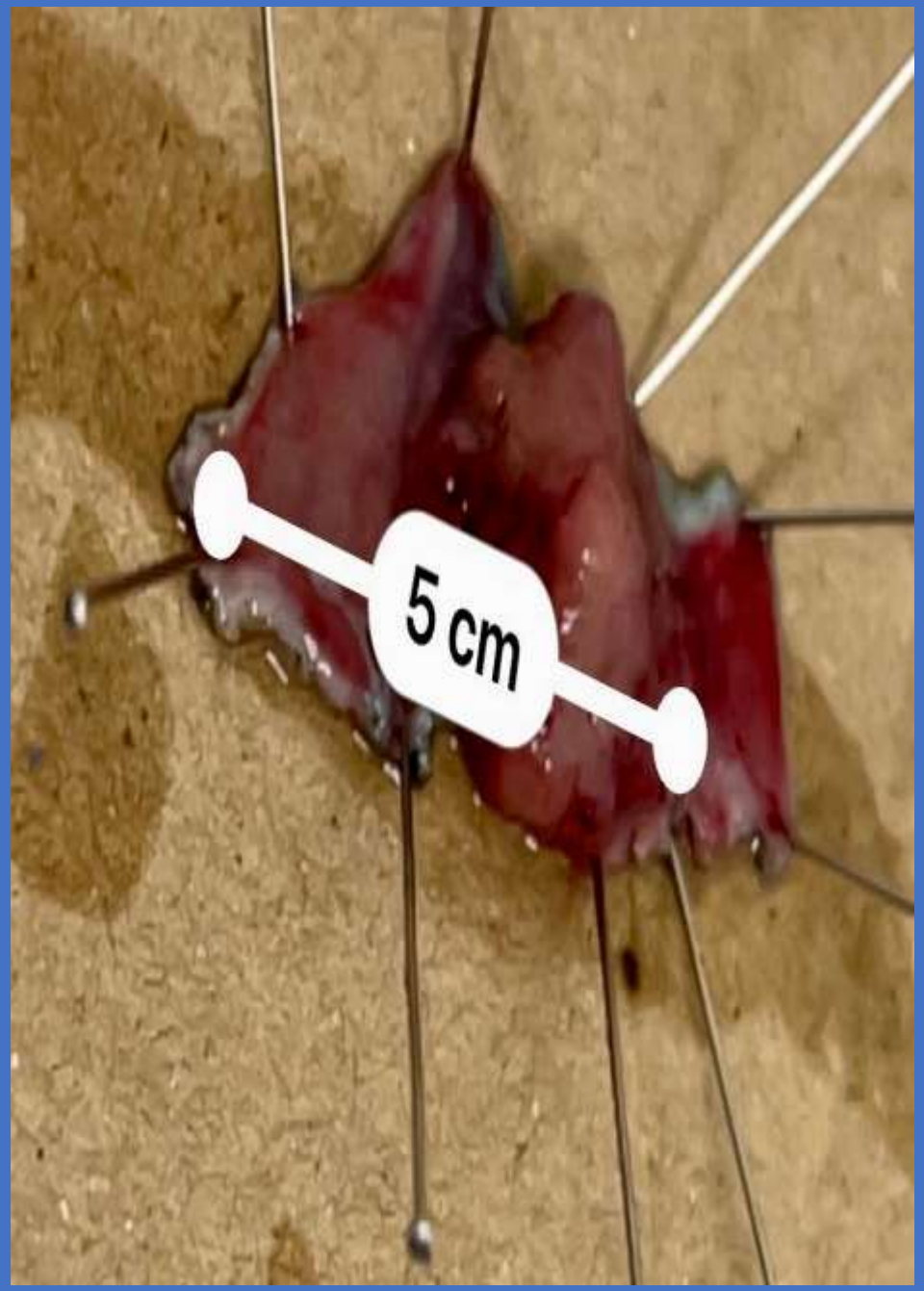
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