



MANEJO ENDOSCÓPICO DE PÓLIPOS DE COLON Y RECTO

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Santa Casa de Bagé, Brasil



Speaker de la Fujifilm Co



TÉCNICAS DE RESECCIÓN

POLIPECTOMIA

1

MUCOSECTOMIA

2

EFTR

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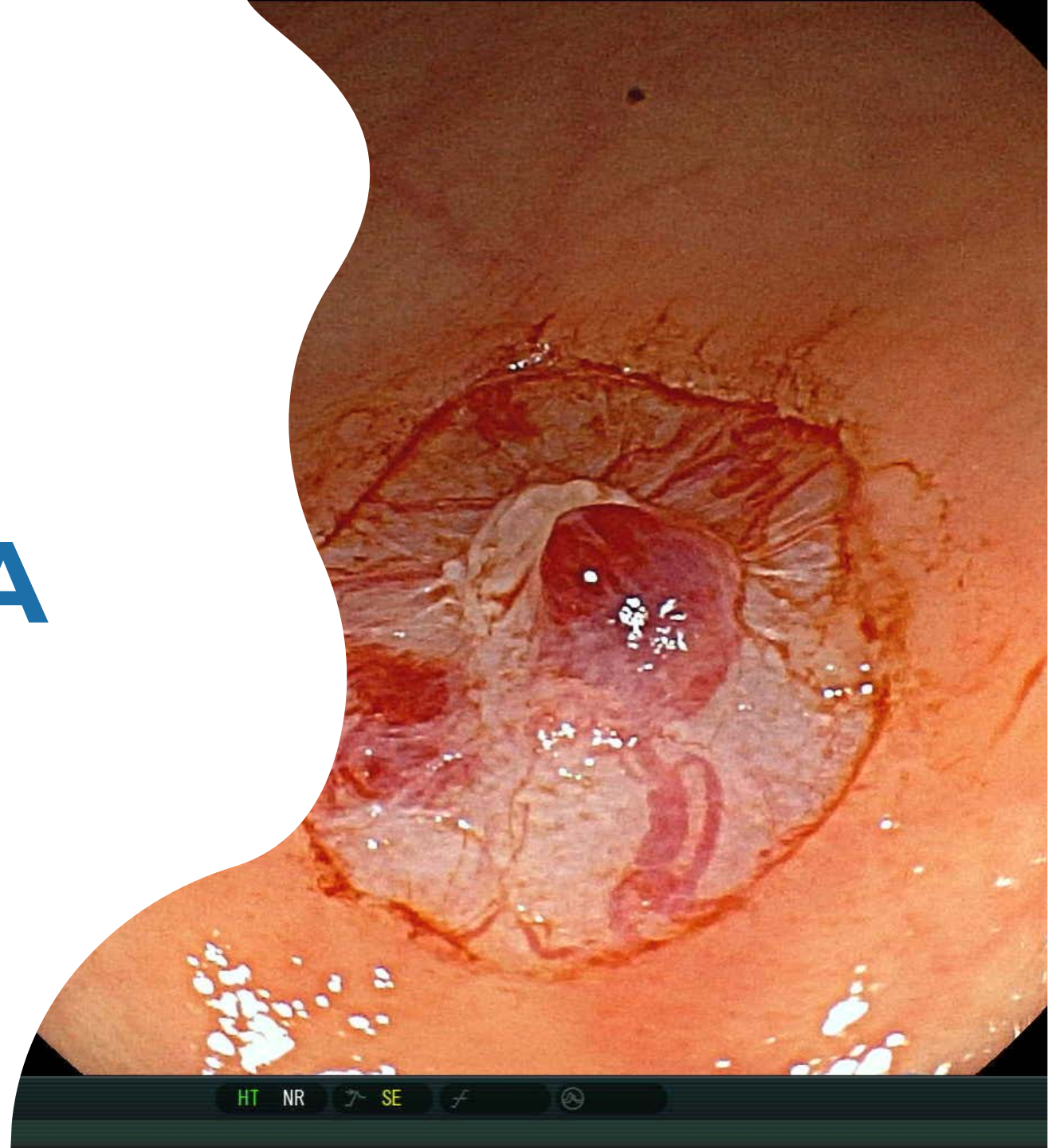
ESD

3

AVULSIÓN
ABLACIÓN

5

POLIPECTOMIA



Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024



RECOMMENDATION

ESGE recommends cold snare polypectomy for the removal of diminutive polyps (≤ 5 mm).
Strong recommendation, high quality of evidence.

ESGE recommends including a clear margin of normal tissue (1–2 mm) surrounding the polyp.
Strong recommendation, high quality of evidence.

RECOMMENDATION

ESGE recommends cold snare polypectomy for the removal of small polyps (6–9 mm).
Strong recommendation, high quality of evidence.

ESGE recommends including a clear margin of normal tissue (1–2 mm) surrounding the polyp.
Strong recommendation, high quality of evidence.

RECOMMENDATION

ESGE recommends **against** the use of cold biopsy forceps excision because of its high rate of incomplete resection.
Strong recommendation, moderate quality of evidence.

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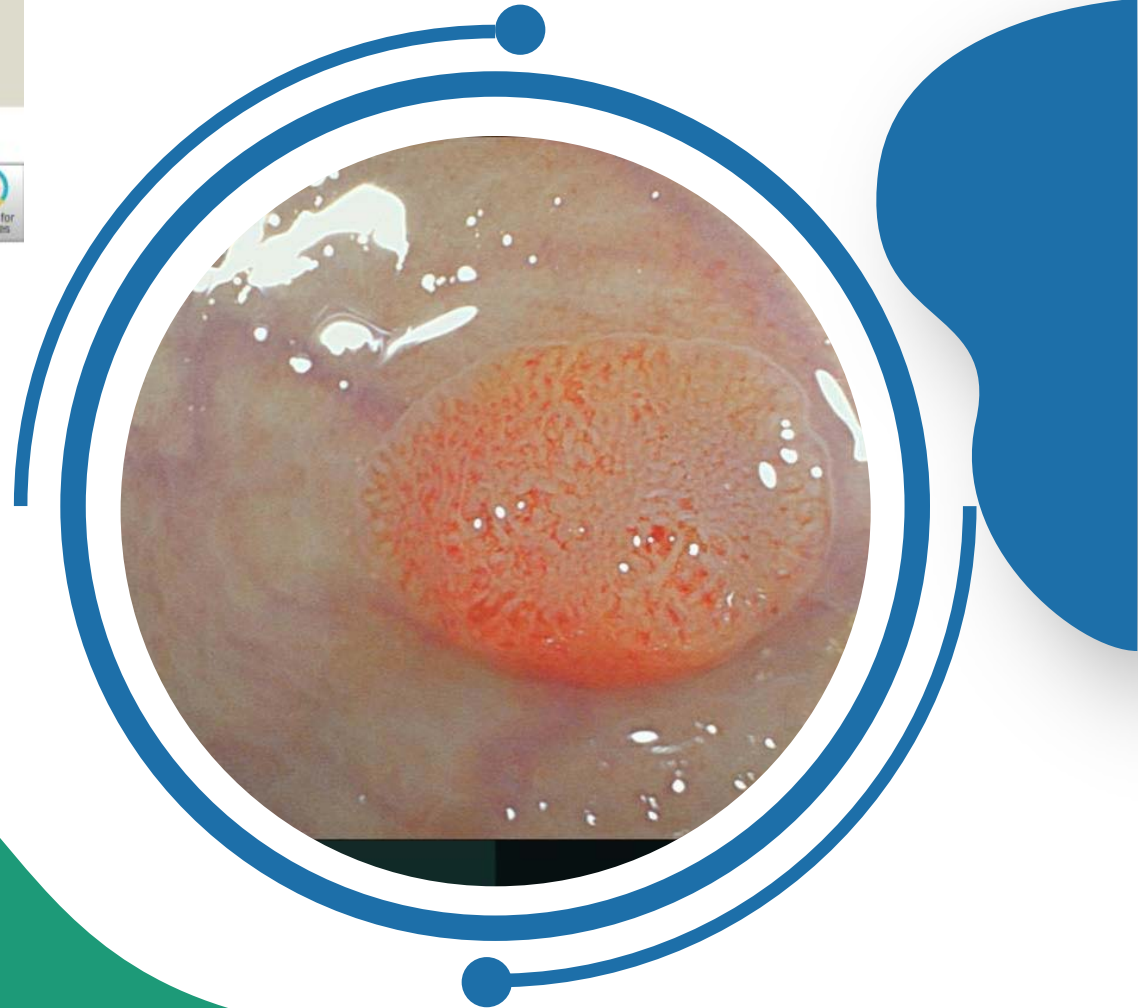
Endoscopic Removal of Colorectal Lesions—Recommendations by the US Multi-Society Task Force on Colorectal Cancer

Tonya Kaltenbach,¹ Joseph C. Anderson,^{2,3,4} Carol A. Burke,⁵ Jason A. Dominitz,^{6,7} Samir Gupta,^{8,9} David Lieberman,¹⁰ Douglas J. Robertson,^{2,3} Aasma Shaukat,^{11,12} Sapna Syngal,¹³ Douglas K. Rex¹⁴








2a: diminutive (≤ 5 mm) and small (6–9 mm) lesions

- We recommend cold snare polypectomy to remove diminutive (≤ 5 mm) and small (6–9 mm) lesions due to high complete resection rates and safety profile. (Strong recommendation, moderate-quality evidence)
- We recommend against the use of cold forceps polypectomy to remove diminutive (≤ 5 mm) lesions due to high rates of incomplete resection. For diminutive lesions ≤ 2 mm, if cold snare polypectomy is technically difficult, jumbo or large-capacity forceps polypectomy may be considered. (Strong recommendation, moderate-quality evidence)



Guidelines

Guidelines for Colorectal Cold Polypectomy (supplement to “Guidelines for Colorectal Endoscopic Submucosal Dissection/Endoscopic Mucosal Resection”)

Toshio Uraoka,  Kohei Takizawa,  Shinji Tanaka, Hiroshi Kashida,  Yutaka Saito, 
Naohisa Yahagi, Hiro-o Yamano, Shoichi Saito, Takashi Hisabe, Takashi Yao, 
Masahiko Watanabe, Masahiro Yoshida, Yusuke Saitoh, Osamu Tsuruta,
Masahiro Igarashi, Takashi Toyonaga, Yoichi Ajioka, Kazuma Fujimoto and Haruhiro Inoue

The indications should be limited to lesions smaller than 10 mm that are preoperatively diagnosed as adenoma and which can be resected completely en bloc.

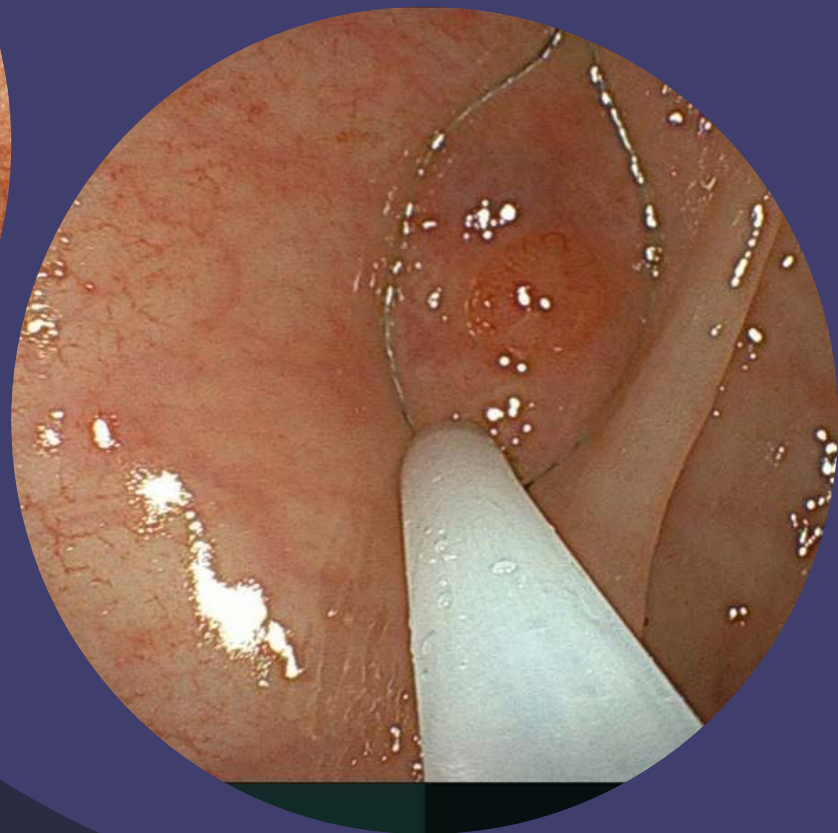
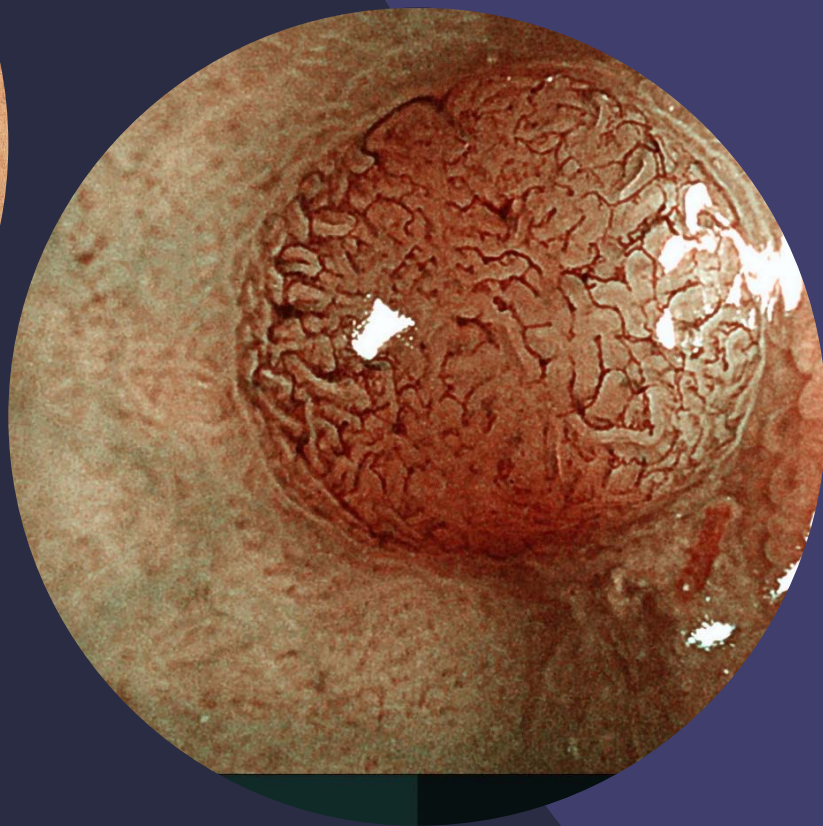
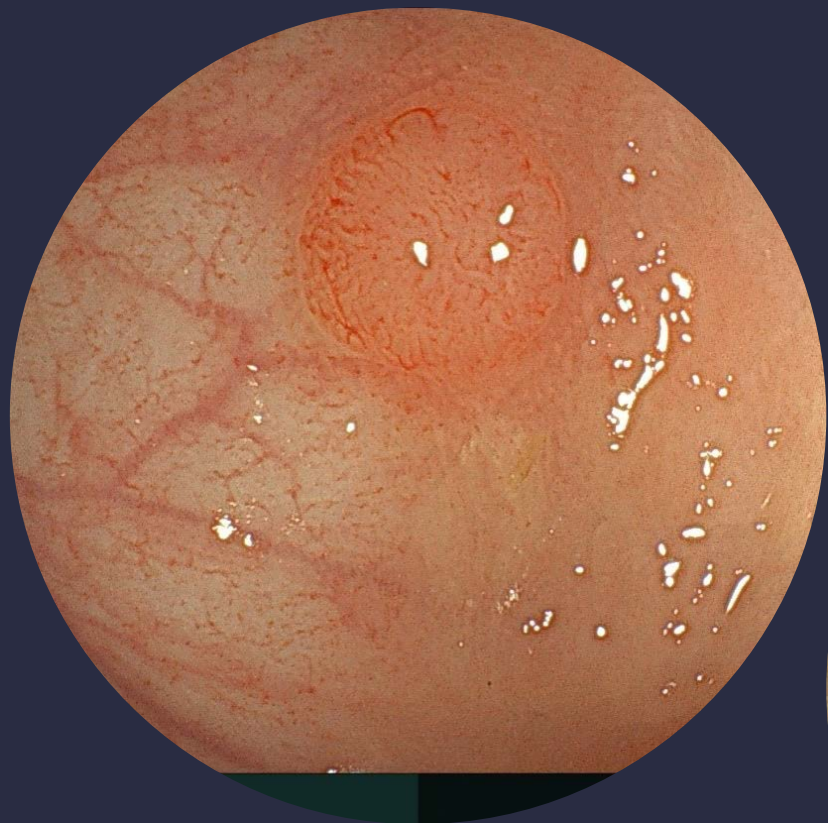
Modified Delphi method evaluation: median 8, minimum 7, maximum 9

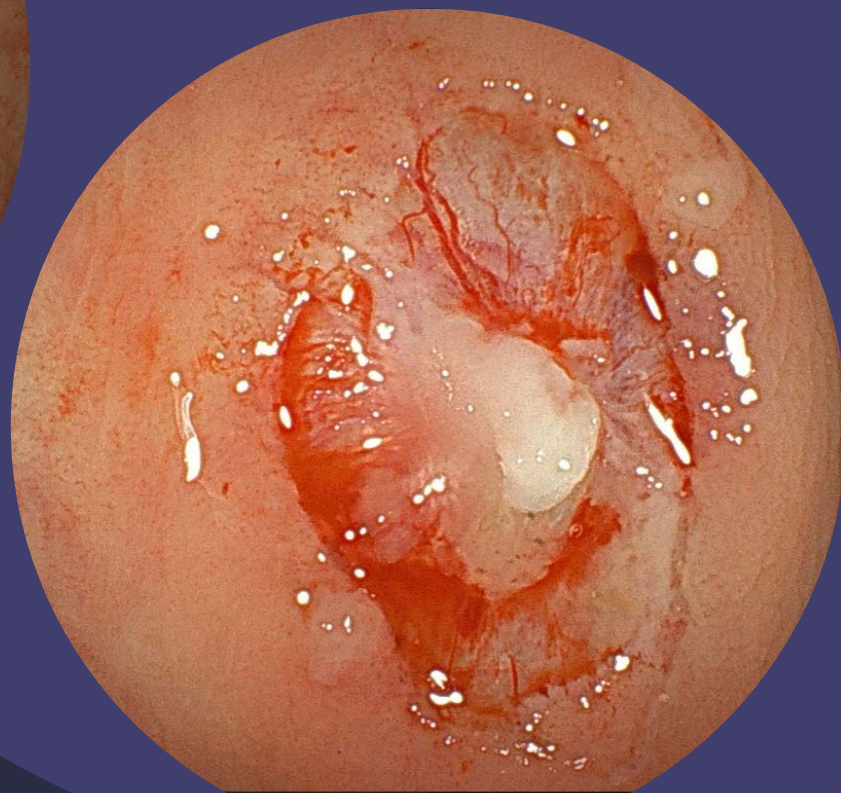
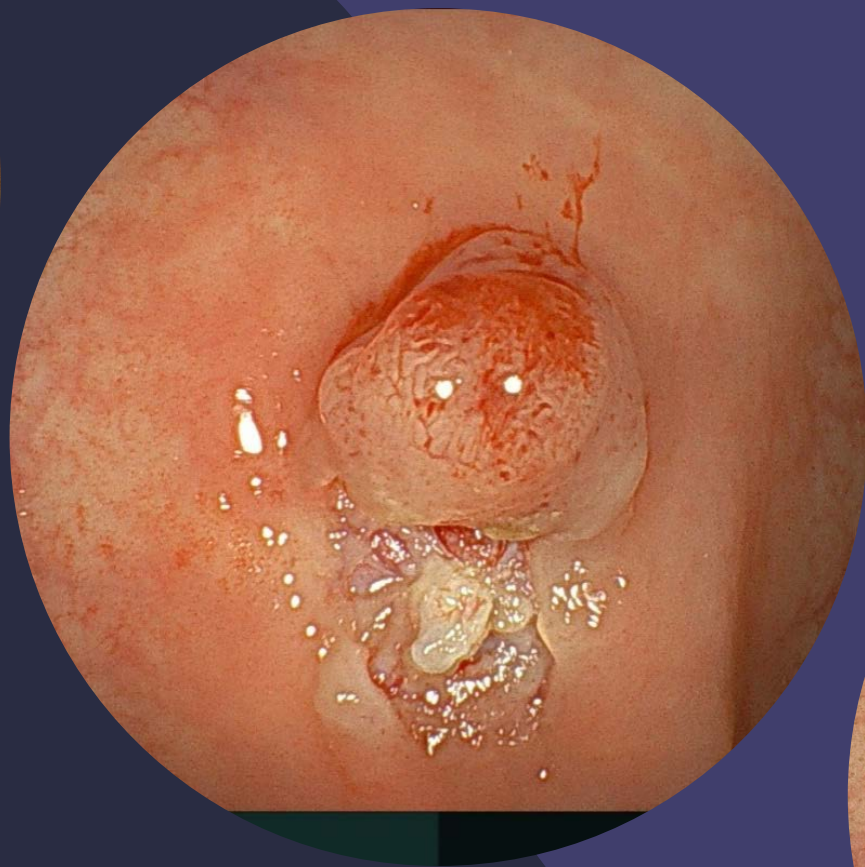
Strength of recommendation: 1

Evidence level: B

Based on the above, the indication for CSP includes preoperatively diagnosed adenomas <10 mm. The use of image-enhanced endoscopy with magnification is recommended for a highly accurate preoperative diagnosis of colorectal lesion prior to cold polypectomy.