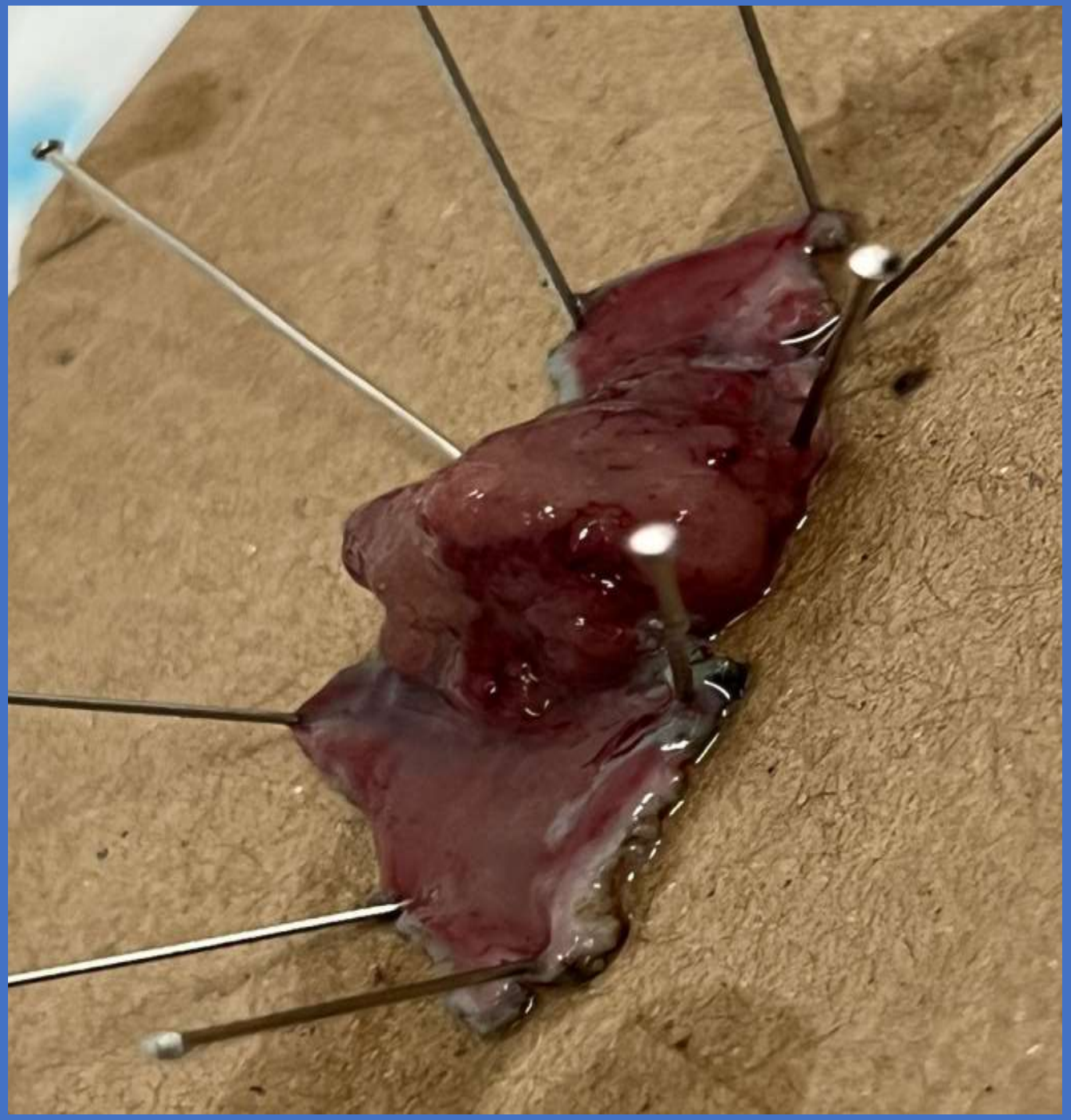


Exceptions
and other indications

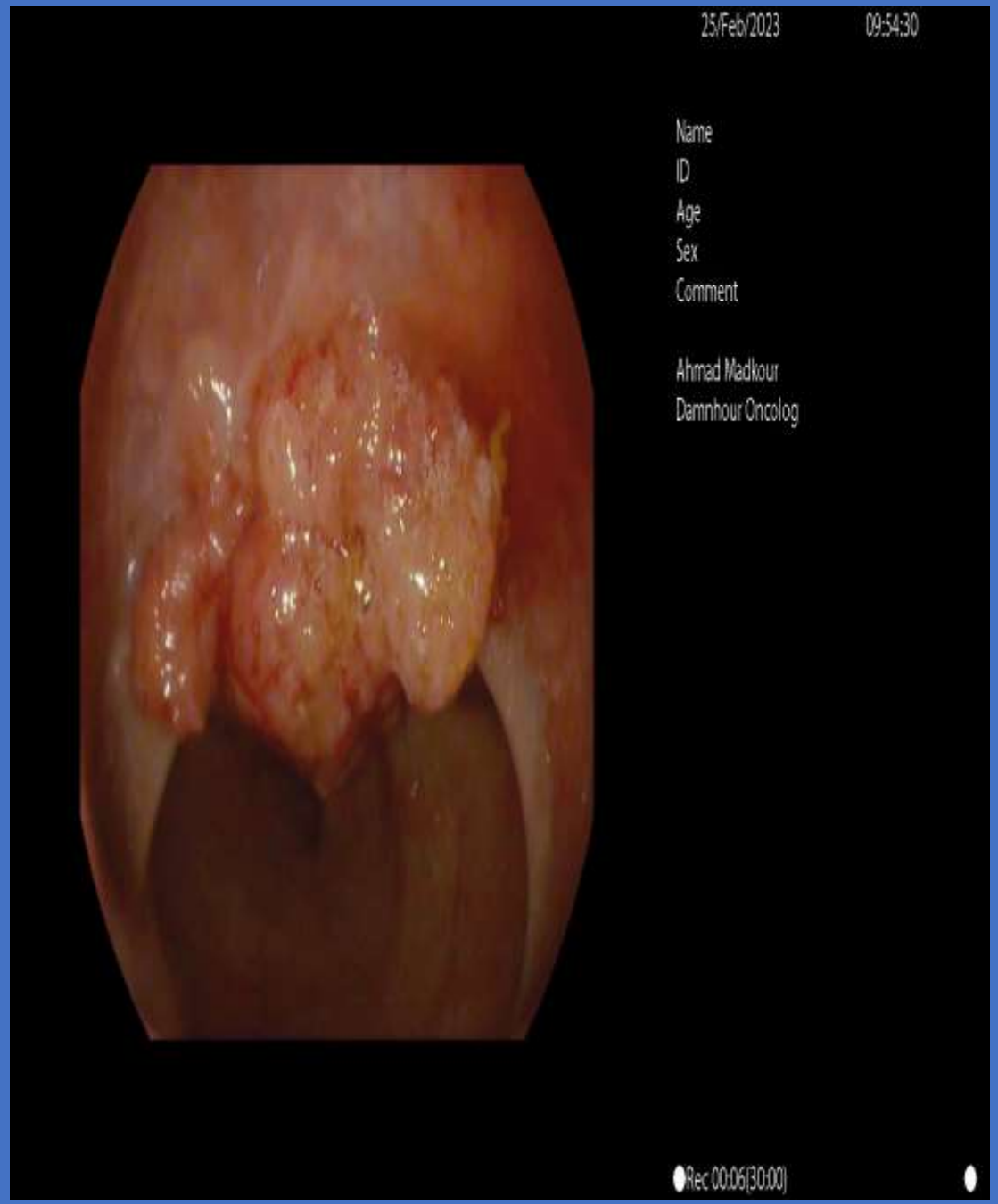
- Recurrent lesions after EMR
- IBD
- Severe Submucosal fibrosis
- SMT , NET