Considering its technical facility and reliable polyp retrieval, CFP is acceptable for the removal of polyps ≤ 3 mm in size.¹⁴ For such cases, the use of large forceps with a larger cup diameter, rather than standard biopsy forceps, is recommended.¹⁵





ORIGINAL ARTICLE

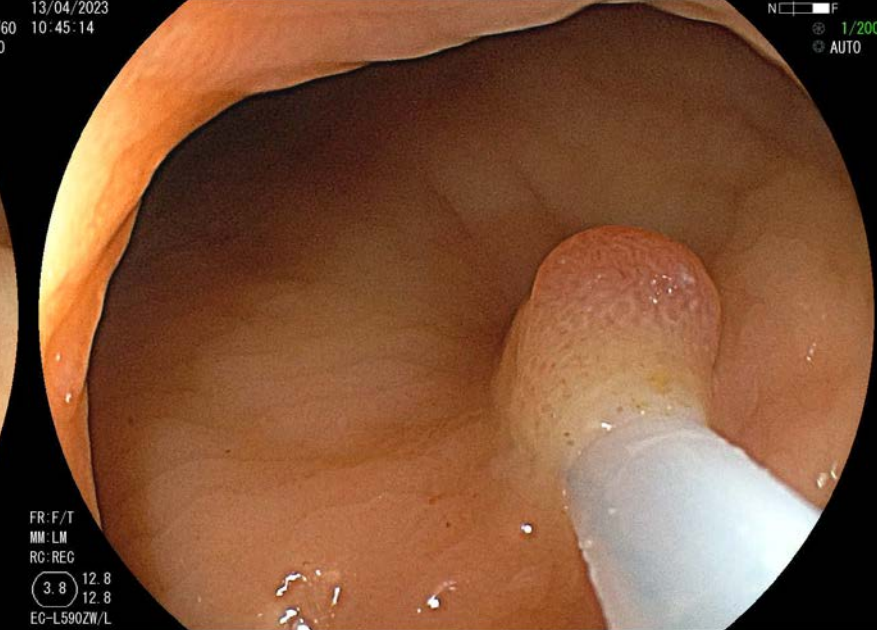
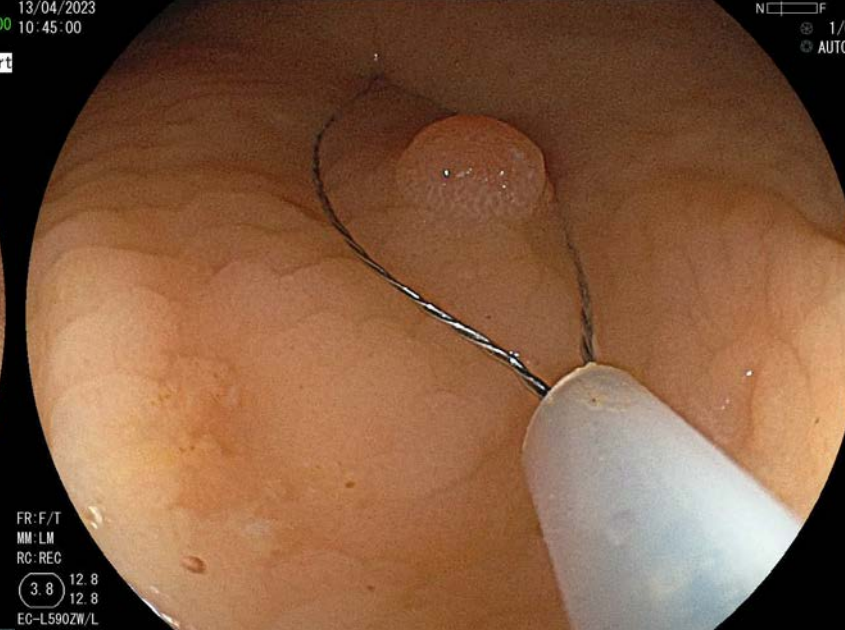
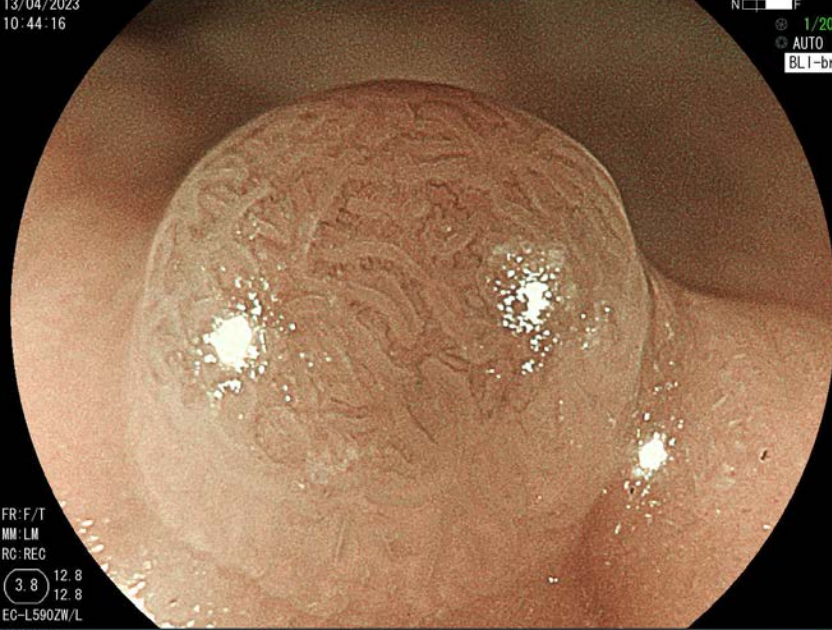
doi.org/10.1590/S0004-2803.23042023-115

Cold snare polypectomy: a safe procedure for removing small non-pedunculated colorectal lesions

Carlos Eduardo Oliveira Dos **SANTOS**^{1,2}, Daniele **MALAMAN**¹,
Ivan David Arciniegas **SANMARTIN**³, Ari Ben-Hur Stefani **LEÃO**²,
Isadora Zanotelli **BOMBASSARO**⁴ and Júlio Carlos **PEREIRA-LIMA**⁴



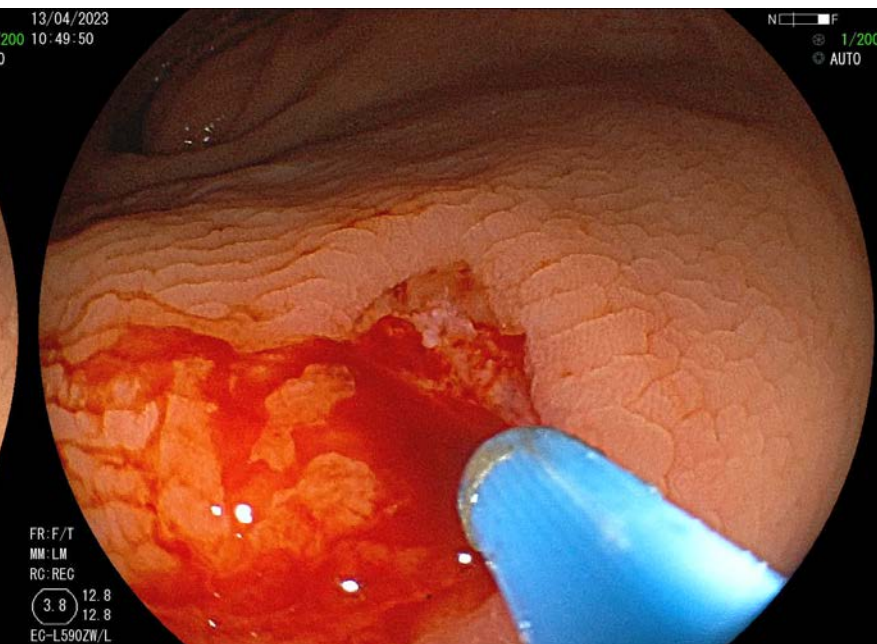
tients by an inexperienced endoscopist. **Results** – A total of 476 polyps (99.4%) were resected en bloc. A negative margin (classified as CPR) was observed in 435 polyps (90.8%). An unclear or positive margin (classified as IPR) was observed in 43 cases (9.0%) and 1 case (0.2%), respectively, for an overall IPR rate of 9.2% (44/479). The IPR rate was 12.2% in the first half of cases and 5.9% in the second half ($P=0.02$). Dividing into tertiles, the IPR rate was 15.0% in the first tertile, 6.9% in the second tertile, and 5.7% in the third tertile ($P=0.01$). Dividing into quartiles, the IPR rate was 15.8% in the first quartile and 5.9% in the fourth quartile ($P=0.03$). The IPR rate was 6.3% for type 0-IIa lesions and 14.1% for type 0-Is lesions ($P=0.01$). For serrated and adenomatous lesions, the IPR rate was 9.2%. Specimen retrieval failed in 3.6% of cases. **Immediate bleeding** (>30 s) occurred in 1 case (0.2%), treated with argon plasma coagulation. **No delayed bleeding or perforation occurred.** **Conclusion** – CSP is a safe technique that provides good results for the resection of small non-pedunculated polyps, with a short learning curve.



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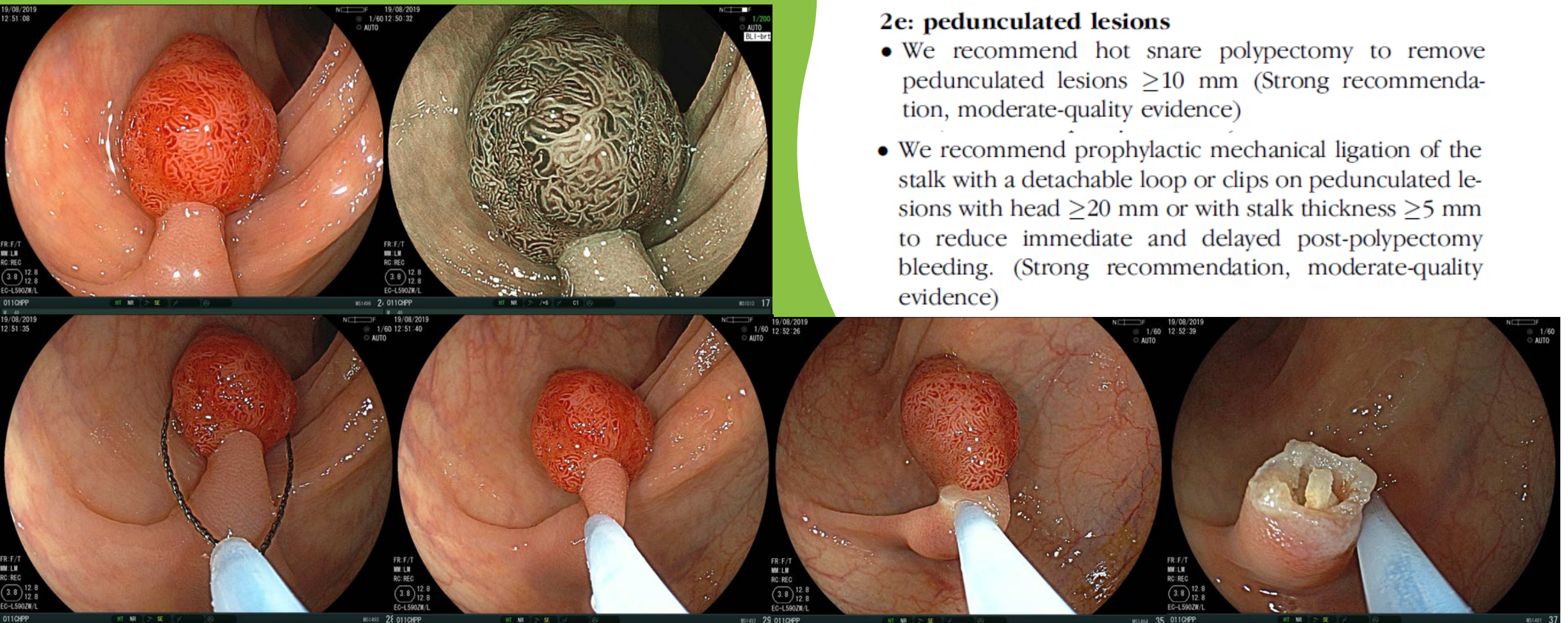
Endoscopic Removal of Colorectal Lesions—Recommendations by the US Multi-Society Task Force on Colorectal Cancer



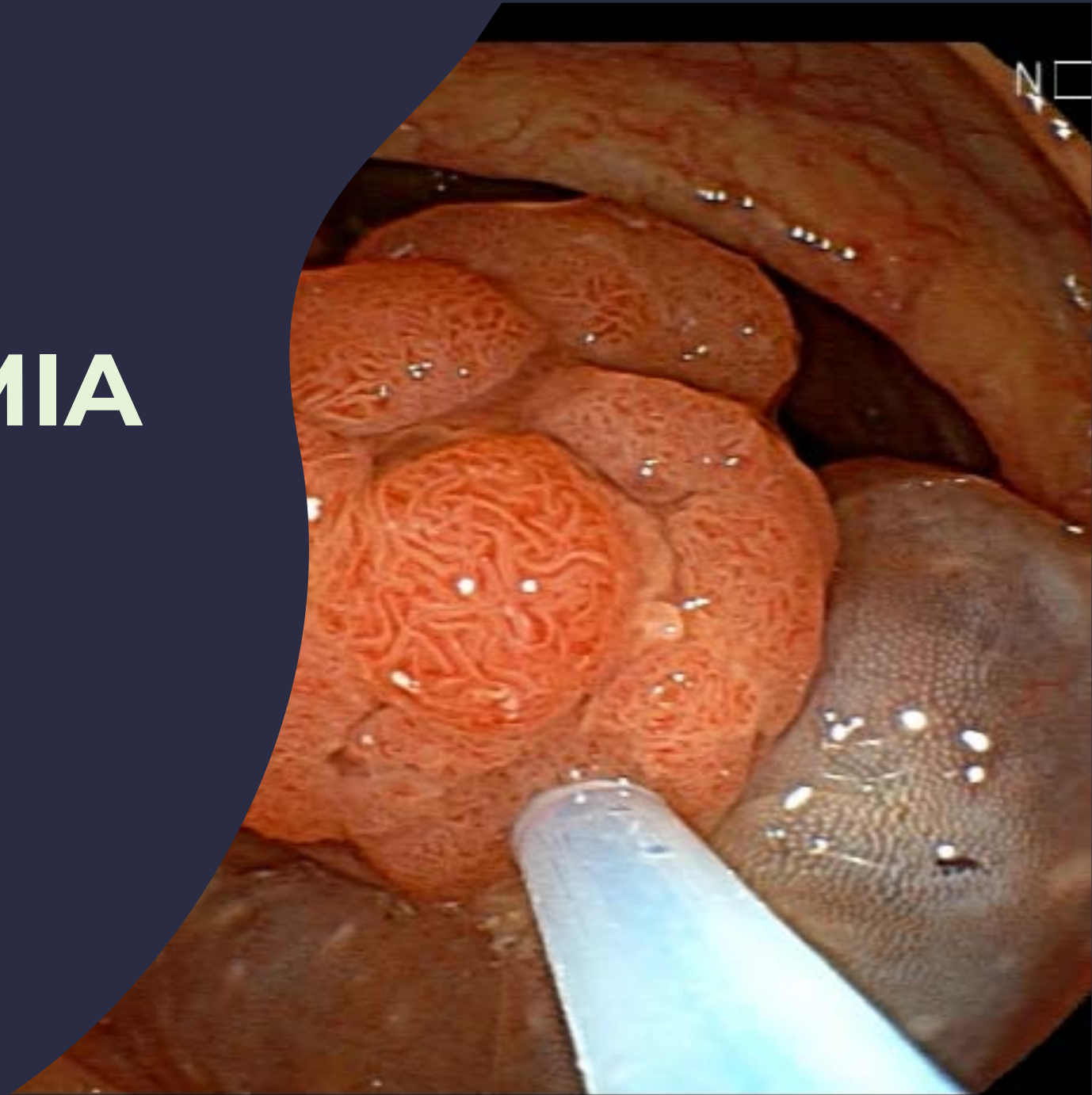
Tonya Kaltenbach,¹ Joseph C. Anderson,^{2,3,4} Carol A. Burke,⁵ Jason A. Dominitz,^{6,7} Samir Gupta,^{8,9} David Lieberman,¹⁰ Douglas J. Robertson,^{2,3} Aasma Shaukat,^{11,12} Sapna Syngal,¹³ Douglas K. Rex¹⁴

2e: pedunculated lesions

- We recommend hot snare polypectomy to remove pedunculated lesions ≥ 10 mm (Strong recommendation, moderate-quality evidence)
- We recommend prophylactic mechanical ligation of the stalk with a detachable loop or clips on pedunculated lesions with head ≥ 20 mm or with stalk thickness ≥ 5 mm to reduce immediate and delayed post-polypectomy bleeding. (Strong recommendation, moderate-quality evidence)

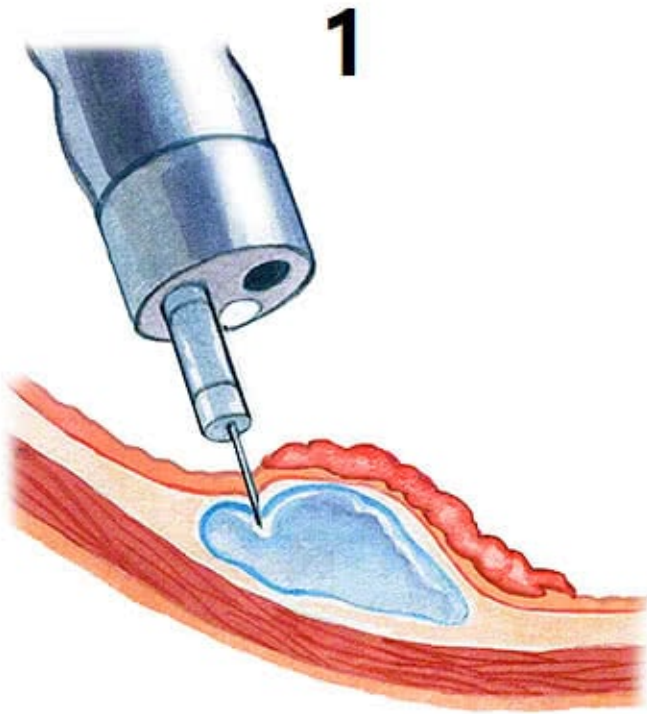


MUCOSECTOMIA

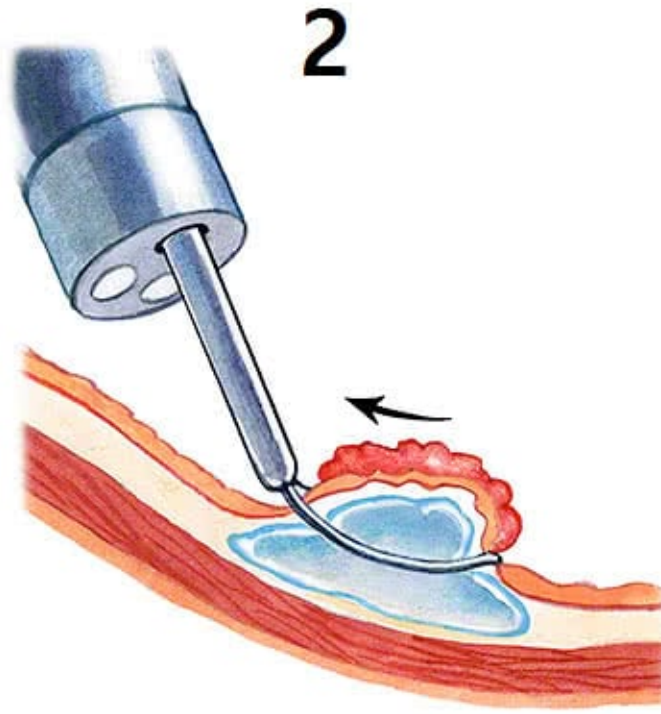




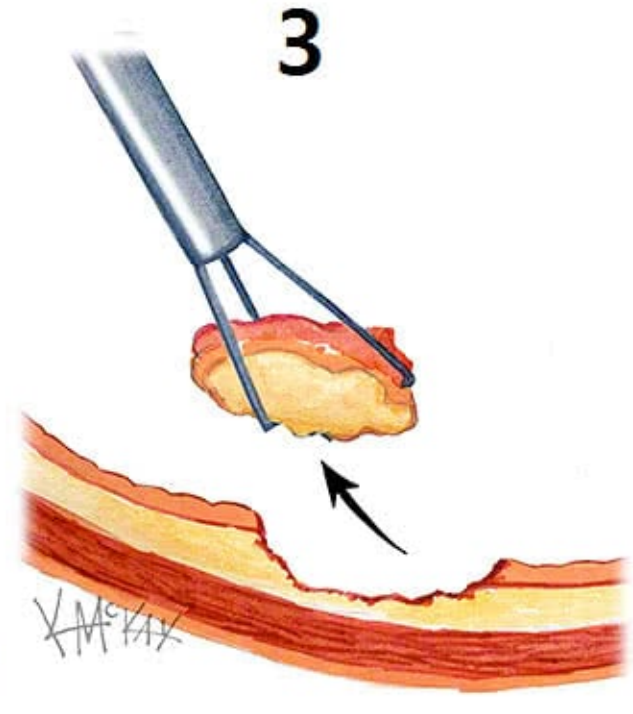
MUCOSECTOMIA



Injection of fluid to lift polyp



snared removal of polyp



retrieval with forceps

SOLUCIONES

SOLUCIÓN SALINA

SOLUCIÓN SALINA HIPERTÓNICA

MANITOL

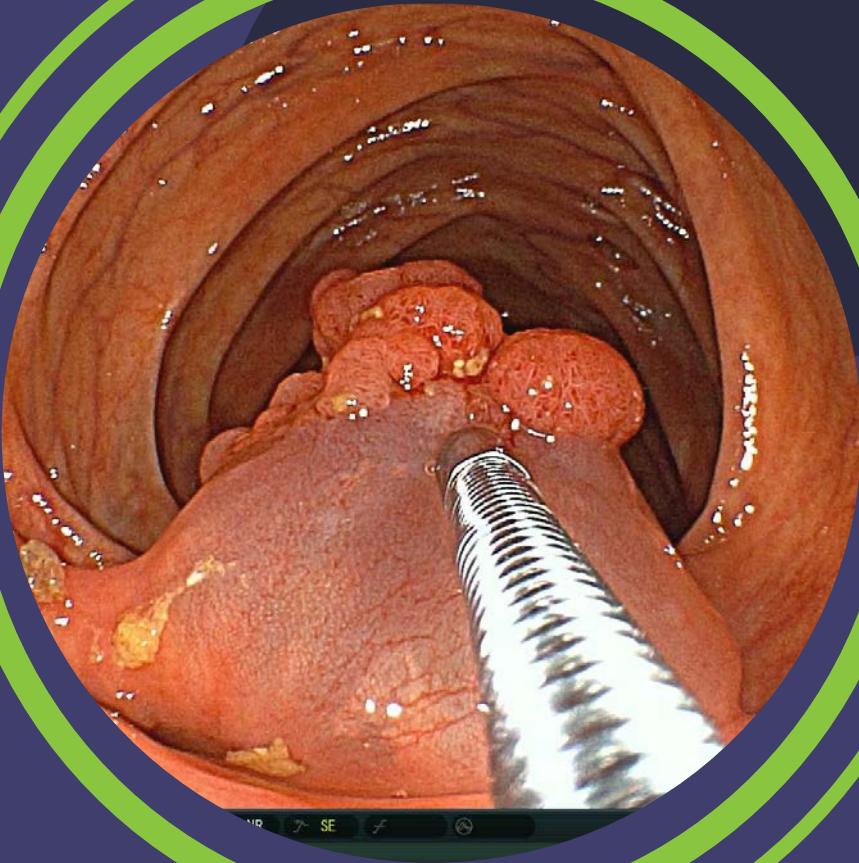
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HPMC

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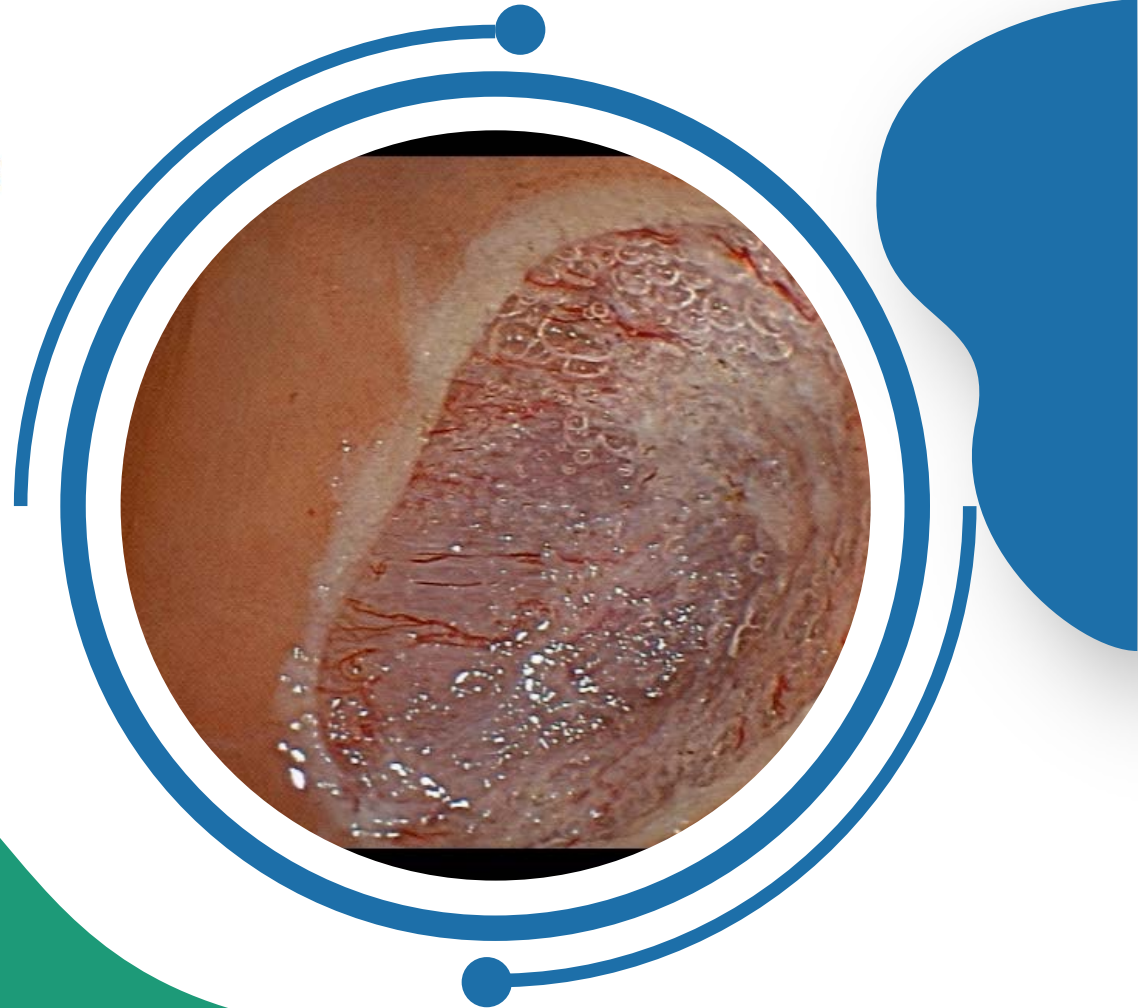
SIC-8000 (Eleview)

ORISE GEL



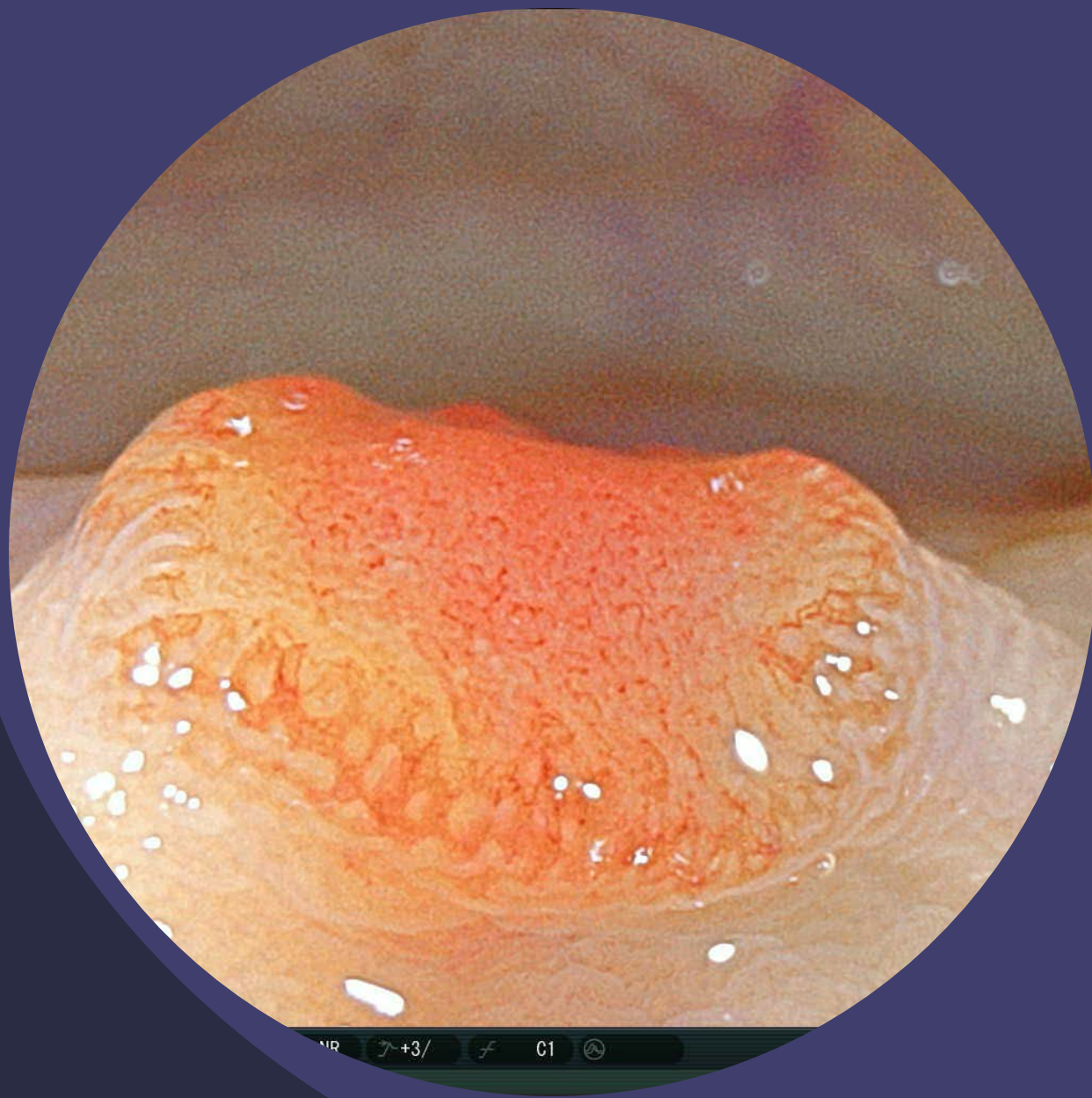
Normal saline solution versus other viscous solutions for submucosal injection during endoscopic mucosal resection: a systematic review and meta-analysis

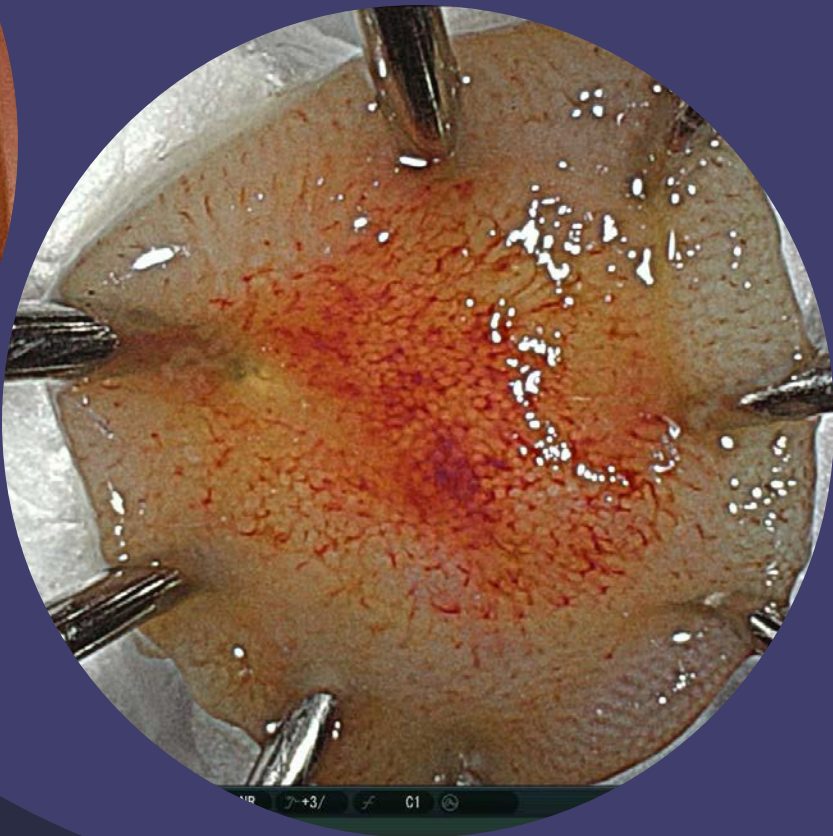
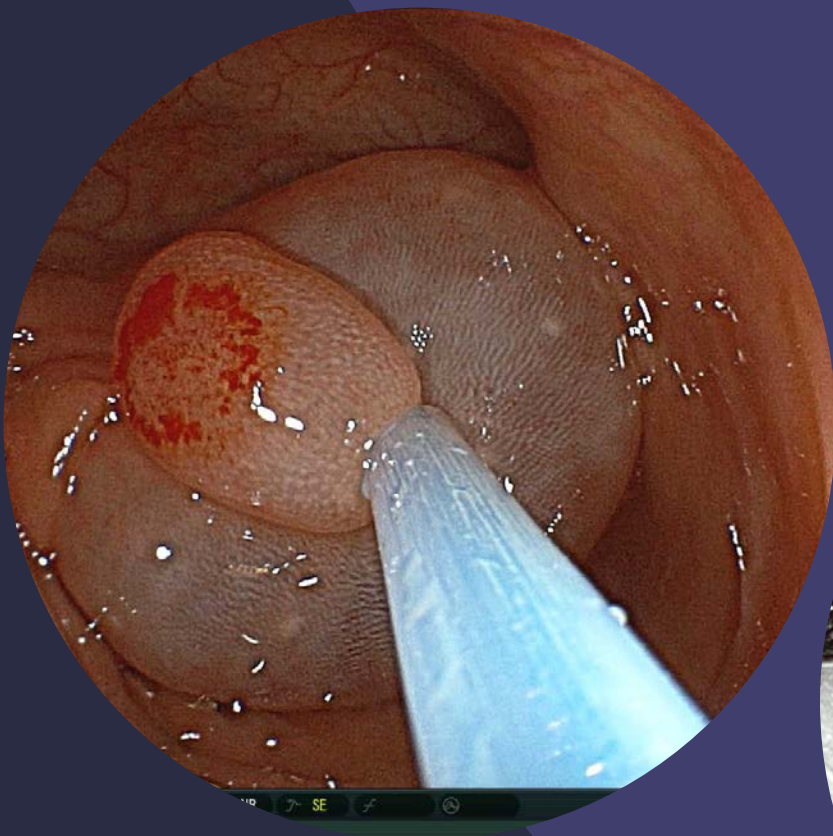
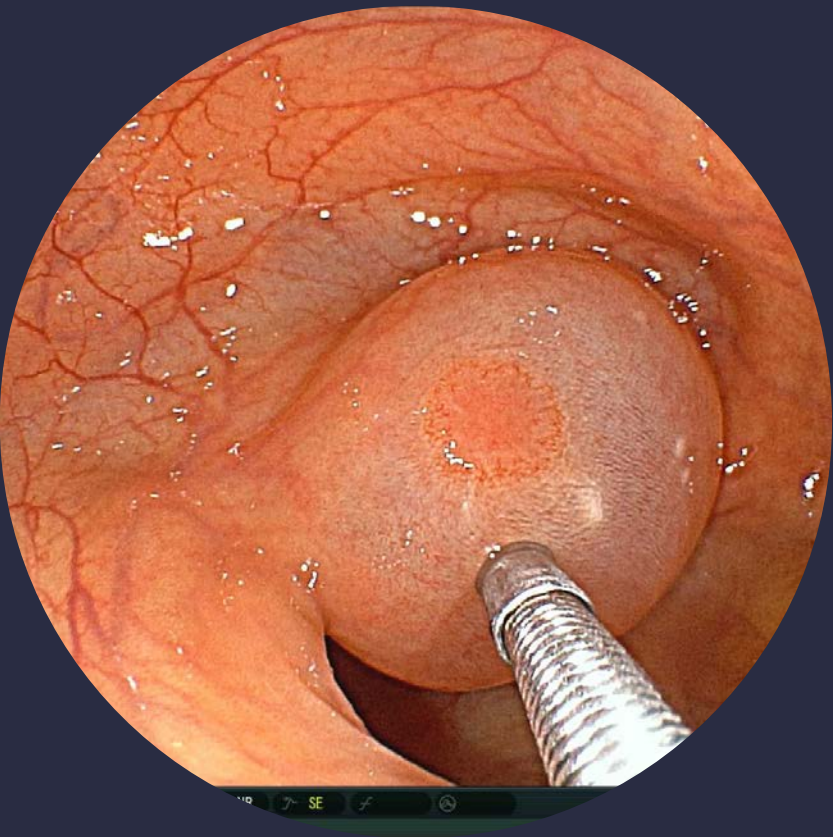
Harathi Yandrapu¹, Madhav Desai², Sameer Siddique³, Prashanth Vennalganti², Sreekar Vennalaganti¹, Sravanthi Parasa², Tarun Rai², Vijay Kanakadandi², Ajay Bansal¹, Mohammad Titi¹, Alessandro Repici⁴, Matthew L Bechtold³, Prateek Sharma⁵, Abhishek Choudhary¹



Soluciones viscosas

- ✓> resección en bloque (OR, 1.91; 95% CI, 1.11 – 3.29; p = 0.02)
- ✓< lesiones residuales (OR, 0.54; 95% CI, 0.32 – 0.91; p = 0.02)

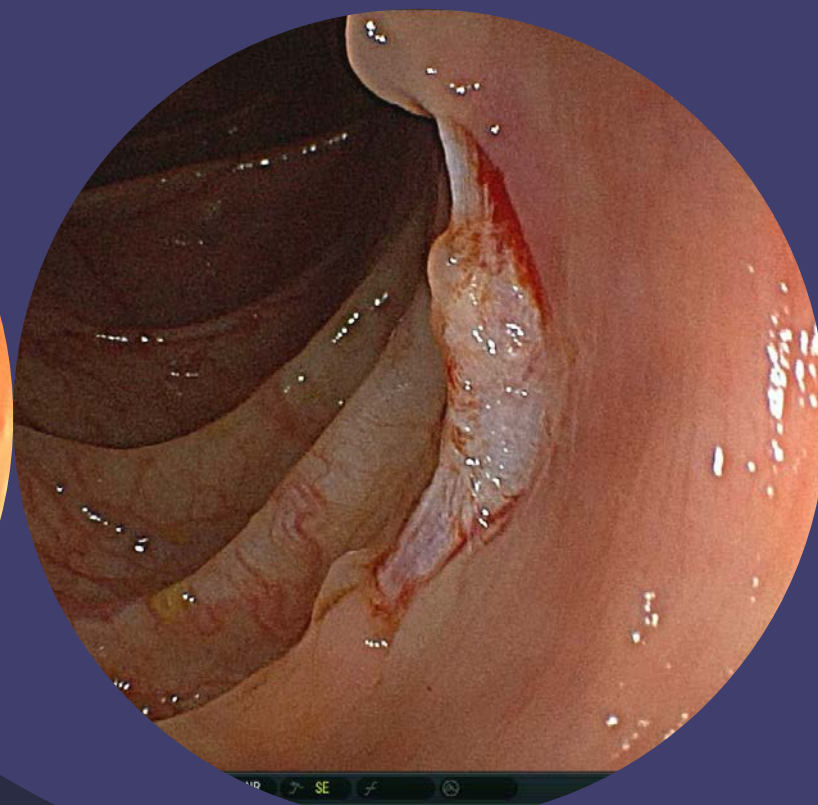
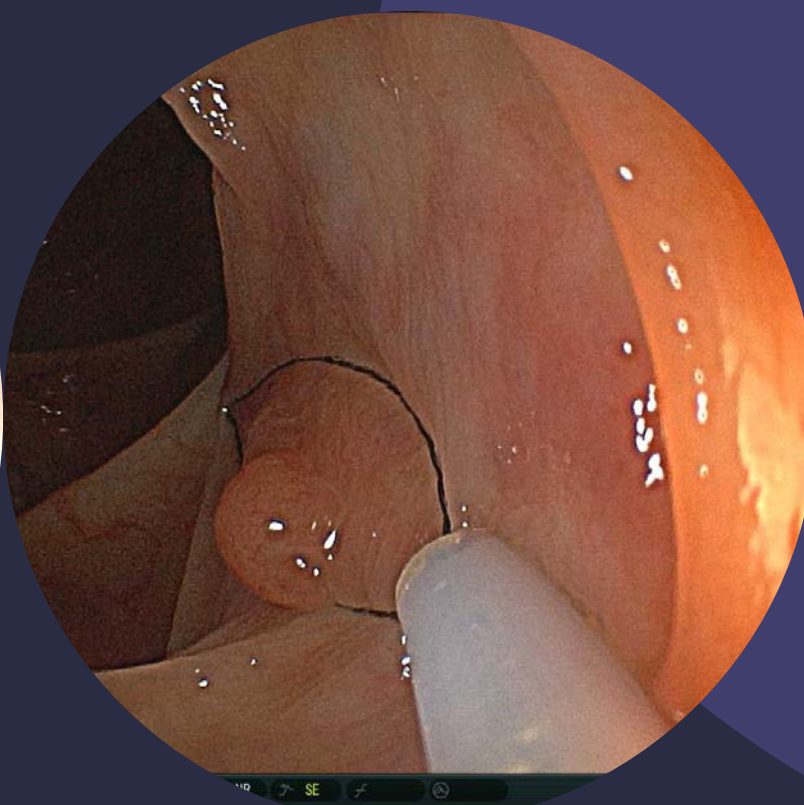




**Colorectal polypectomy and endoscopic mucosal resection:
European Society of Gastrointestinal Endoscopy (ESGE)
Guideline – Update 2024**



9 ESGE recommends (piecemeal) cold snare polypectomy or cold EMR for SSLs of all sizes without suspected dysplasia. Strong recommendation, moderate quality of evidence.



Clinical and endoscopic predictors of cytological dysplasia or cancer in a prospective multicentre study of large sessile serrated adenomas/polyps

Nicholas G Burgess,^{1,2} Maria Pellise,¹ Kavinderjit S Nanda,¹ Luke F Hourigan,^{3,4} Simon A Zanati,^{5,6} Gregor J Brown,^{5,7} Rajvinder Singh,⁸ Stephen J Williams,¹ Spiro C Raftopoulos,⁹ Donald Ormonde,⁹ Alan Moss,⁶ Karen Byth,¹⁰ Heok P'Ng,¹¹ Duncan McLeod,¹¹ Michael J Bourke^{1,2}

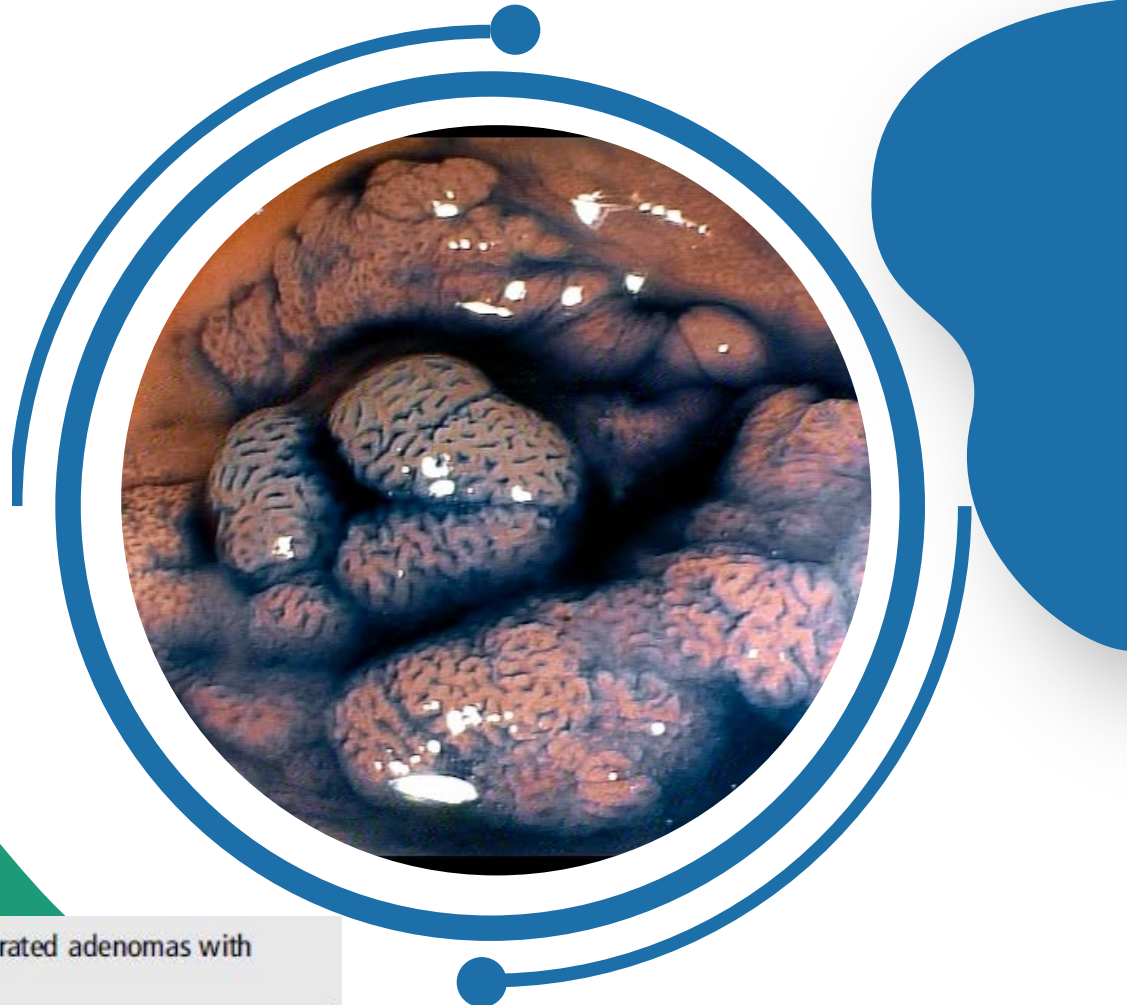


Table 2 Univariable analysis and best fitting multiple logistic regression model for factors associated with sessile serrated adenomas with cytological dysplasia (SSA-D)

	SSA/P-ND	SSA/P-D	Univariable analysis p Value	Best fitting multiple logistic regression model	
				Adjusted OR (95% CI)	p Value
Paris classification* (n, %)					
No 0-Is component	125 (89.3%)	45 (67.2%)	<0.001	1	0.021
Any 0-Is component	15 (10.7%)	22 (32.8%)		3.10 (1.19 to 8.12)	
Highest Kudo classification* (n, %) [†]					
Kudo I and II	98 (72.6%)	22 (33.3%)	<0.001	1	<0.001
Kudo III, IV, V	37 (27.4%)	44 (66.7%)		3.98 (1.94 to 8.15)	

Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024



RECOMMENDATION

ESGE recommends hot snare polypectomy for the removal of SSLs with dysplasia and en bloc excision of the dysplastic component.

Weak recommendation, low quality of evidence.

RECOMMENDATION

A suspected area of dysplasia within a large SSL should be resected en bloc by hot EMR.

Strong recommendation, moderate quality of evidence.

Endoscopic Removal of Colorectal Lesions—Recommendations by the US Multi-Society Task Force on Colorectal Cancer

Tonya Kaltenbach,¹ Joseph C. Anderson,^{2,3,4} Carol A. Burke,⁵ Jason A. Dominitz,^{6,7} Samir Gupta,^{8,9} David Lieberman,¹⁰ Douglas J. Robertson,^{2,3} Aasma Shaukat,^{11,12} Sapna Syngal,¹³ Douglas K. Rex¹⁴



Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024



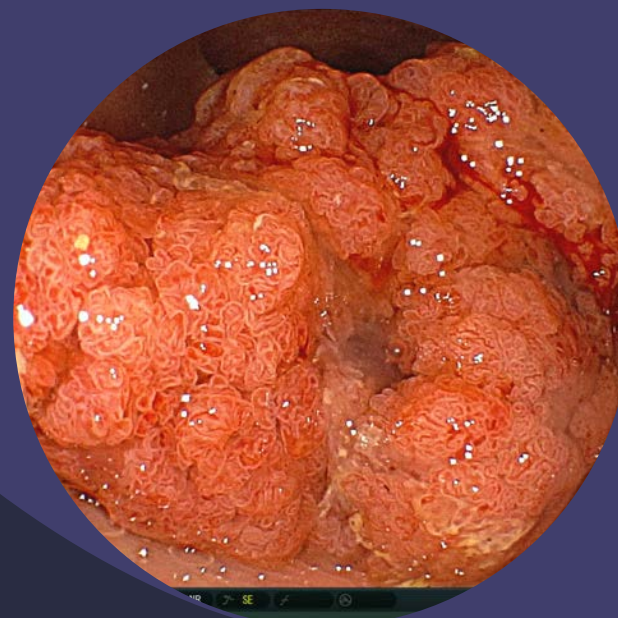
2d: Non-pedunculated (≥ 20 mm) lesions

- We recommend EMR as the preferred treatment method of large (≥ 20 mm) non-pedunculated colorectal lesions. Endoscopic resection can provide complete resection and obviate the higher morbidity, mortality, and cost associated with alternative surgical treatment. (Strong recommendation, moderate-quality evidence)
- We recommend an endoscopist experienced in advanced polypectomy to manage large (≥ 20 mm) non-pedunculated colorectal lesions. (Strong recommendation, low-quality evidence)

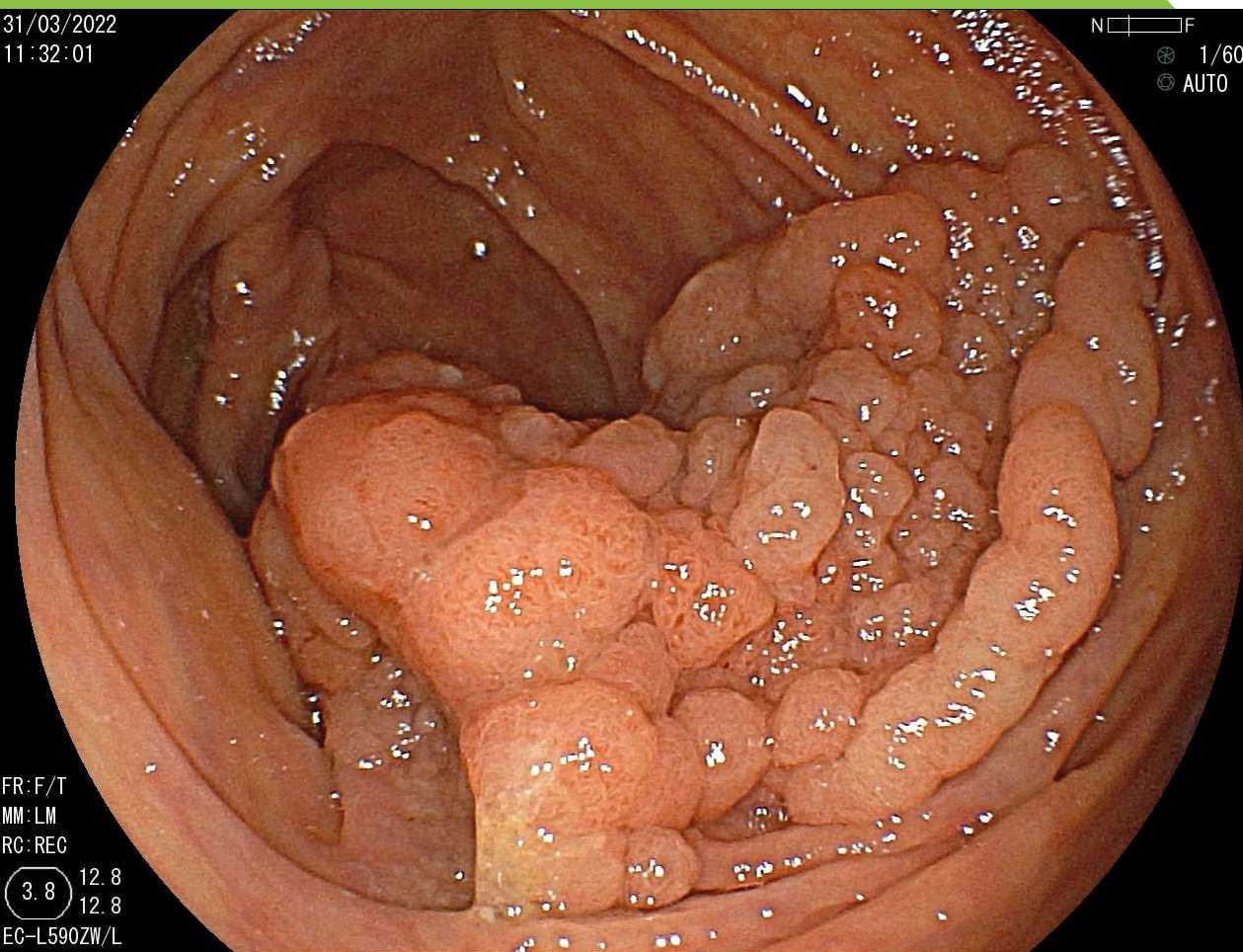
RECOMMENDATION

Large (≥ 20 mm) sessile and laterally spreading or complex polyps should be removed by an appropriately trained and experienced endoscopist, in an appropriately resourced endoscopy center.