- ESD
- Precut EMR
- EFTRD

Exceptions
and other indications

- Recurrent lesions after EMR
- IBD
- Severe Submucosal fibrosis
- SMT , NET

- ESD
- Precut EMR
- EFTRD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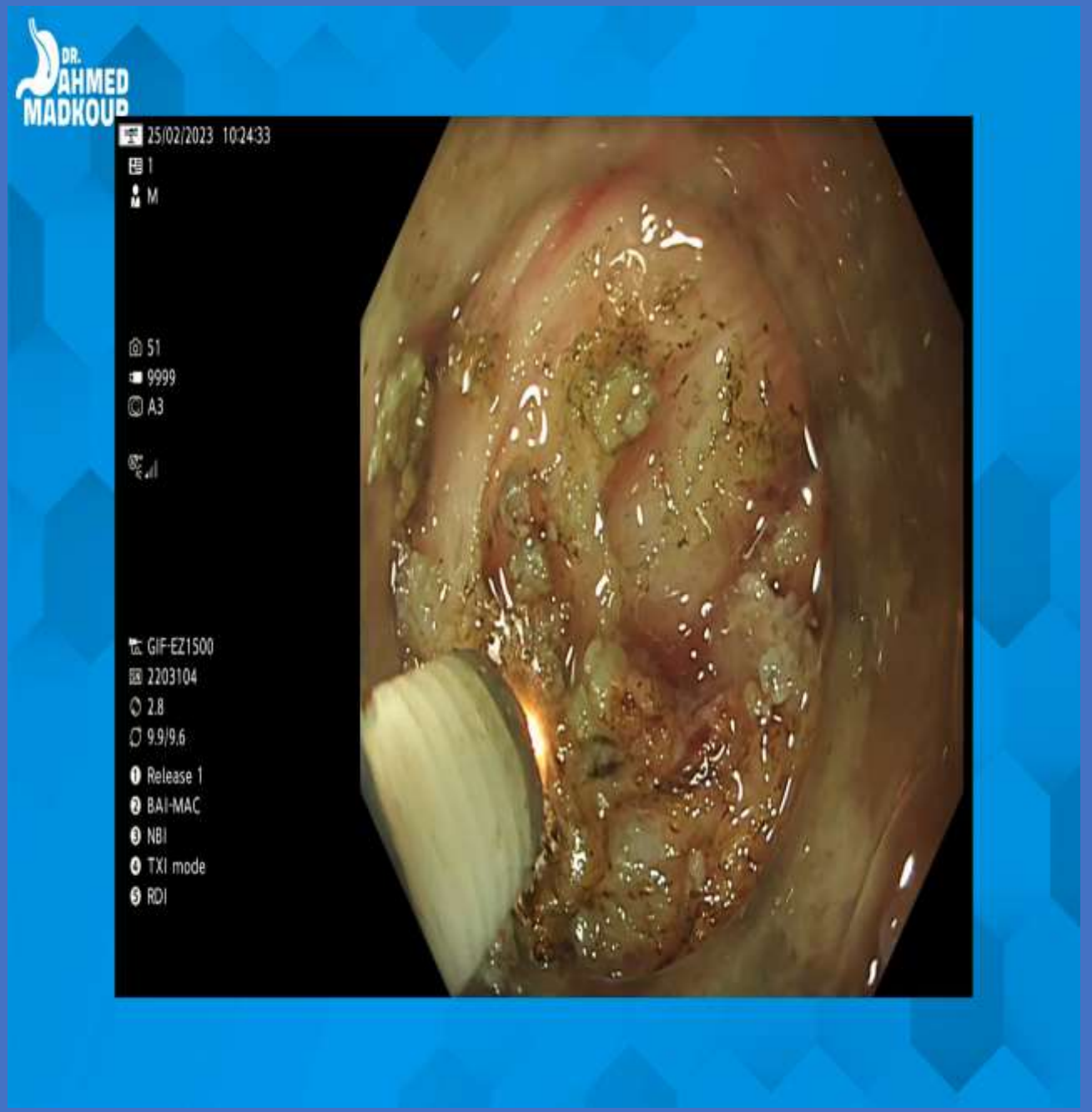
Name
ID
Age
Sex
Comment
Ahmad Madkour
Damnhour Oncolog
Rec 00:06[30:00]