Strong recommendation, moderate quality of evidence.



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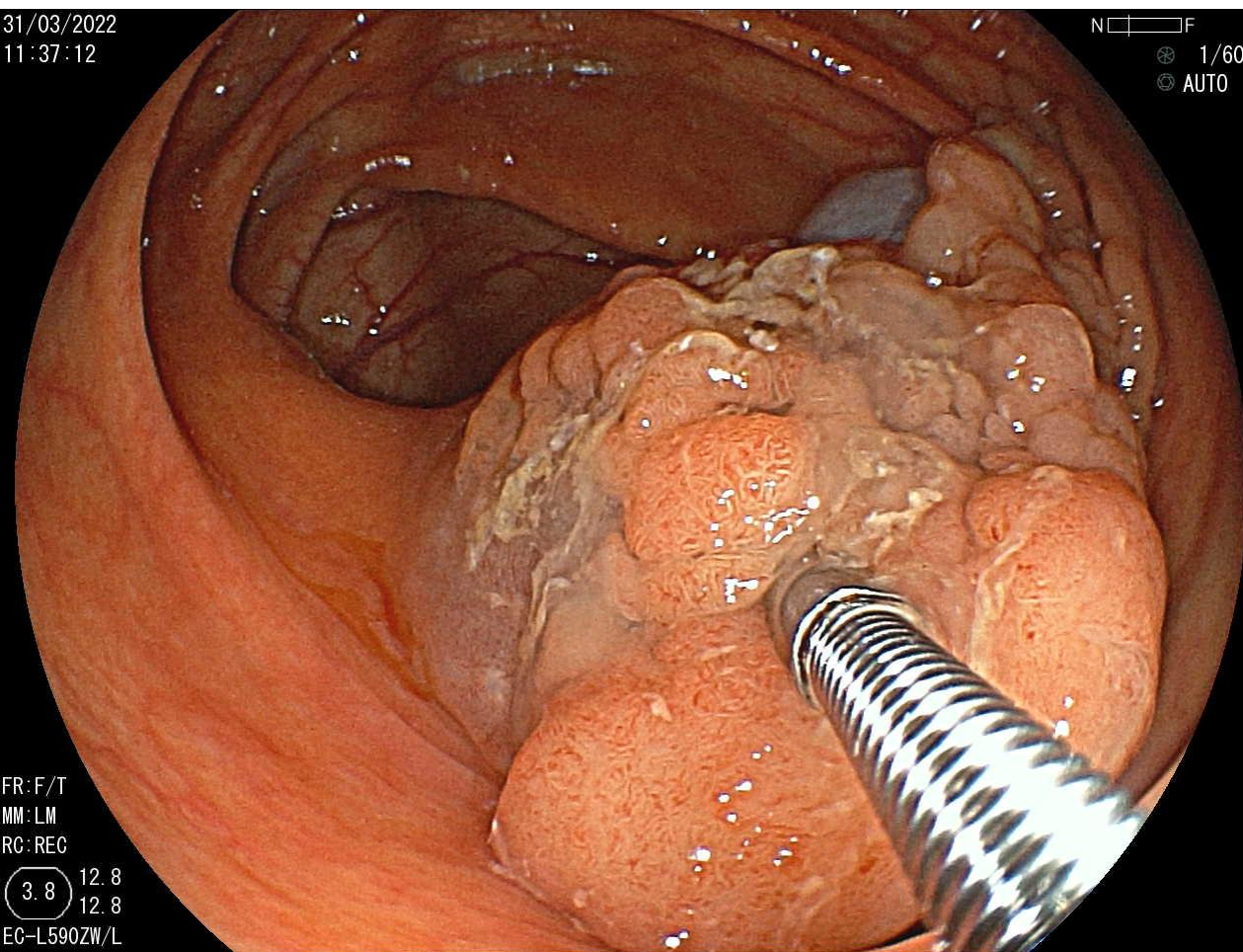
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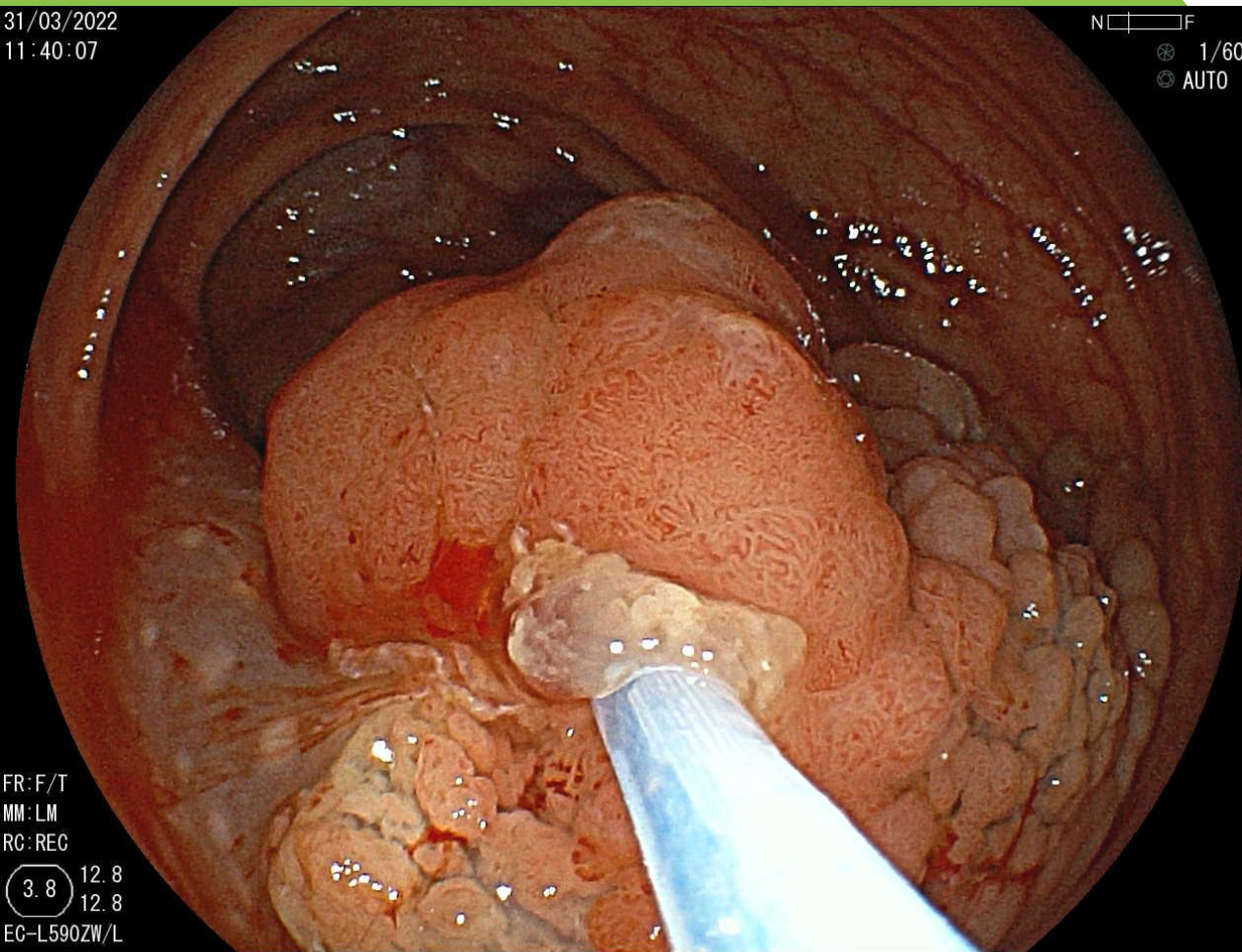
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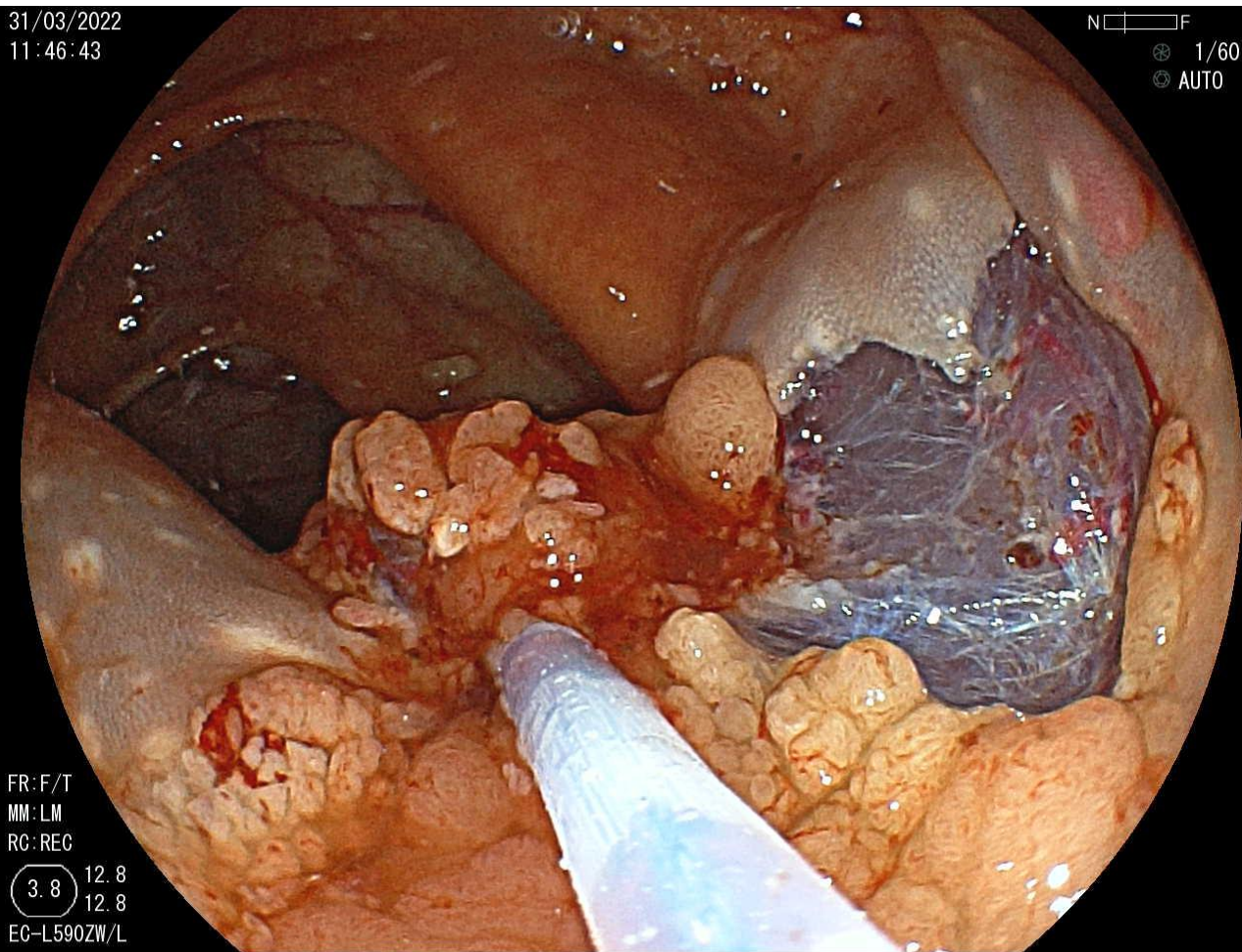
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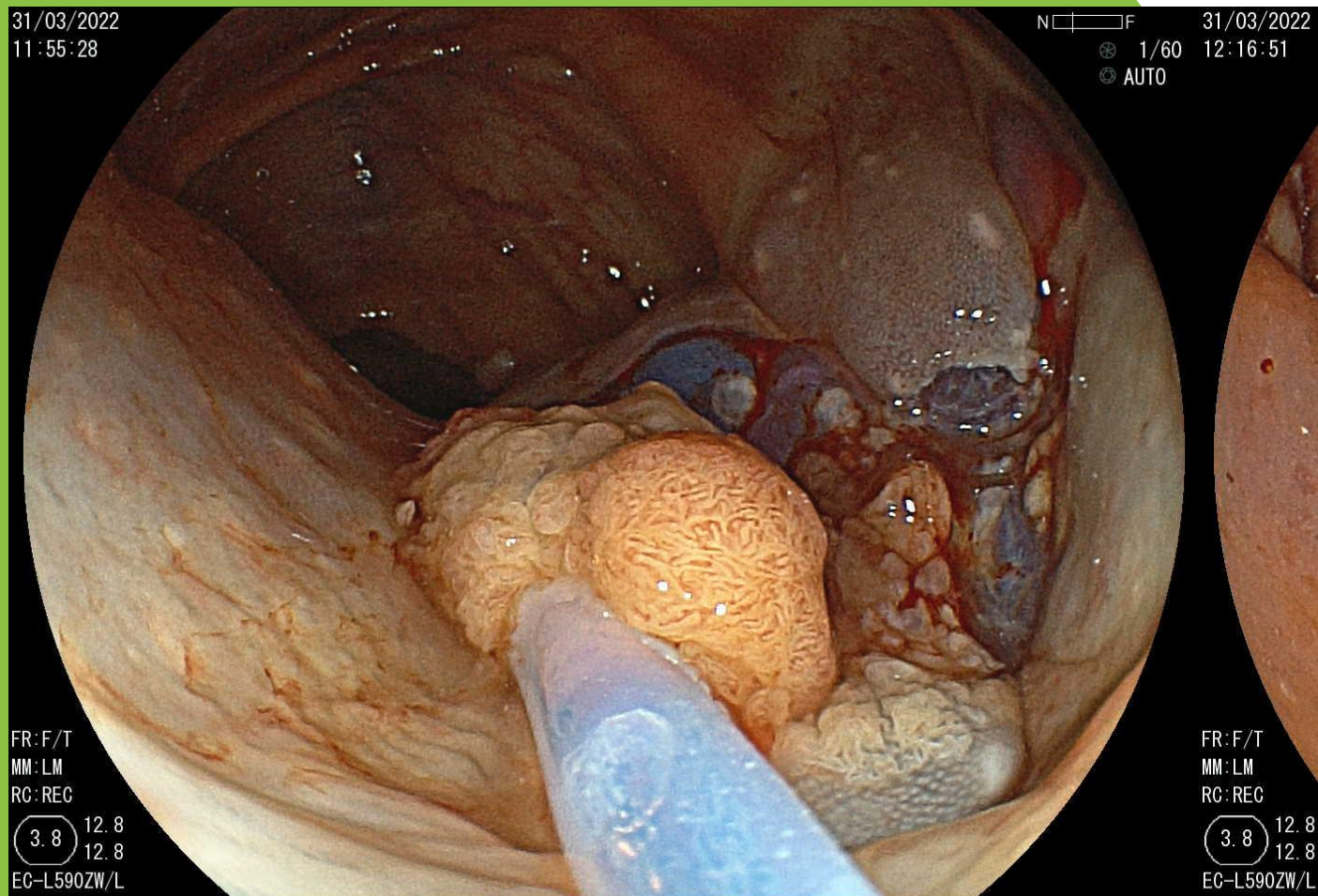
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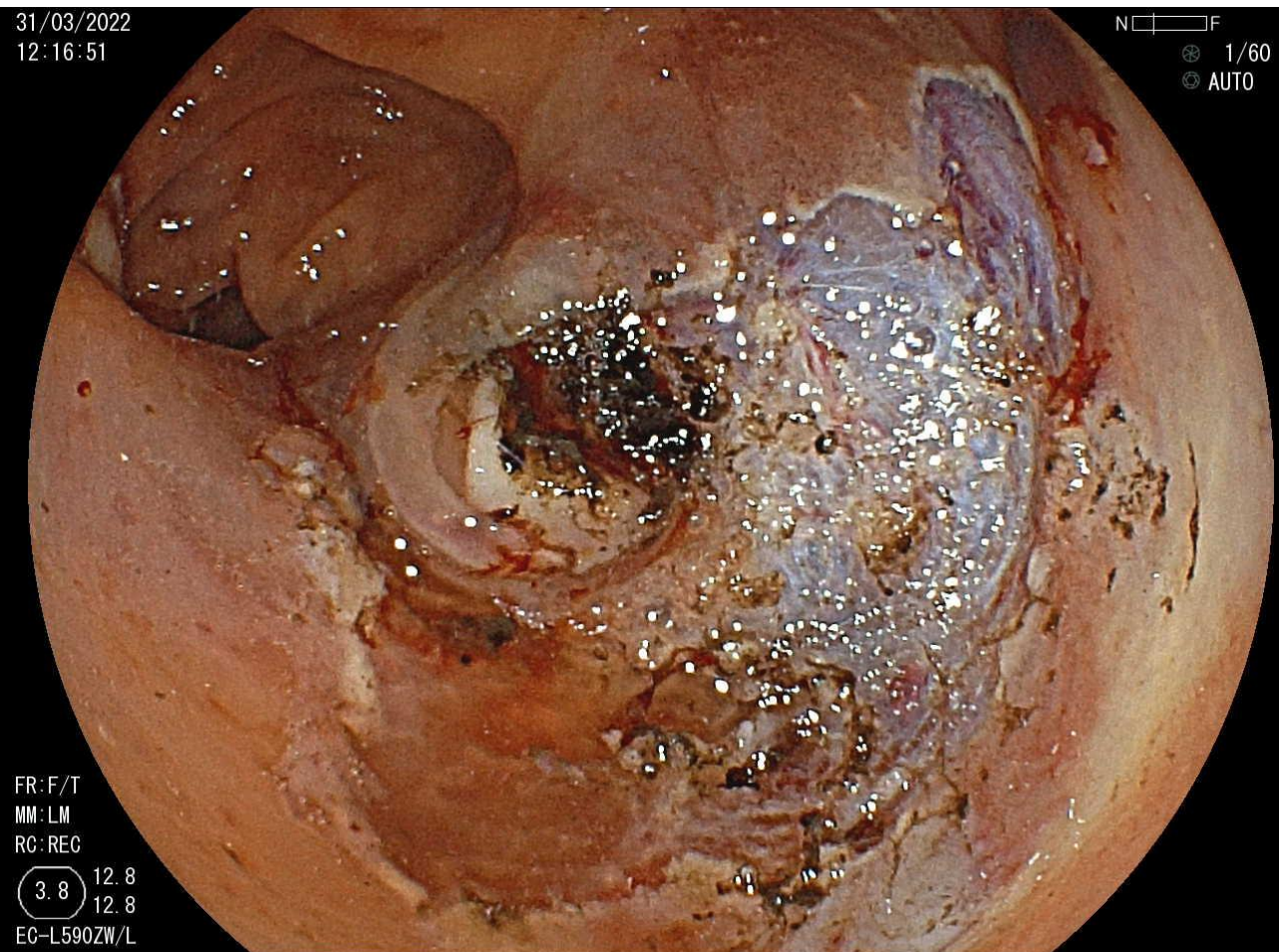
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Santa Casa de Bage
Dr. Carlos Eduardo

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Santa Casa de Bage
Dr. Carlos Eduardo

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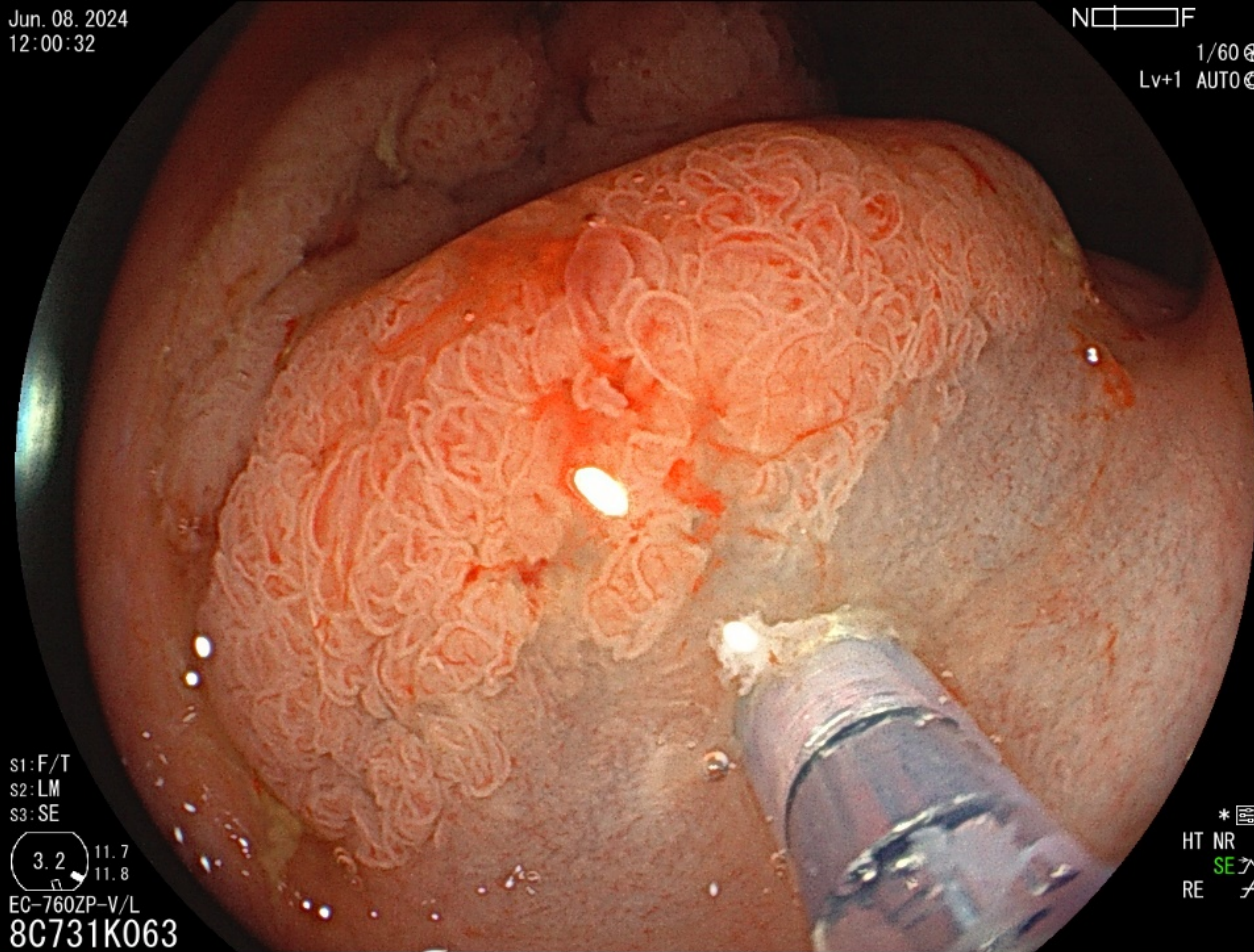
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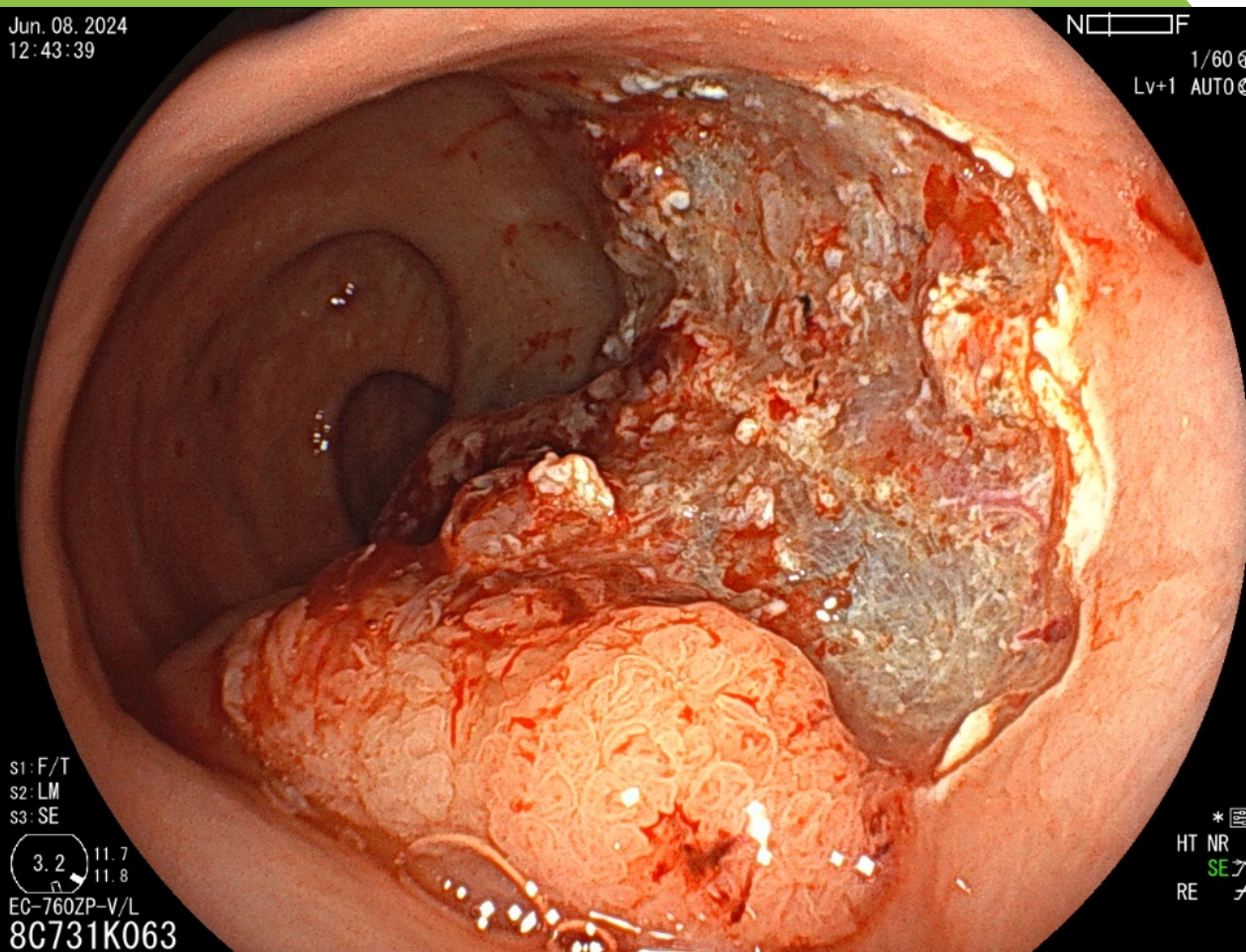
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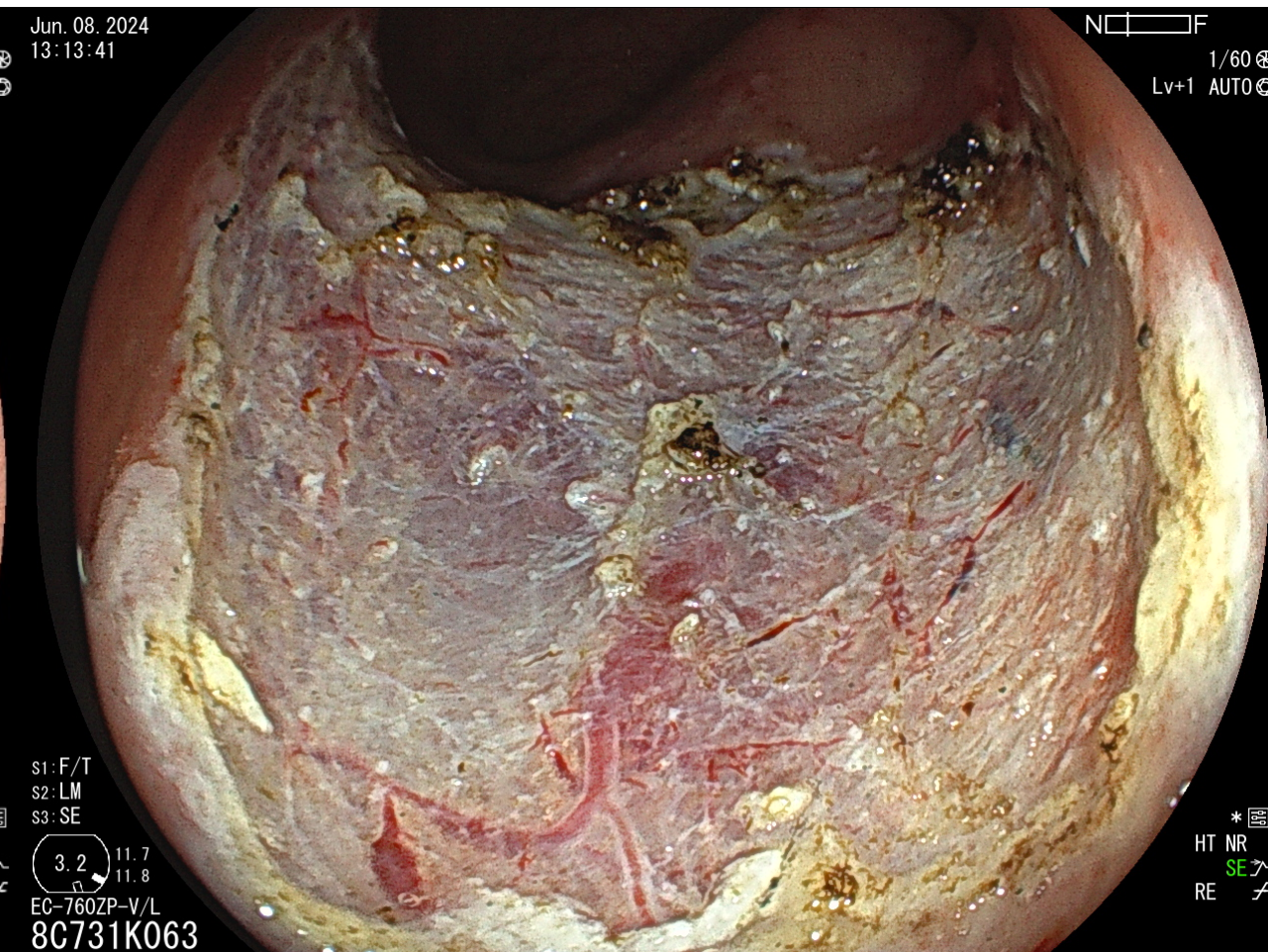
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Dr. Carlos Eduardo

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Santa Casa de Bage
Dr. Carlos Eduardo

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Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024



RECOMMENDATION

ESGE recommends the use of high quality photo- and/or videodocumentation in preference to biopsies to determine the most advanced pathology in LNPCPs and to inform selection of the optimal treatment strategy or facilitate tertiary referral. Where deep submucosal invasion is suspected, biopsies are indicated.

Strong recommendation, high quality of evidence.

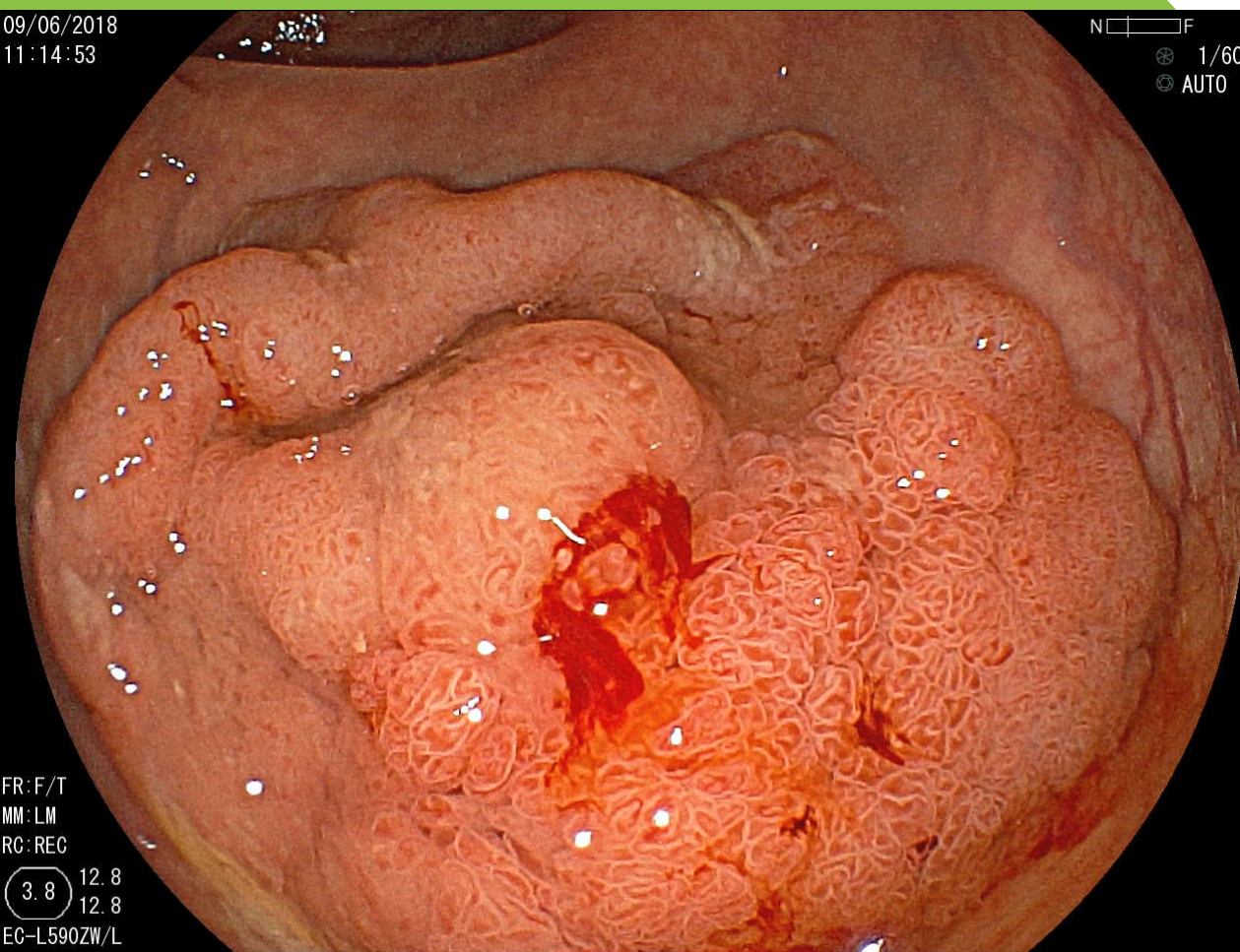
Guidelines

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

Shinji Tanaka,^{1,2,3,4} Hiroshi Kashida,¹ Yutaka Saito,^{1,2} Naohisa Yahagi,¹ Hiroo Yamano,¹ Shoichi Saito,¹ Takashi Hisabe,¹ Takashi Yao,² Masahiko Watanabe,^{2,3} Masahiro Yoshida,^{1,4} Yusuke Saitoh,¹ Osamu Tsuruta,¹ Ken-ichi Sugihara,² Masahiro Igarashi,¹ Takashi Toyonaga,¹ Yoichi Ajioka,² Masato Kusunoki,³ Kazuhiko Koike,⁴ Kazuma Fujimoto¹ and Hisao Tajiri¹

carcinoma cases.^{81–87} In addition, biopsy should not be done in principle for qualitative diagnosis (strength of recommendation: 2, level of evidence: C). In cases of superficial-type lesions, because biopsy as a preoperative diagnosis may cause fibrosis in the SM layer and lead to a positive nonlifting sign, subsequent endoscopic treatment will be difficult.⁸¹ For large lesions such as LST-G,⁵⁴ which, in several cases are “carcinoma in adenoma”, a simple biopsy may not show an accurate yield as a qualitative diagnosis. Therefore, a diagnosis based on image enhancement/magnifying endoscopic observation as an optical biopsy (histological diagnosis by endoscopic imaging without forceps biopsy) is more effective.

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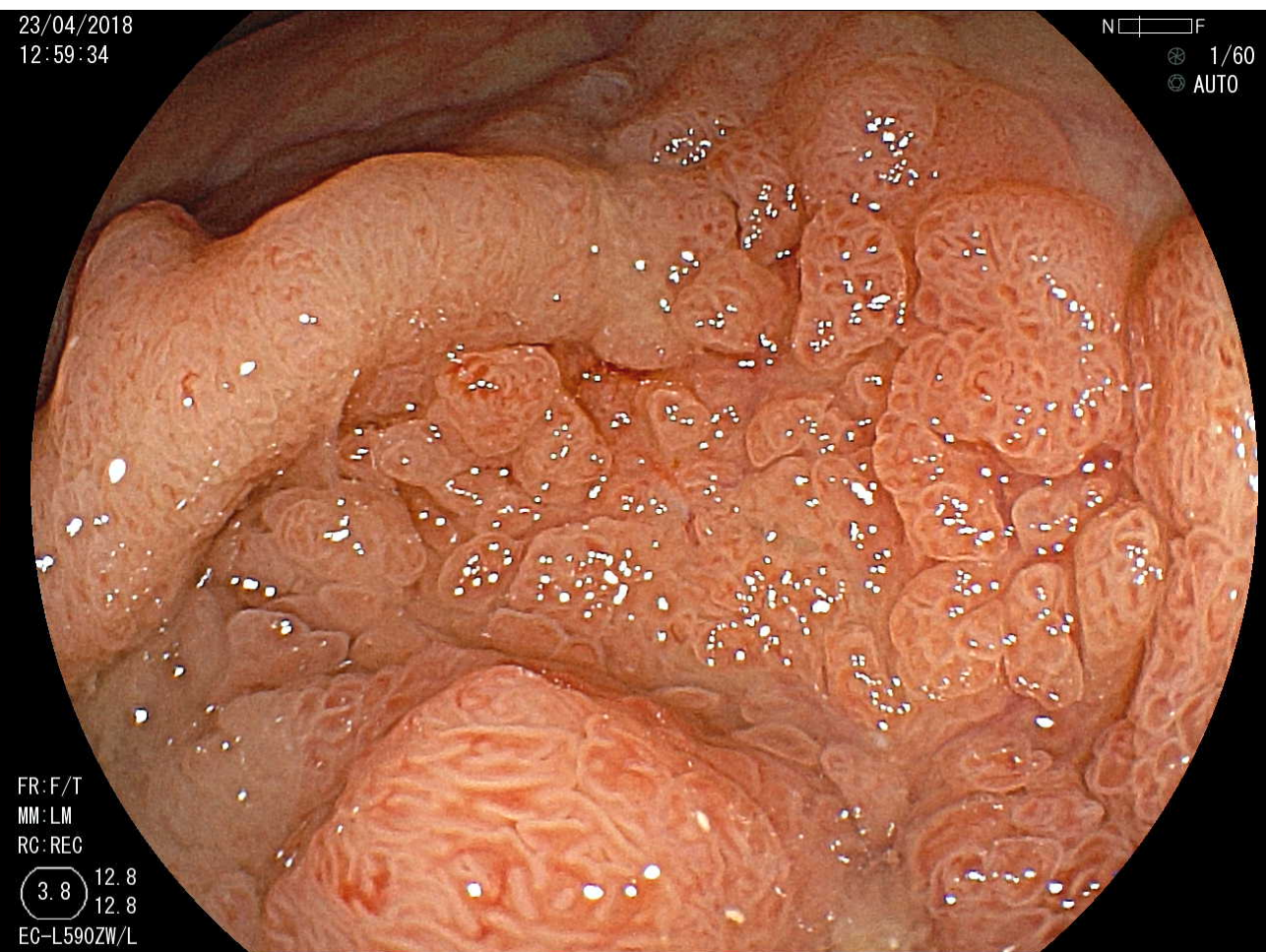
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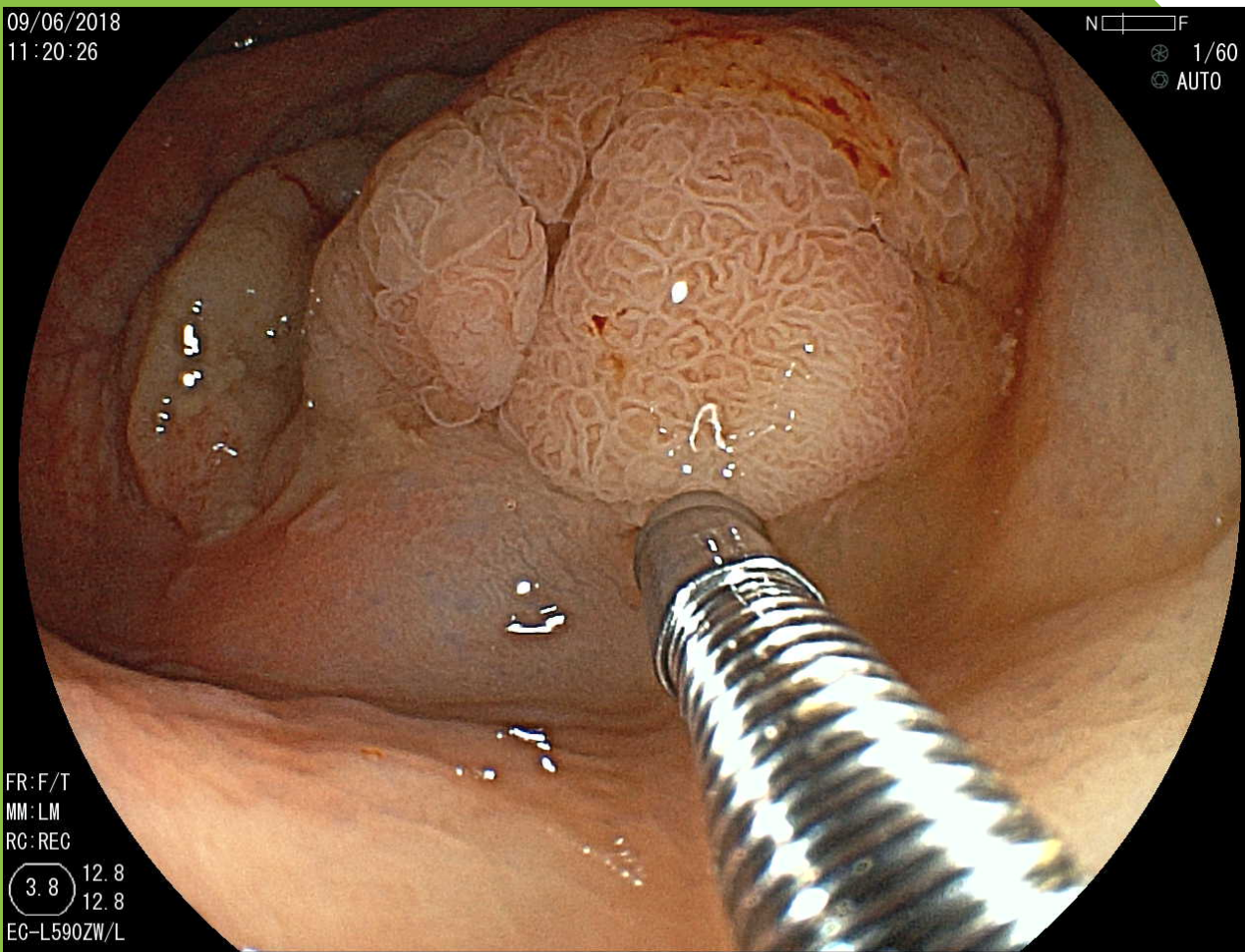
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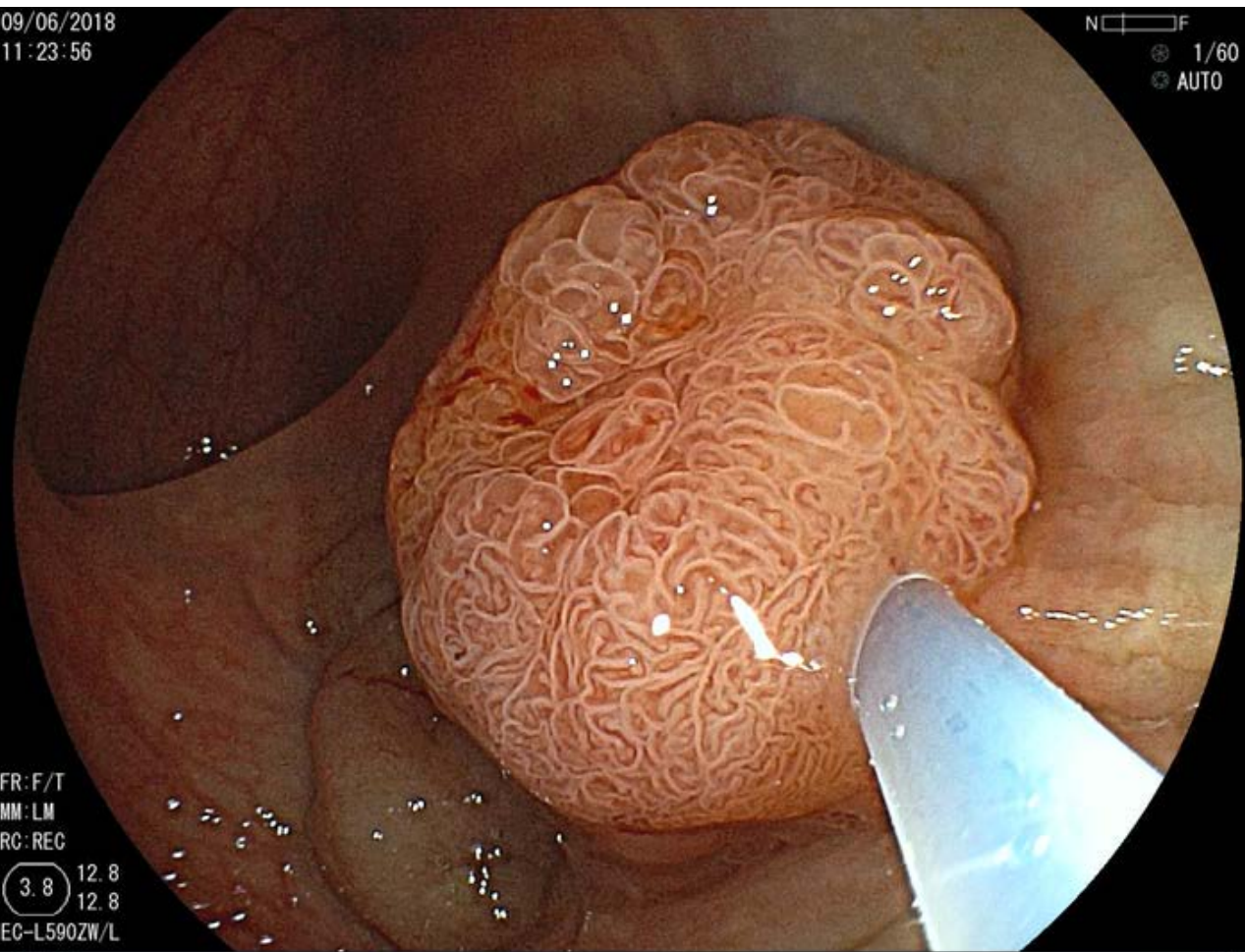
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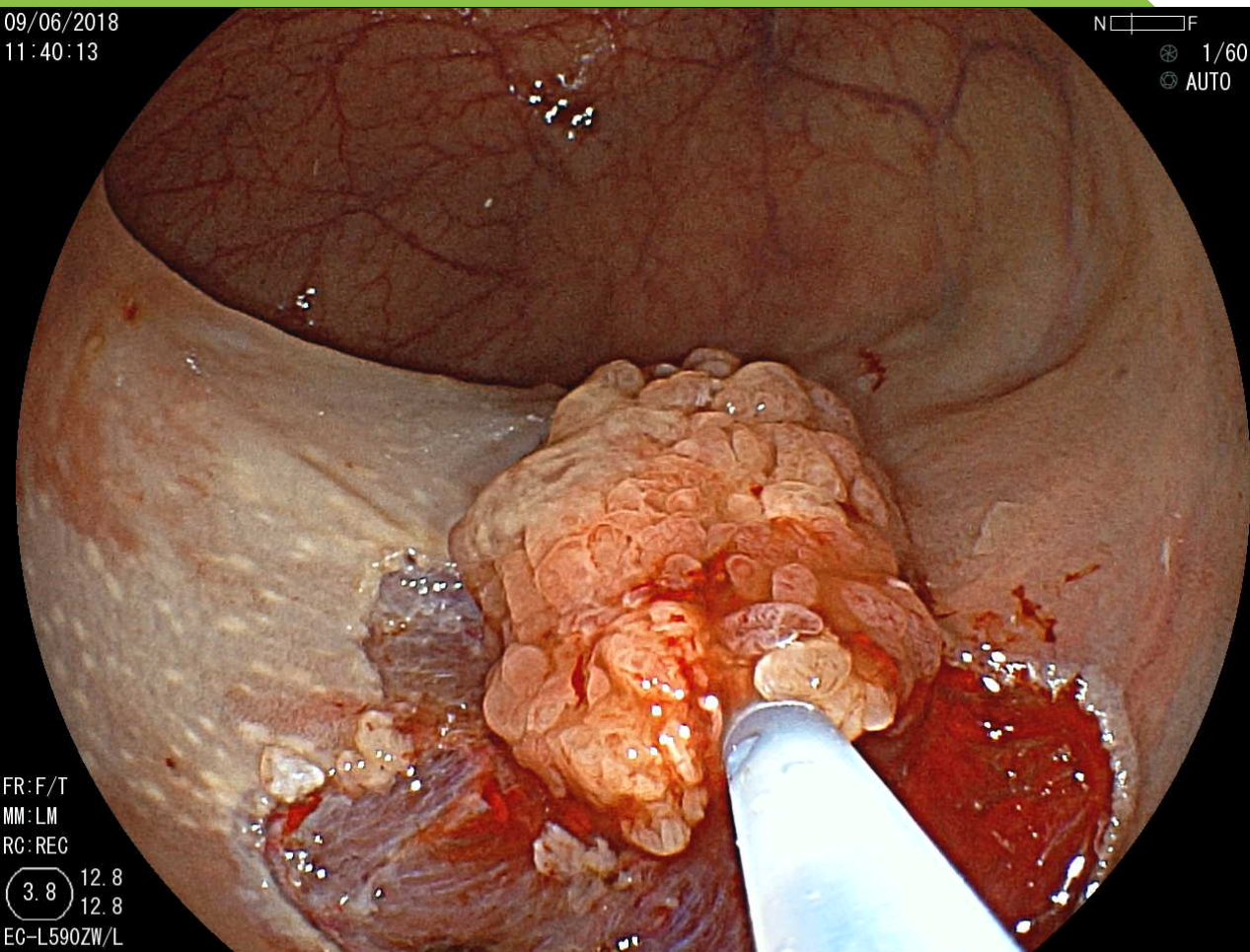
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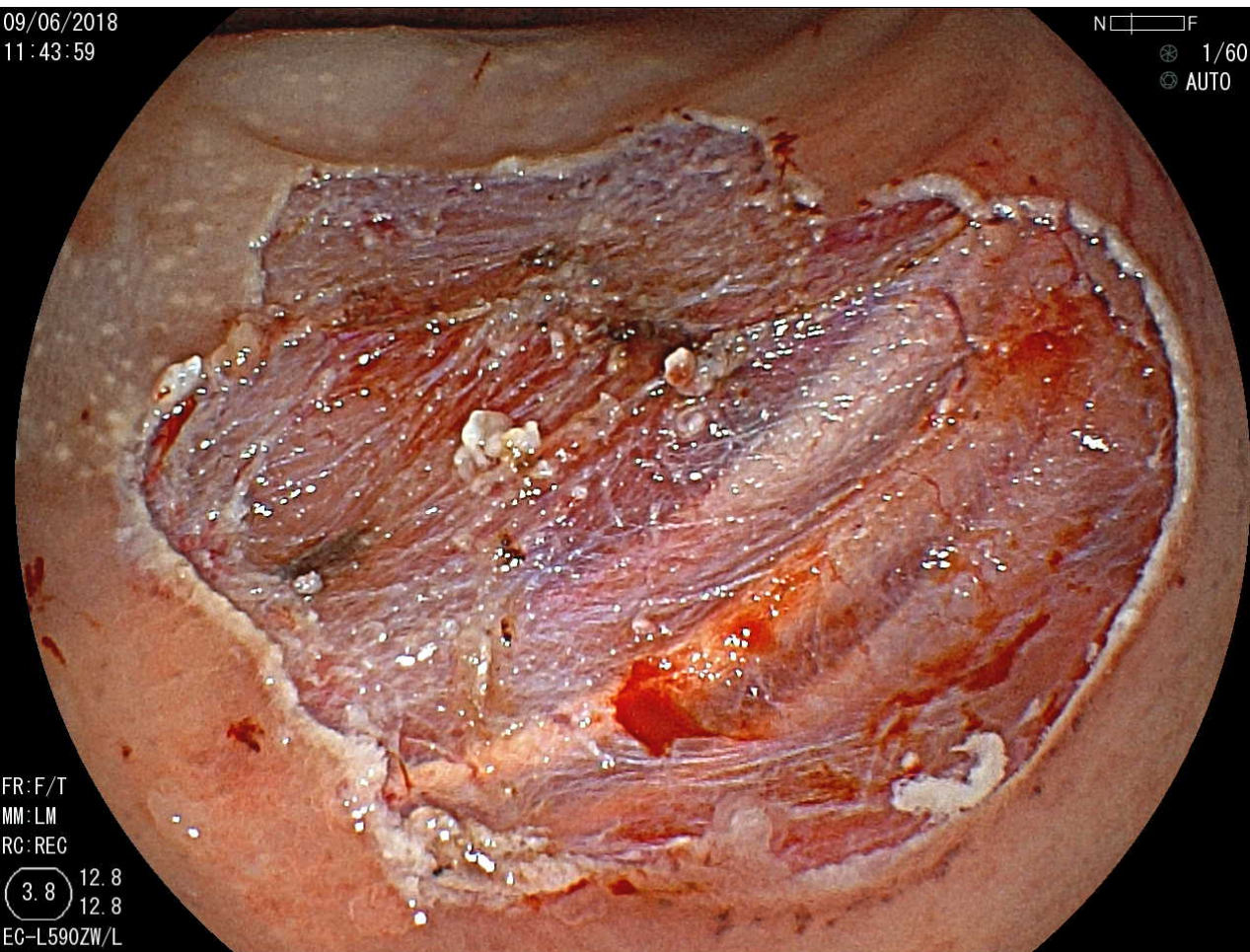