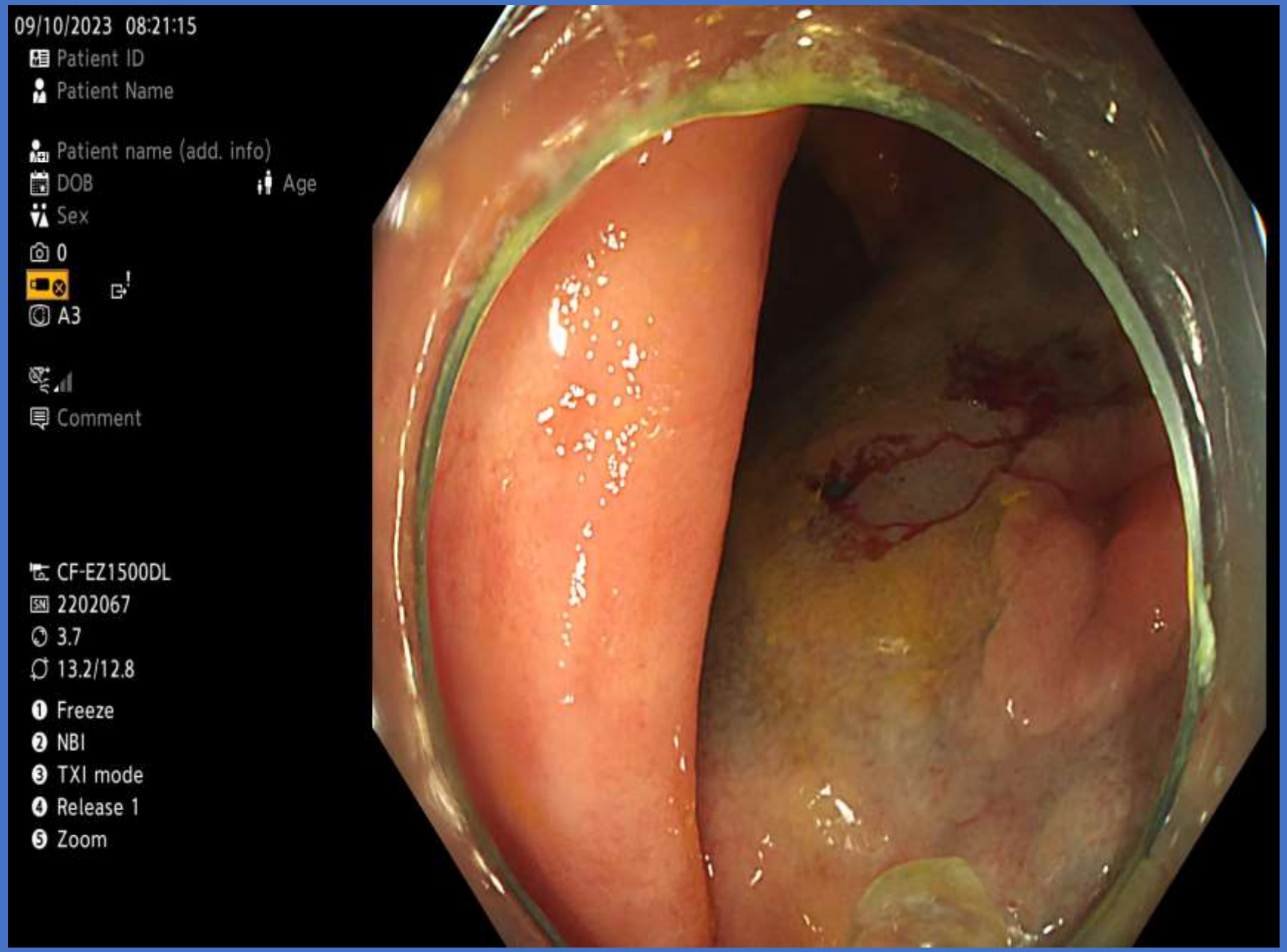

DR. AHMED MADKOUR
25/02/2023 10:24:33
1
M
51
9999
A3
GIF-EZ1500
2203104
2.8
9.9/9.6
1 Release 1
2 BAI-MAC
3 NBI
4 TXI mode
5 RDI

Exceptions
and other indications

- Recurrent lesions after EMR
- IBD
- Severe Submucosal fibrosis
- SMT , NET

- ESD
- Precut EMR
- EFTRD

60 years old male with long standing UC follow-up colonoscopy showed small LST NG