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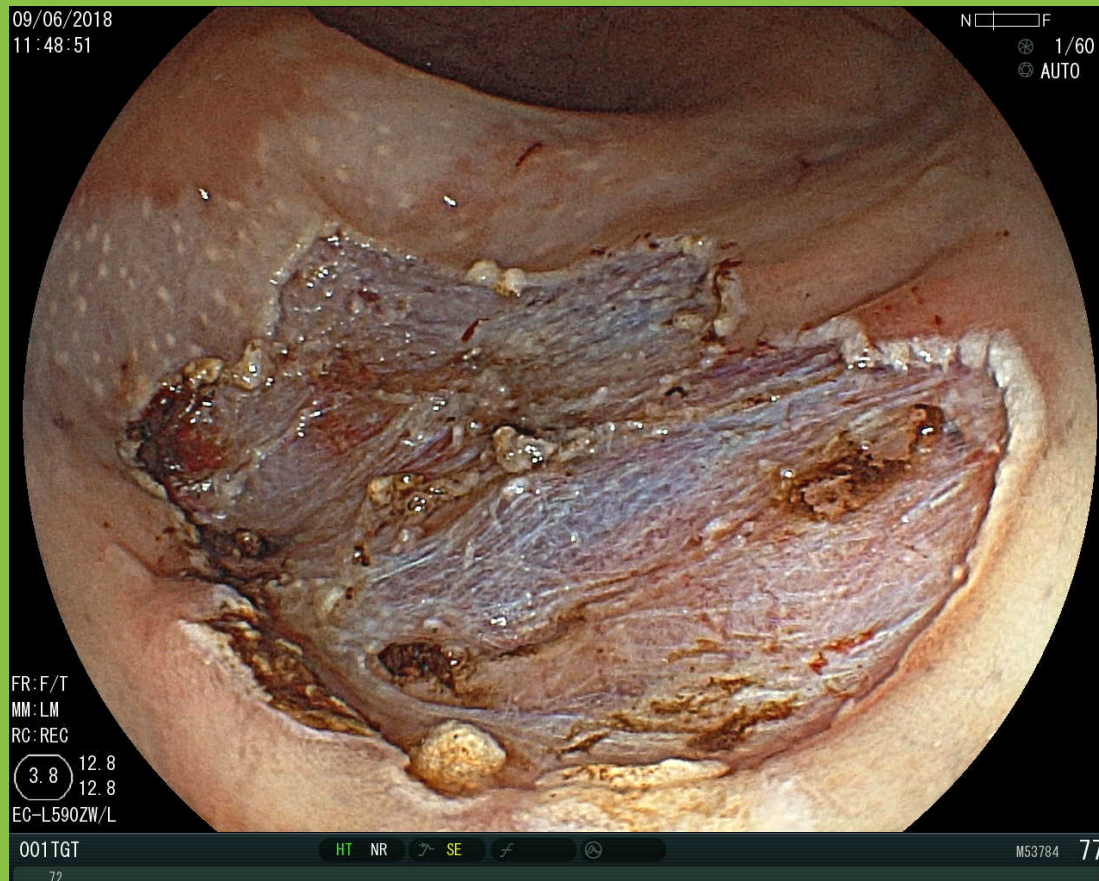
M53806 65

Endoscopic Removal of Colorectal Lesions—Recommendations by the US Multi-Society Task Force on Colorectal Cancer

Tonya Kaltenbach,¹ Joseph C. Anderson,^{2,3,4} Carol A. Burke,⁵ Jason A. Dominitz,^{6,7} Samir Gupta,^{8,9} David Lieberman,¹⁰ Douglas J. Robertson,^{2,3} Aasma Shaukat,^{11,12} Sapna Syngal,¹³ Douglas K. Rex¹⁴



Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024



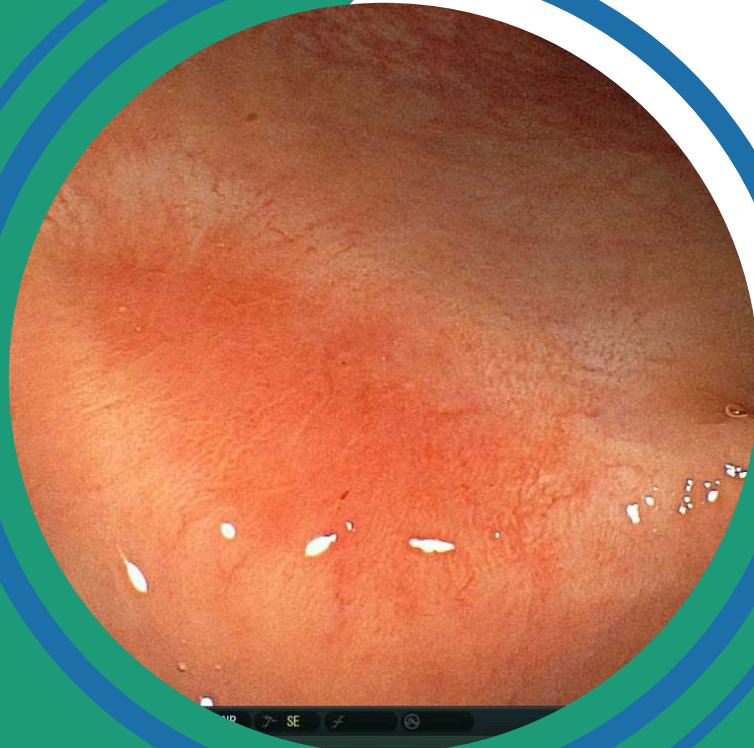
RECOMMENDATION

ESGE recommends that, after piecemeal EMR of LNPCPs, the resection margins should be treated by thermal ablation using snare-tip soft coagulation (STSC) to prevent adenoma recurrence.

Strong recommendation, high quality of evidence.

- We suggest the use of adjuvant thermal ablation of the post-EMR margin, where no endoscopically visible adenoma remains despite meticulous inspection. There is insufficient evidence to recommend a specific modality (ie, APC, snare tip soft coagulation) at this time. (Conditional recommendation, moderate-quality evidence)

Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024



RECOMMENDATION

ESGE recommends that successful EMR should be defined by: the lack of endoscopically visible remnant neoplastic tissue at the mucosectomy site; histologic assessment of the specimen; and the absence of recurrence at the first surveillance colonoscopy at 6 months.

Strong recommendation, moderate quality of evidence.

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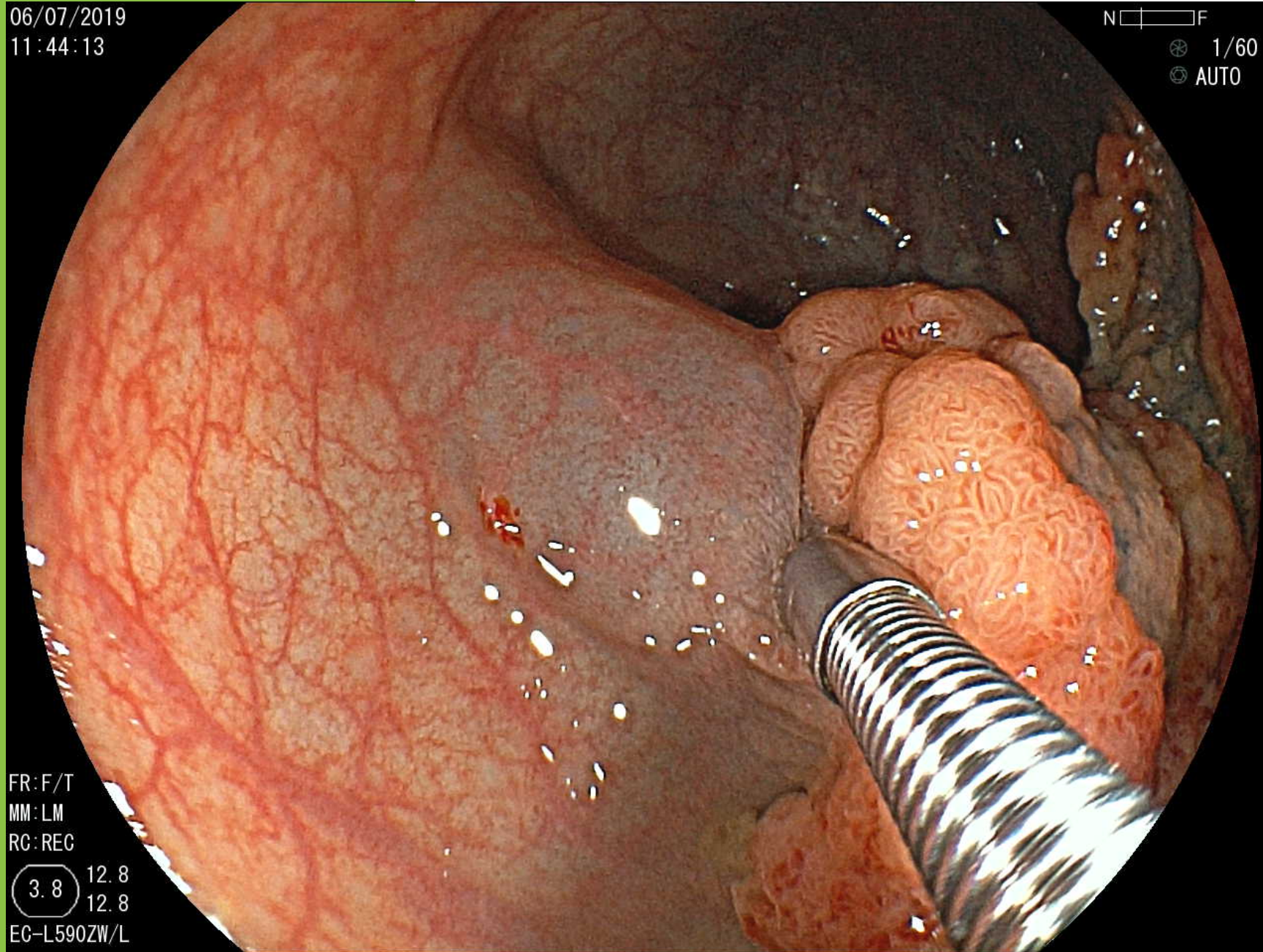
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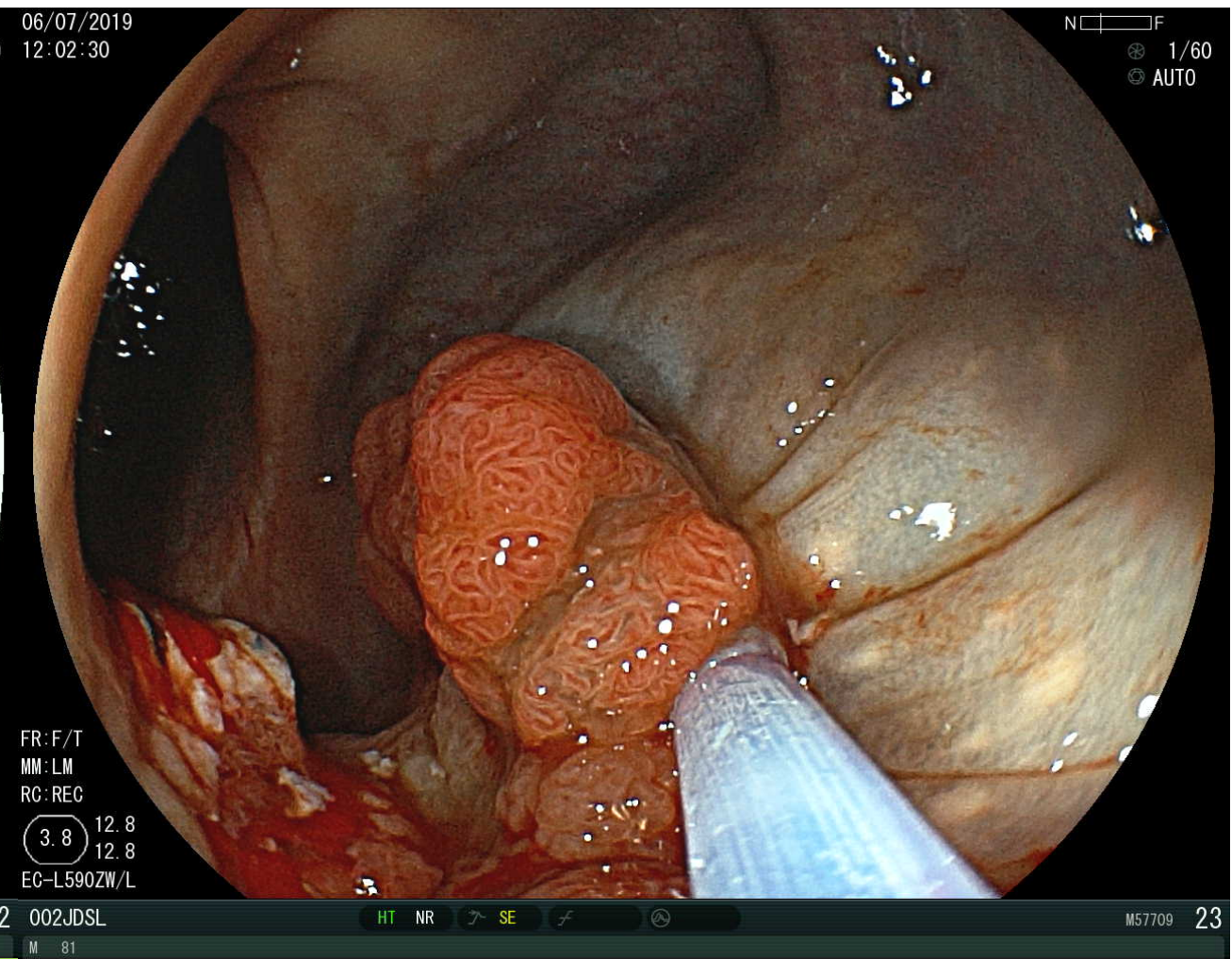
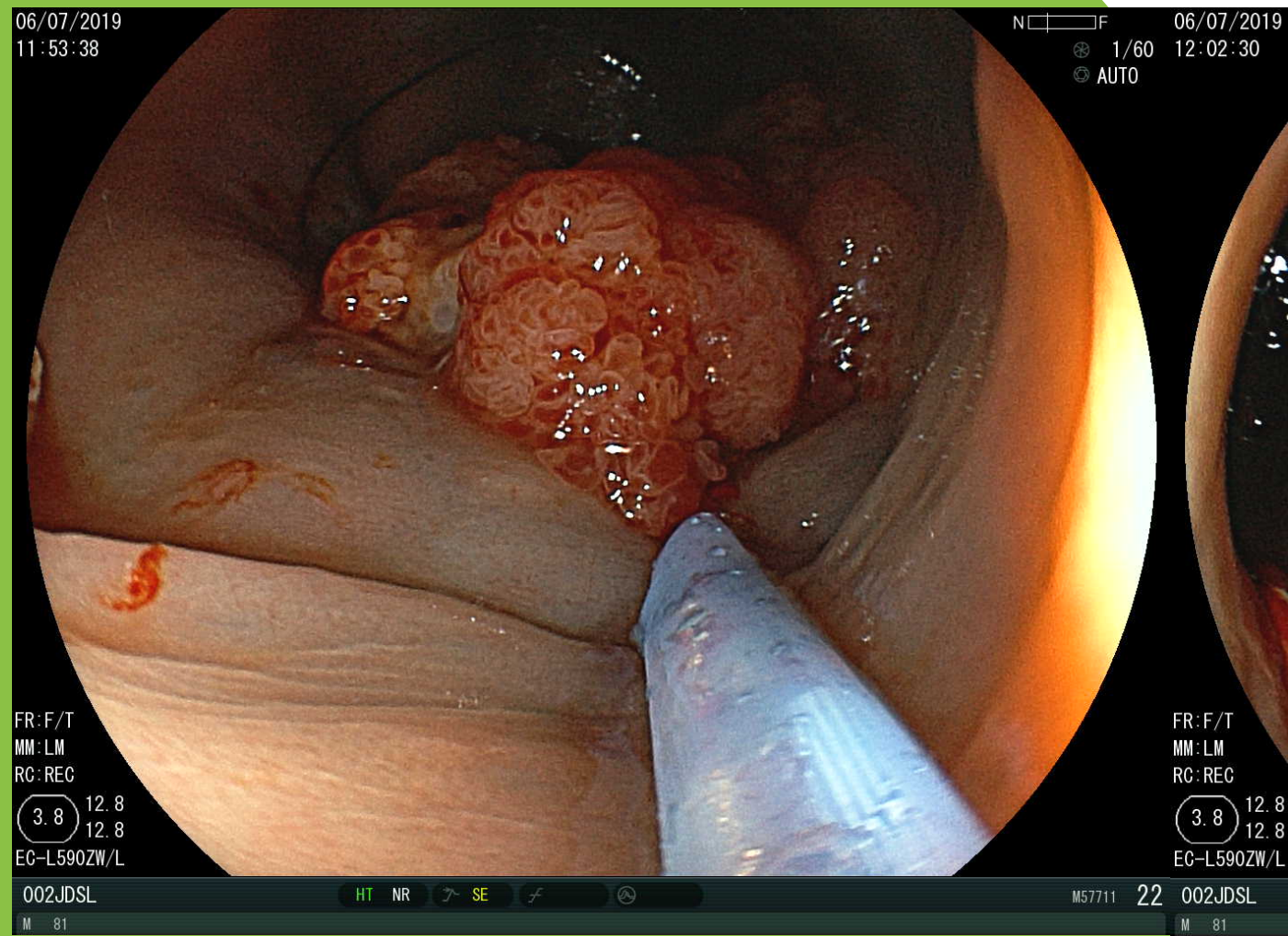
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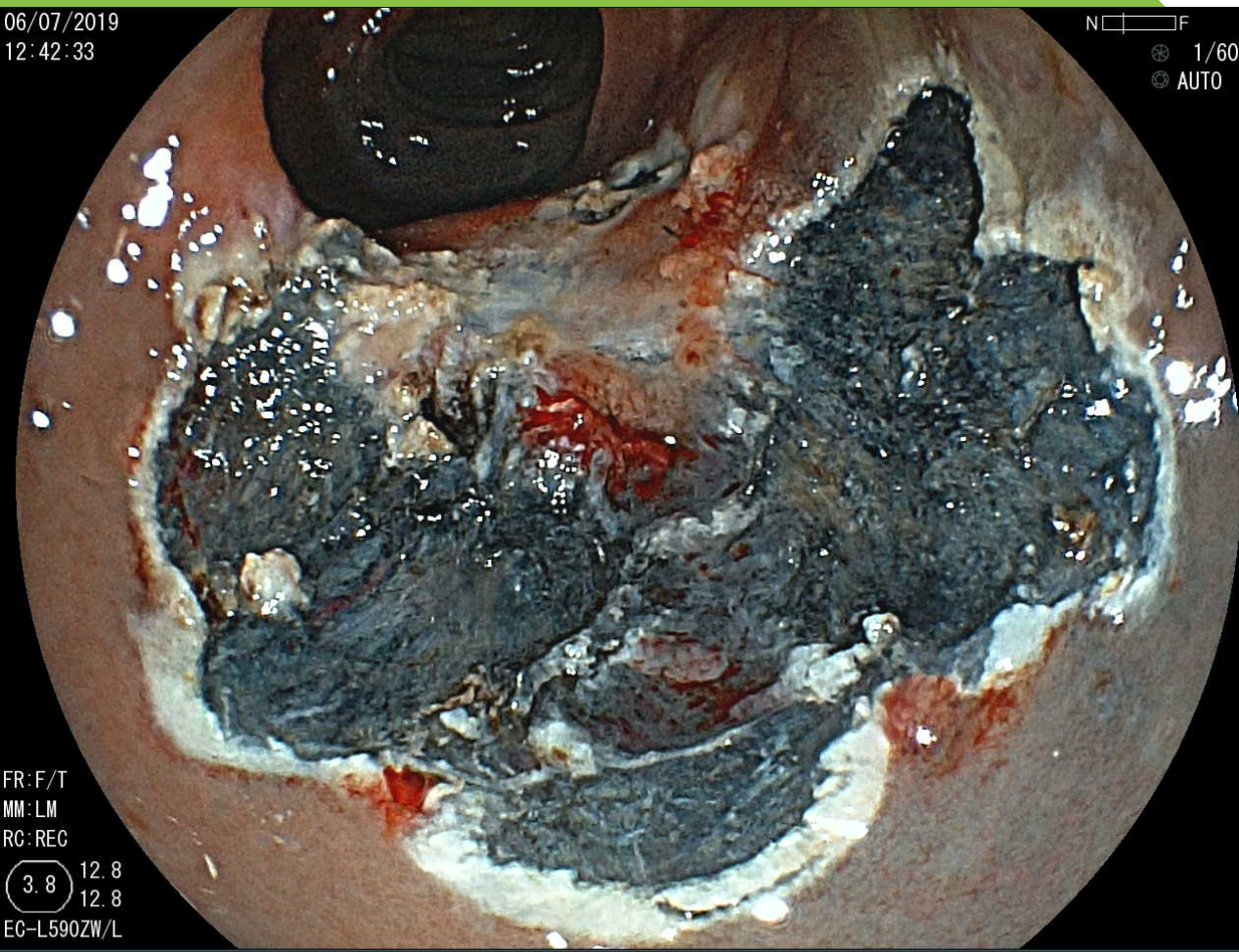
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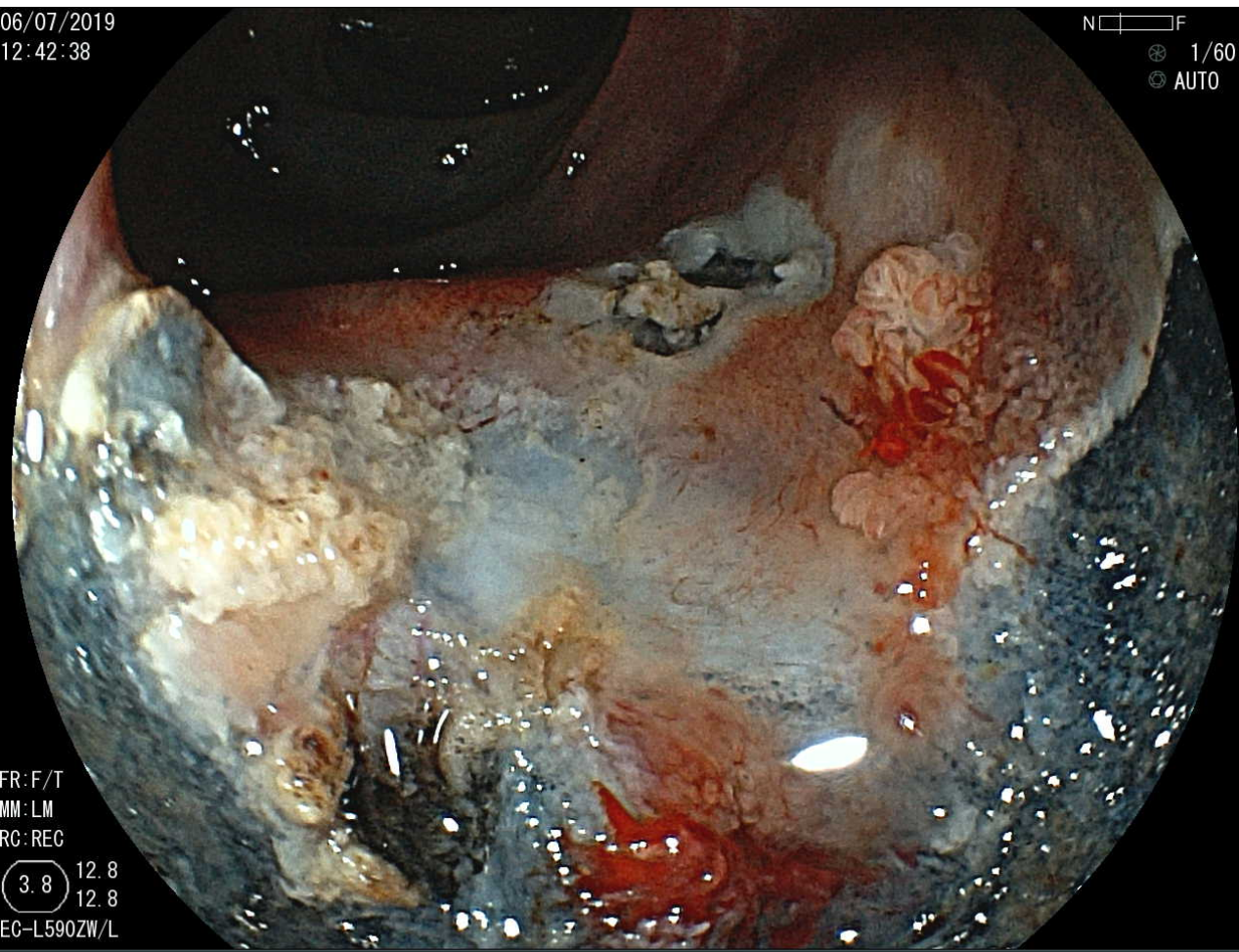
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**Colorectal polypectomy and endoscopic mucosal resection:
European Society of Gastrointestinal Endoscopy (ESGE)
Guideline – Update 2024**



RECOMMENDATION

ESGE recommends that, in addition to conventional EMR, adjunctive techniques including hot or cold avulsion (CAST) be considered as treatment options in the management of nonlifting areas within LNPCPs.

Strong recommendation, moderate quality of evidence.





Guidelines

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

Shinji Tanaka,^{1,2,3,4} Hiroshi Kashida,¹ Yutaka Saito,^{1,2} Naohisa Yahagi,¹ Hiroo Yamano,¹ Shoji Saito,¹ Takashi Hisabe,¹ Takashi Yao,² Masahiko Watanabe,^{2,3} Masahiro Yoshida,^{1,4} Yusuke Saitoh,¹ Osamu Tsuruta,¹ Ken-ichi Sugihara,² Masahiro Igarashi,¹ Takashi Toyonaga,¹ Yoichi Ajioka,² Masato Kusunoki,³ Kazuhiko Koike,⁴ Kazuma Fujimoto¹ and Hisao Tajiri¹

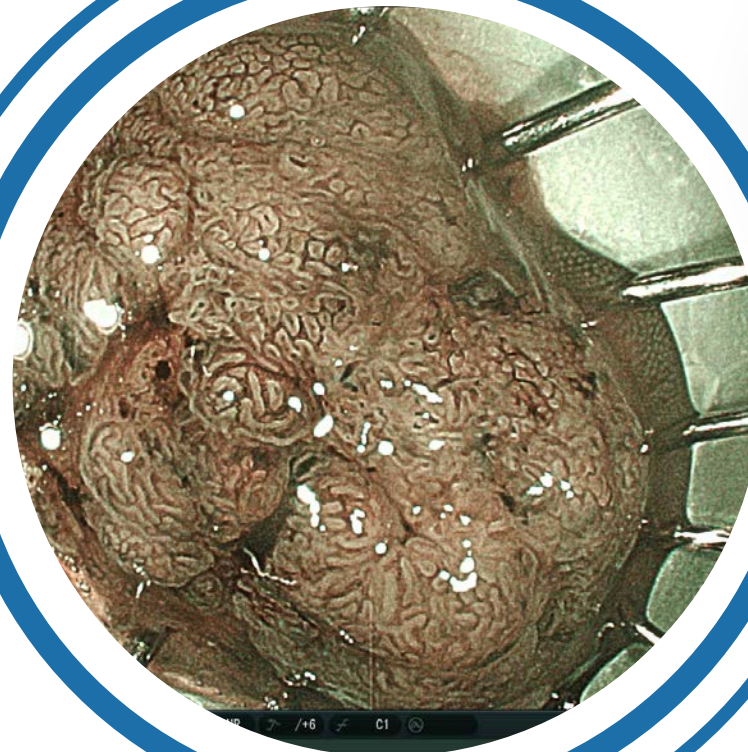
Table 4 Local recurrence rate between *en bloc* and piecemeal resection

Resection method		Author
<i>En bloc</i>	Piecemeal	
2.7%	20.1%	Saito <i>et al.</i> (2010) ⁴⁷
0–3%	10–23%	Hotta <i>et al.</i> (2010) ⁴⁹
—	19%	Sakamoto <i>et al.</i> (2012) ⁵⁰
1.4%	6.8%	Oka <i>et al.</i> (2015) ⁵³
0.7%	23.5%	Hotta <i>et al.</i> (2009) ¹¹⁹
1.2%	15.4%	Tajika <i>et al.</i> (2011) ¹⁴⁸



Small as well as large colorectal lesions are effectively managed by endoscopic mucosal resection technique

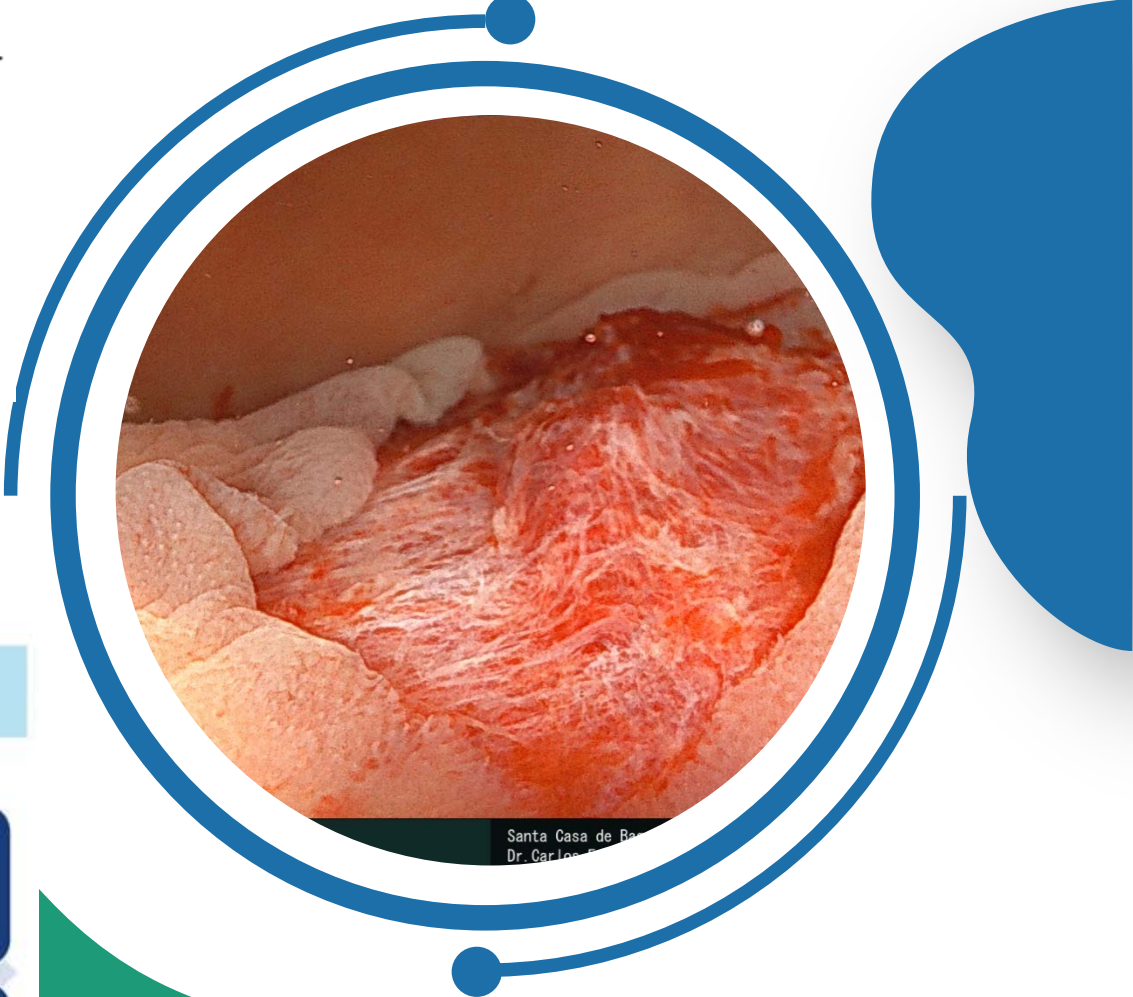
Carlos Eduardo Oliveira dos **SANTOS**^{1,2}, Lysandro Alsina **NADER**³, Cintia **SCHERER**³,
Rafaelle Gaglioto **FURLAN**¹, Ivan David Arciniegas **SANMARTIN**⁴ and Júlio Carlos **PEREIRA-LIMA**⁵



ABSTRACT – **Background** – Endoscopic mucosal resection (EMR) is an easy-to-use treatment option for superficial colorectal lesions, including lesions ≥ 20 mm. **Objective** – To evaluate the effectiveness of EMR. **Methods** – We evaluated 430 lesions removed by EMR in 404 patients. The lesions were analyzed according to their morphology, size, location, and histology. Lesions < 20 mm were resected en bloc, whereas lesions ≥ 20 mm were removed by piecemeal EMR (p-EMR). Adverse events and recurrence were assessed. **Results** – Regarding morphology, 145 (33.7%) were depressed lesions, 157 (36.5%) were polypoid lesions and 128 (29.8%) were laterally spreading lesions, with 361 (84%) lesions < 20 mm and 69 (16%) ≥ 20 mm. Regarding histology, 413 (96%) lesions were classified as neoplastic lesions. Overall, 14 (3.3%) adverse reactions occurred, most commonly in lesions removed by p-EMR ($P < 0.001$) and associated with advanced histology ($P = 0.008$). Recurrence occurred in 14 (5.2%) cases, more commonly in lesions removed by p-EMR ($P < 0.001$). **Conclusion** – EMR is an effective technique for the treatment of superficial colorectal lesions, even of large lesions.

Cold snare endoscopic mucosal resection for colon polyps: a systematic review and meta-analysis

Authors
Mohamed Abdallah¹, Khalid Ahmed², Daniyal Abbas³, Mouhand F. H. Mohamed⁴, Gaurav Suryawanshi¹, Nicholas McDonald¹, Natalie Wilson¹, Shifa Umar⁵, Aasma Shaukat⁶, Mohammad Bilal¹



Cold snare endoscopic mucosal resection for colon polyps: a systematic review and meta-analysis



Cold snare endoscopic mucosal resection (CS-EMR)

Data on recurrence rates and adverse events for CS-EMR of colon polyps are mixed

16 studies
• 5 retrospective
• 7 prospective
• 4 RCTs

2592 colon polyps

1922 patients

Recurrence rate
6.7%
95%CI 2.4%-17.4%

Intraprocedural bleeding rate
2.6%
95%CI 1.5%-4.5%

Delayed bleeding rate
1.5%
95%CI 0.8%-2.7%

Technical success rate
97.2%
95%CI 91.8%-99.1%

Endoscopy

Cold Versus Hot Snare Endoscopic Resection of Large Nonpedunculated Colorectal Polyps: Randomized Controlled German CHRONICLE Trial

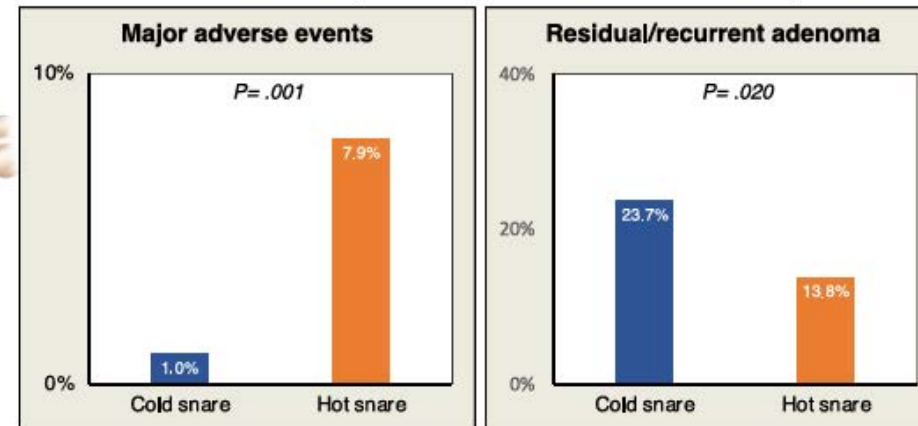


Ingo Steinbrück,¹ Alanna Ebigbo,² Armin Kuellmer,³ Arthur Schmidt,^{3,4} Konstantinos Kouladouros,⁵ Markus Brand,⁶ Teresa Koenen,⁷ Viktor Rempel,⁸ Andreas Wannhoff,⁹ Siegbert Faiss,¹⁰ Oliver Pech,¹¹ Oliver Möschler,¹² Franz Ludwig Dumoulin,¹³ Martha M. Kirstein,¹⁴ Thomas von Hahn,¹⁵ Hans-Dieter Allescher,¹⁶ Stefan K. Gölder,¹⁷ Martin Götz,¹⁸ Stephan Hollerbach,¹⁹ Björn Lewerenz,²⁰ Alexander Meining,⁶ Helmut Messmann,² Thomas Rösch,²¹ and Hans-Peter Allgaier¹

Gastroenterology 2024;167:764–777

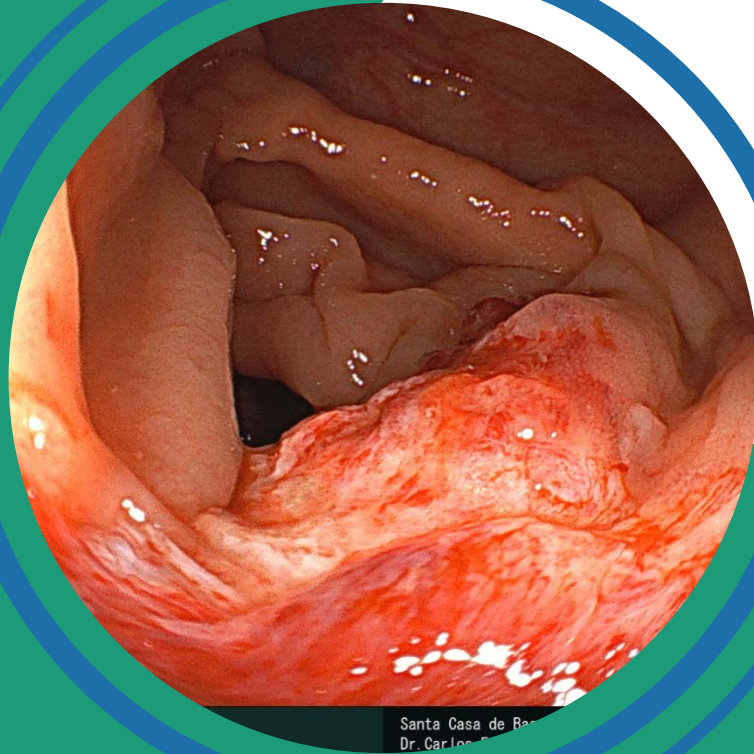
Cold versus Hot Snare Endoscopic Resection of Large Non-Pedunculated Colorectal Polyps (Randomized-controlled German CHRONICLE-trial)

Major adverse events are a relevant problem of hot snare-EMR of non-pedunculated colorectal polyps ≥ 2 cm.



Cold snare-EMR appears safer than hot snare-EMR with an almost complete elimination of major adverse events, but results in a higher rate of residual adenoma at the first endoscopic follow-up.

Gastroenterology



Santa Casa de B...
Dr. Carlos...

“Underwater” EMR without submucosal injection for large sessile colorectal polyps (with video)

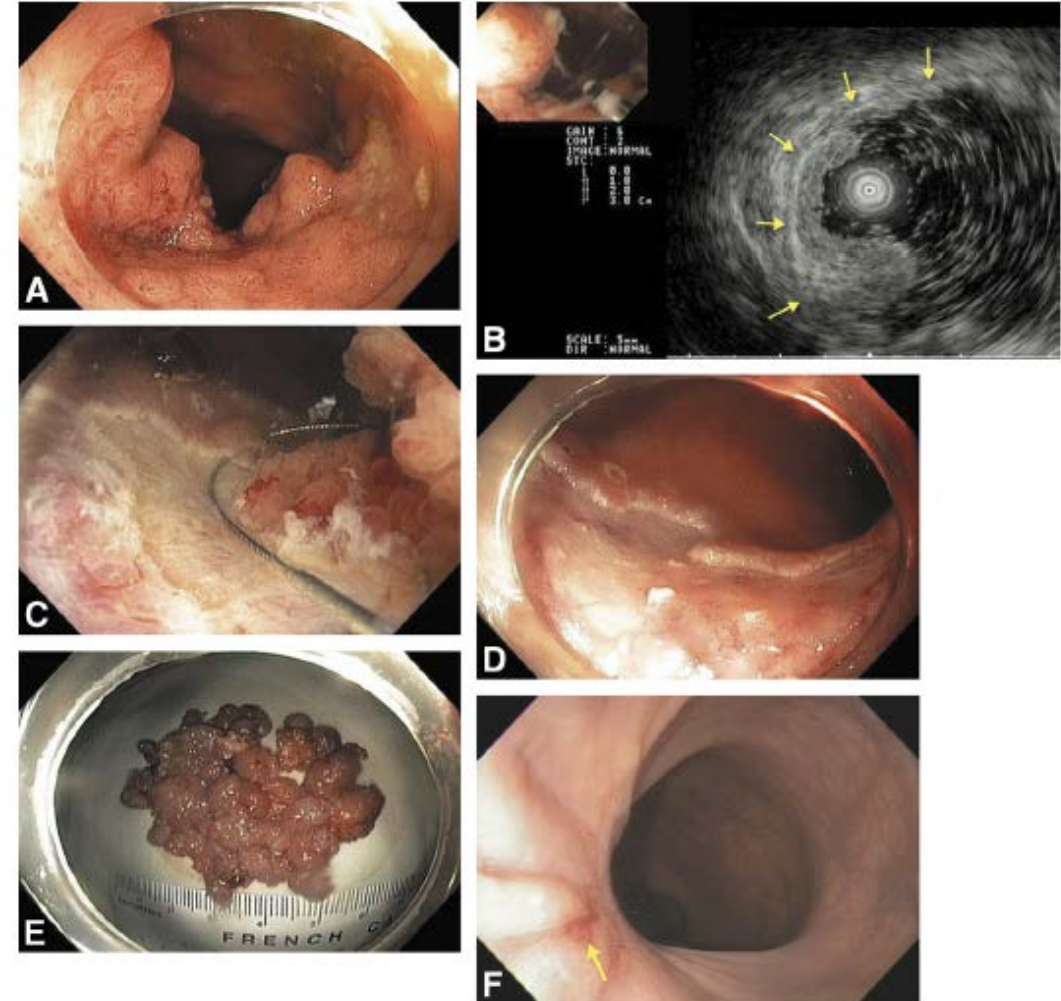
Kenneth F. Binmoeller, MD, Frank Weilert, MD, Janak Shah, MD, Yasser Bhat, MD, Steve Kane

San Francisco, California, USA

RECOMMENDATION

ESGE suggests that underwater EMR can be considered an alternative to conventional hot EMR for the treatment of adenomatous LNPCPs.

Weak recommendation, moderate quality of evidence.