Exceptions
and other indications

- Recurrent lesions after EMR
- IBD
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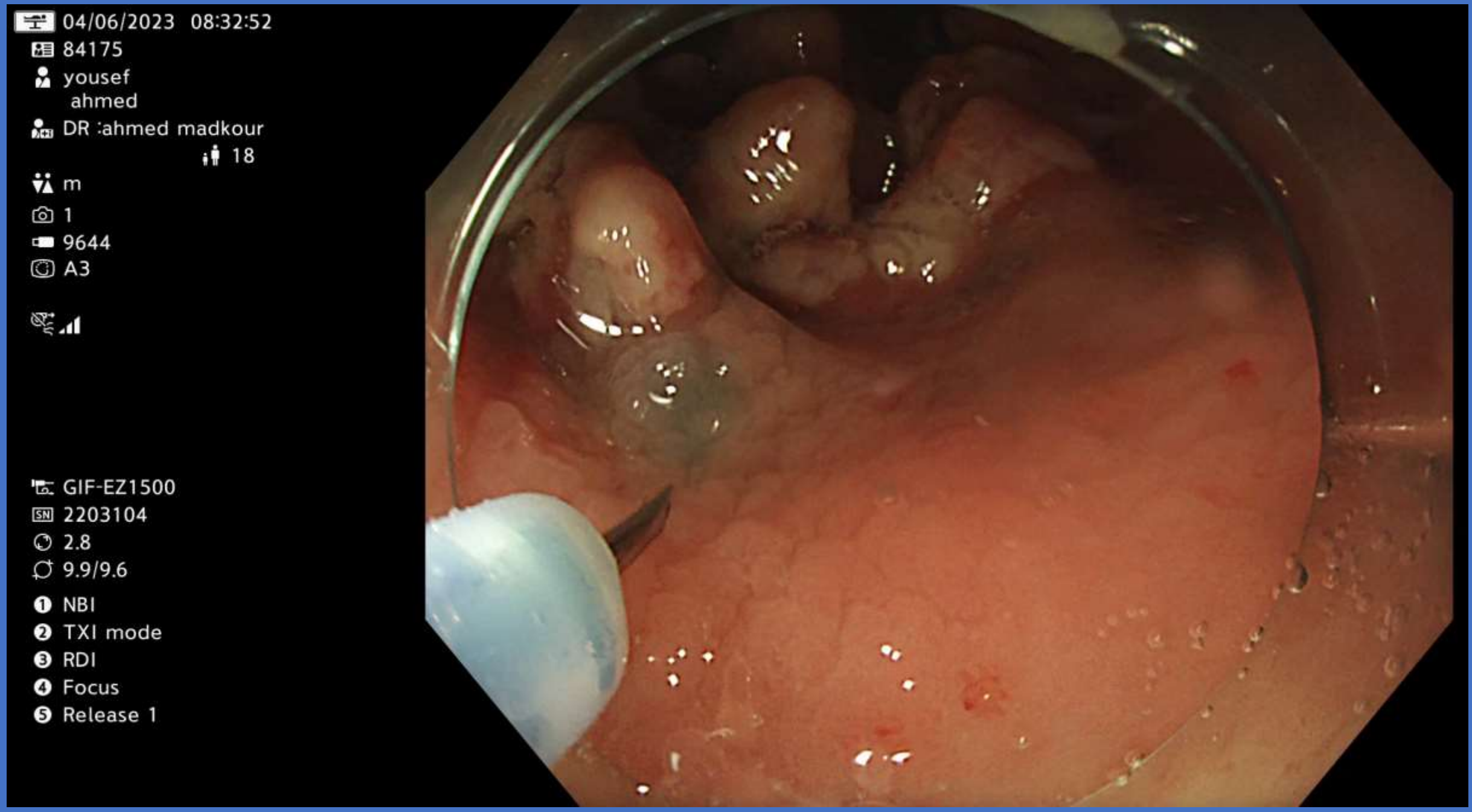
- SMT , NET

- ESD
- Precut EMR
- EFTRD

16 Years old boy with recurrent rectal bleeding
Repeated Biopsy
(Hyperplastic, Hamartoma, Adenoma!!)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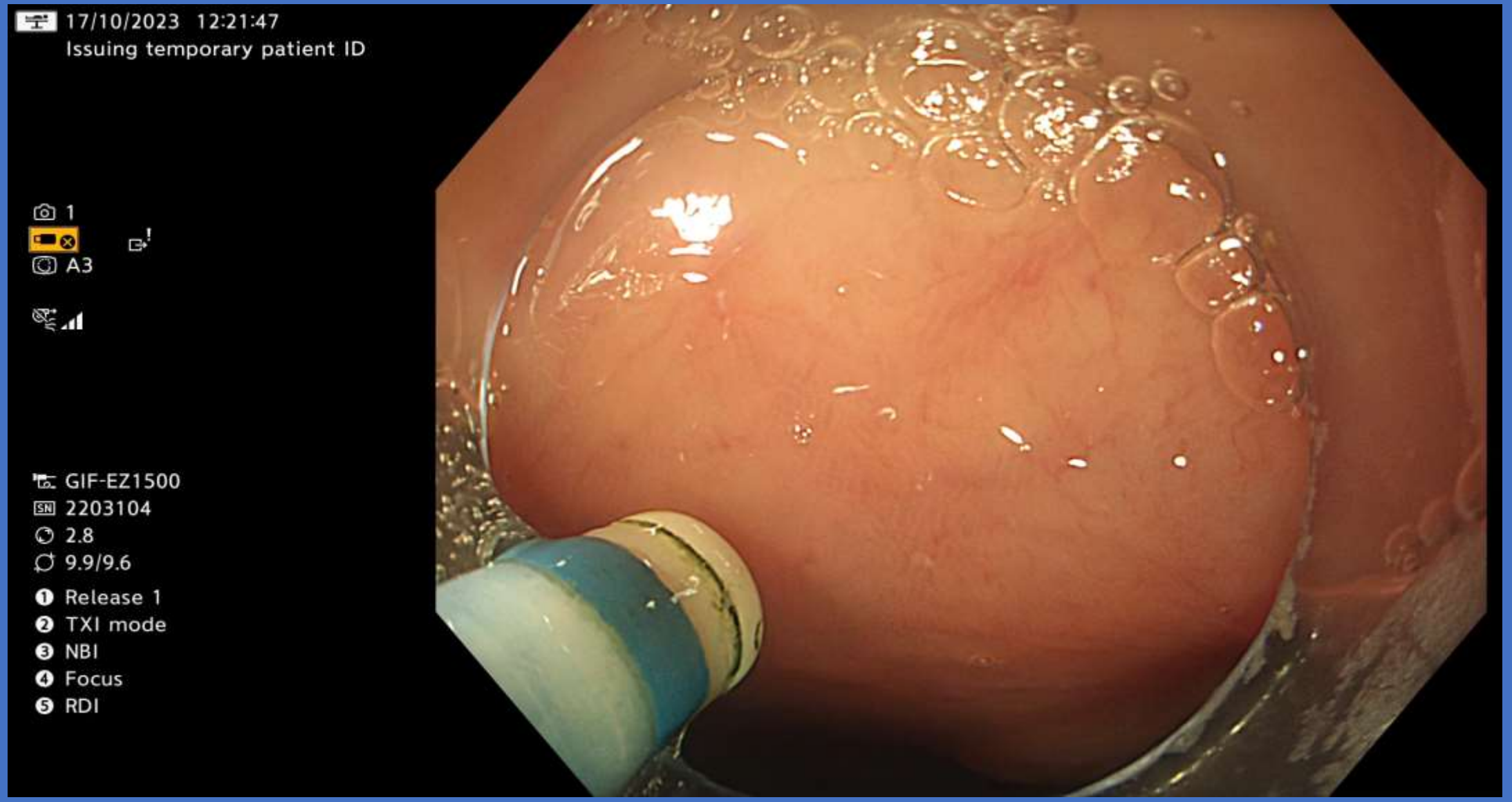
84175
yousef
ahmed
DR :ahmed madkour
18
m
1
9644
A3
GIF-EZ1500
SN 2203104
2.8
9.9/9.6
1 NBI
2 TXI mode
3 RDI
4 Focus
5 Release 1

Exceptions
and other indications

- Recurrent lesions after EMR
- IBD
- Severe Submucosal fibrosis
- NET

- ESD
- EFTRD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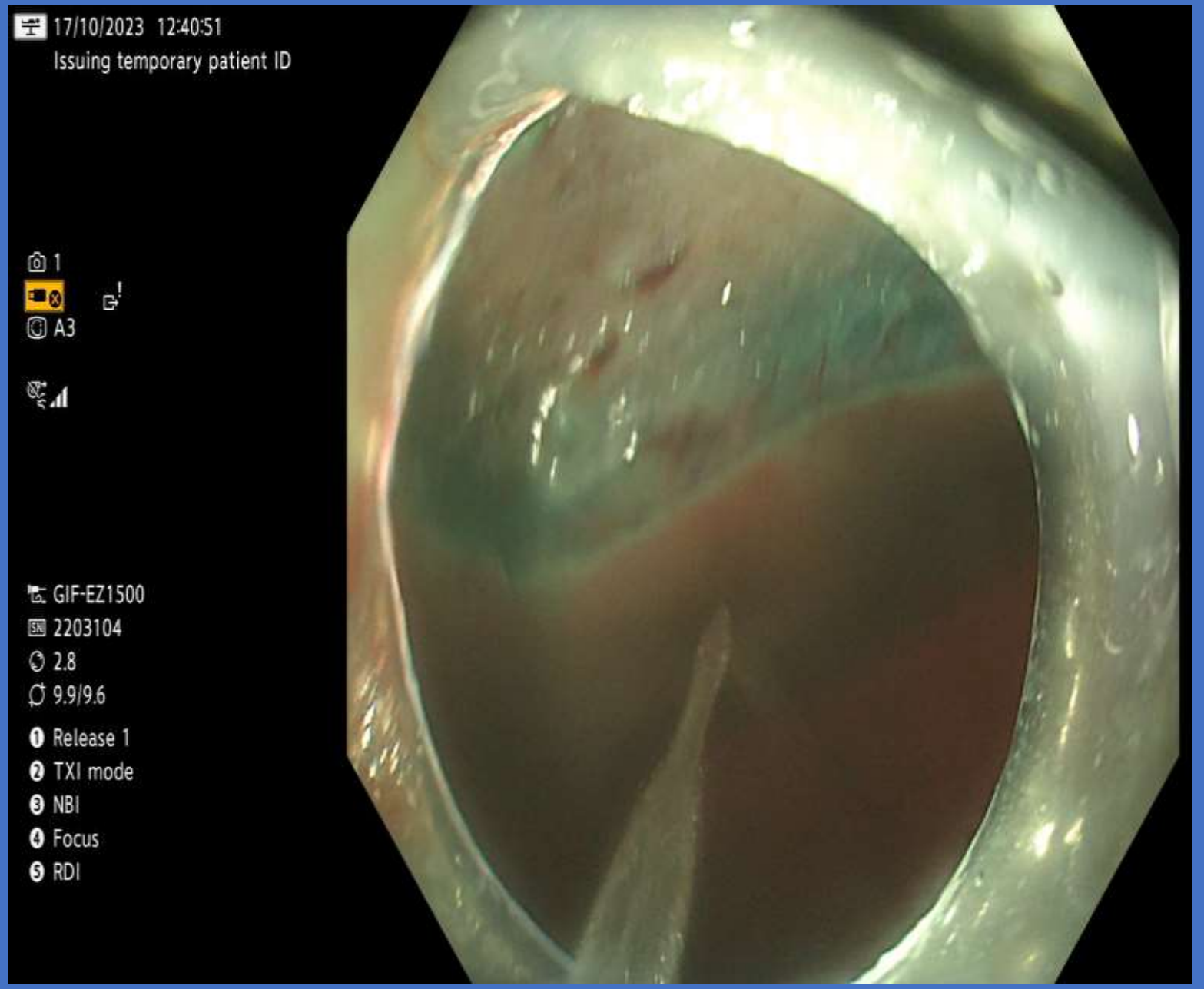
9.9/9.6
1 Release 1
2 TXI mode
3 NBI
4 Focus
5 RDI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A3
GIF-EZ1500
SN 2203104
2.8
9.9/9.6
1 Release 1
2 TXI mode
3 NBI
4 Focus
5 RDI

Always remember

Size and location is not a limitation

Just avoid deep submucosal invasion

ALEXEA

aalac INTERNATIONAL

Endoscopic Tunneling Technique

Basic Course

2 Days

6 Candidate

4 HOURS theoretical lectures

10 HOURS Hands-on Live animal

LIMITED Limited Number

Selected candidate will be informed within one week

8-9 March 2023 | ALEXEA

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THIRD SPACE ENDOSCOPY
EGYPTIAN TASK FORCE

SPACE ENDOSCOPY EGYPTIAN TASK FORCE TSEEF

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Thank you