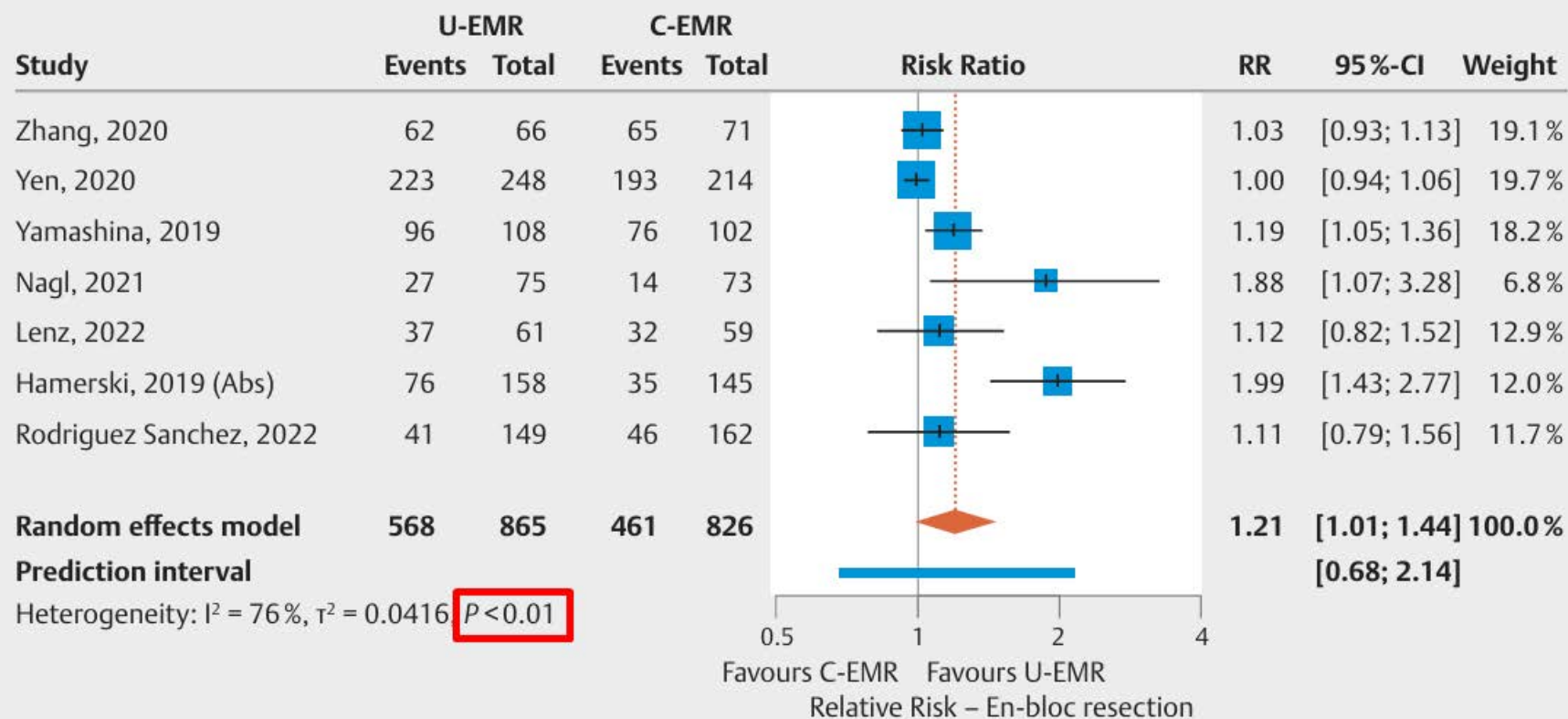
Safety and efficacy of underwater versus conventional endoscopic mucosal resection for colorectal polyps: Systematic review and meta-analysis of RCTs

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Authors

Saurabh Chandan¹, Jay Bapaye², Shahab R. Khan³, Babu P. Mohan⁴, Daryl Ramai⁴, Dushyant S. Dahiya⁵, Mohammad Bilal⁶, Peter V. Draganov⁷, Mohamed O. Othman⁸, Joaquin Rodriguez Sánchez⁹, Gursimran S. Kochhar¹⁰



► Fig. 2 Forest plot, RR, en-bloc resection.

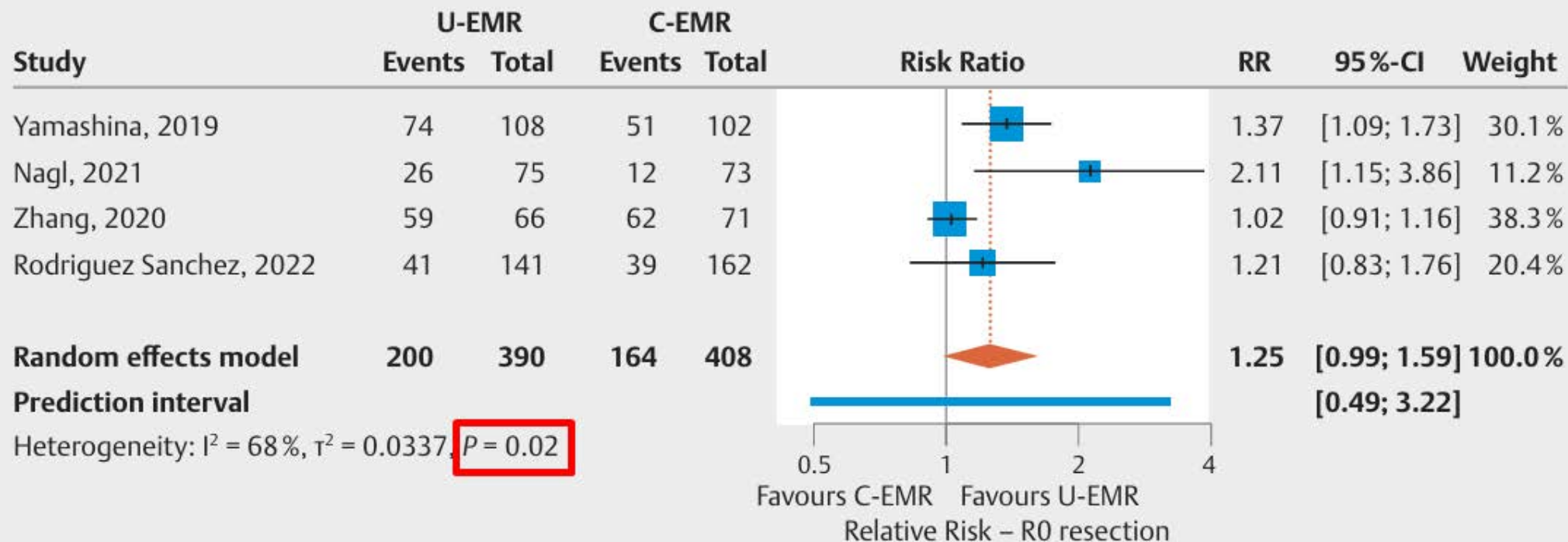
Safety and efficacy of underwater versus conventional endoscopic mucosal resection for colorectal polyps: Systematic review and meta-analysis of RCTs

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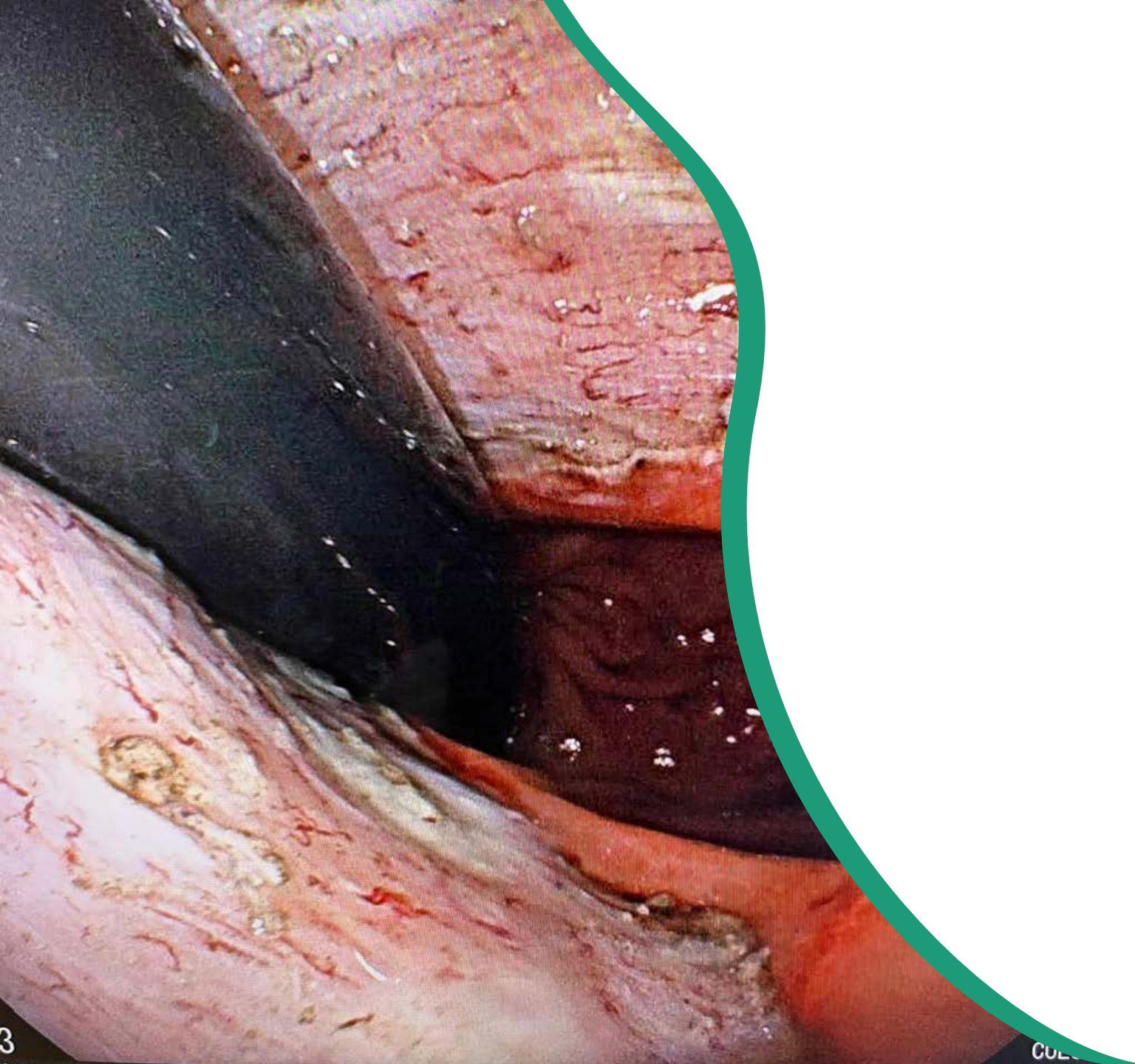


Authors

Saurabh Chandan¹, Jay Bapaye², Shahab R. Khan³, Babu P. Mohan⁴, Daryl Ramai⁴, Dushyant S. Dahiya⁵, Mohammad Bilal⁶, Peter V. Draganov⁷, Mohamed O. Othman⁸, Joaquin Rodriguez Sánchez⁹, Gursimran S. Kochhar¹⁰

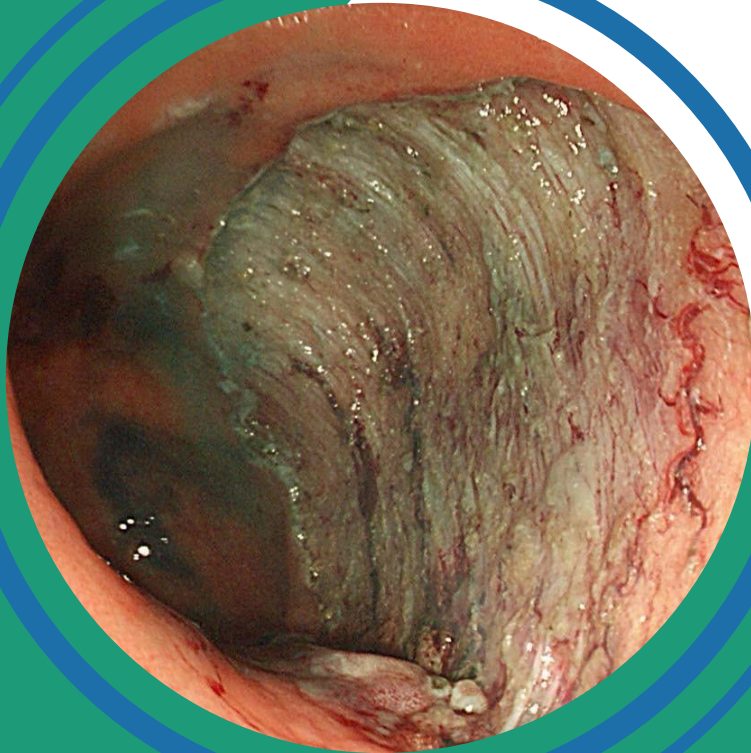


► **Fig. 1** Forest plot, RR, R0 resection.



ESD

**Colorectal polypectomy and endoscopic mucosal resection:
European Society of Gastrointestinal Endoscopy (ESGE)
Guideline – Update 2024**



RECOMMENDATION

Endoscopic submucosal dissection may also be suggested as an alternative for removal of LNPCPs of ≥ 20 mm in selected cases and in high-volume centers. Weak recommendation, low quality of evidence.

Guidelines

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

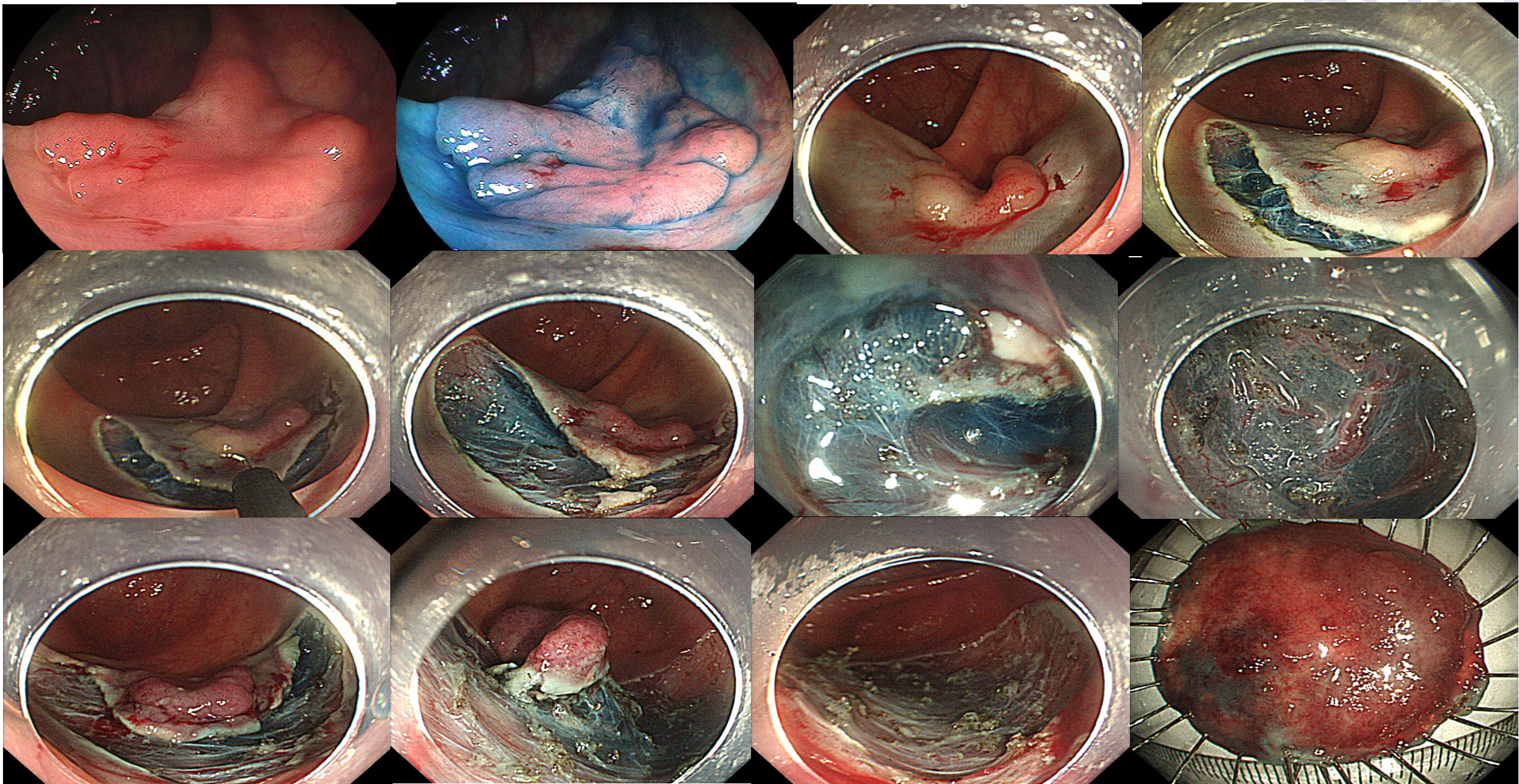
Shinji Tanaka,^{1,2,3,4} Hiroshi Kashida,¹ Yutaka Saito,^{1,2} Naohisa Yahagi,¹ Hiroo Yamano,¹ Shoji Saito,¹ Takashi Hisabe,¹ Takashi Yao,² Masahiko Watanabe,^{2,3} Masahiro Yoshida,^{1,4} Yusuke Saitoh,¹ Osamu Tsuruta,¹ Ken-ichi Sugihara,² Masahiro Igarashi,¹ Takashi Toyonaga,¹ Yoichi Ajioka,² Masato Kusunoki,³ Kazuhiko Koike,⁴ Kazuma Fujimoto¹ and Hisao Tajiri¹

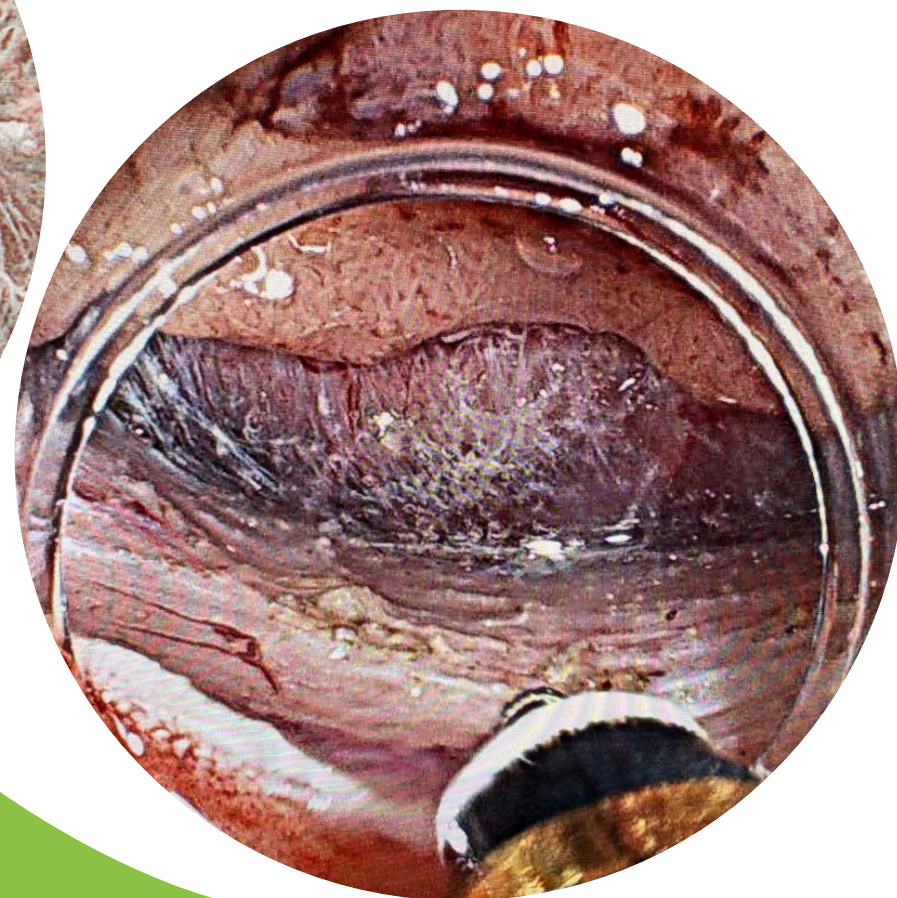
Table 2 Indications for endoscopic submucosal dissection of colorectal tumors

Lesions for which endoscopic en bloc resection is required

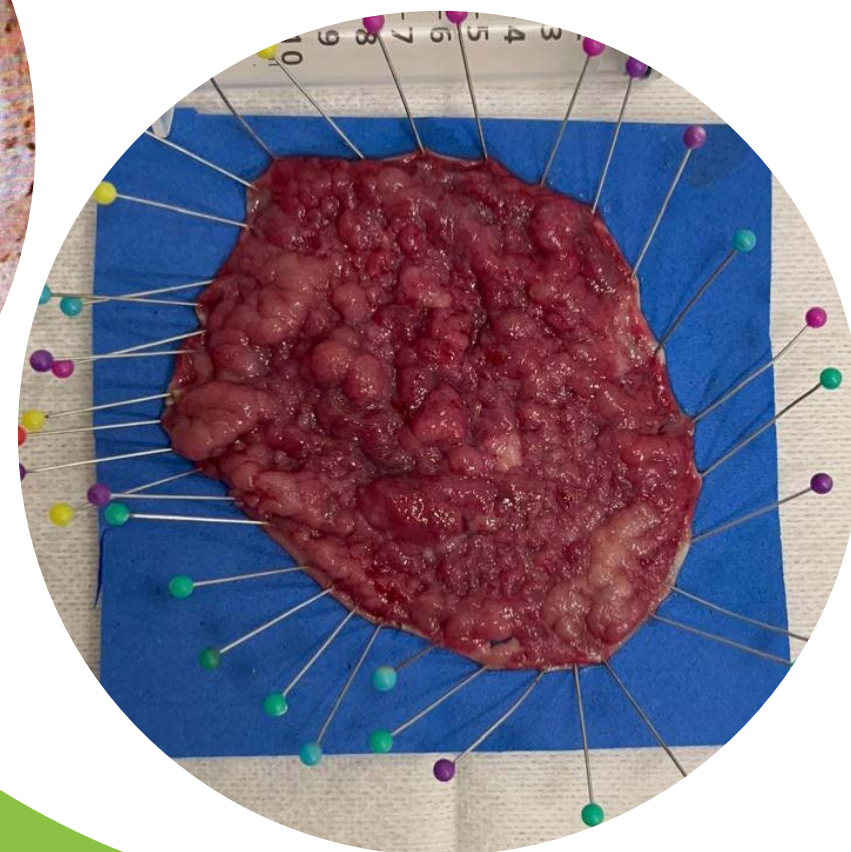
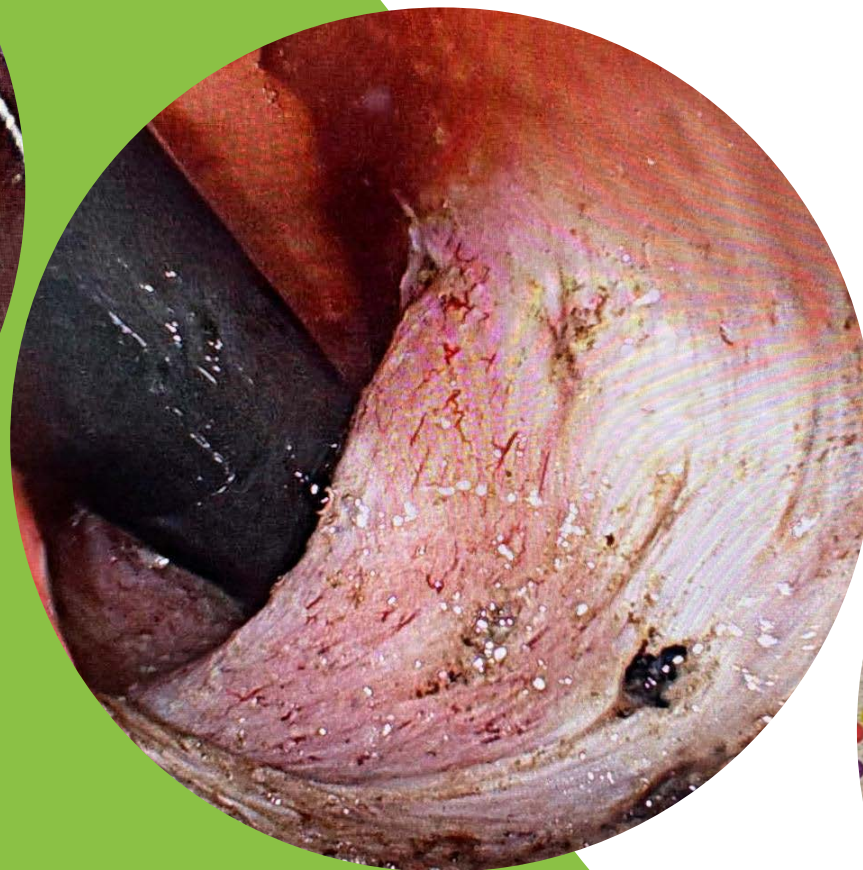
- 1) Lesions for which en bloc resection with snare EMR is difficult to apply
 - LST-NG, particularly LST-NG (PD)
 - Lesions showing a Vi-type pit pattern
 - Carcinoma with shallow T1 (SM) invasion
 - Large depressed-type tumors
 - Large protruded-type lesions suspected to be carcinoma[†]
- 2) Mucosal 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







Cortesia de Rafael Castilho
Pinto



Cortesia de Rafael Castilho
Pinto

Guidelines

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

Shinji Tanaka,^{1,2,3,4} Hiroshi Kashida,¹ Yutaka Saito,^{1,2} Naohisa Yahagi,¹ Hiroo Yamano,¹ Shoichi Saito,¹ Takashi Hisabe,¹ Takashi Yao,² Masahiko Watanabe,^{2,3} Masahiro Yoshida,^{1,4} Yusuke Saitoh,¹ Osamu Tsuruta,¹ Ken-ichi Sugihara,² Masahiro Igarashi,¹ Takashi Toyonaga,¹ Yoichi Ajioka,² Masato Kusunoki,³ Kazuhiko Koike,⁴ Kazuma Fujimoto¹ and Hisao Tajiri¹

Table 3 Perforation rate during procedure in accordance with resection technique

Perforation rate			Author
Polypectomy	EMR	ESD	
—	0%	10.7%	Kobayashi <i>et al.</i> (2012) ⁴⁸
—	0.8%	2.0%	Nakajima <i>et al.</i> (2013) ¹¹¹
0%	0.78%	—	Wada <i>et al.</i> (2015) ¹³¹
—	—	5.5%	Fujishiro <i>et al.</i> (2007) ¹³²
—	—	8.2%	Isomoto <i>et al.</i> (2009) ¹³³

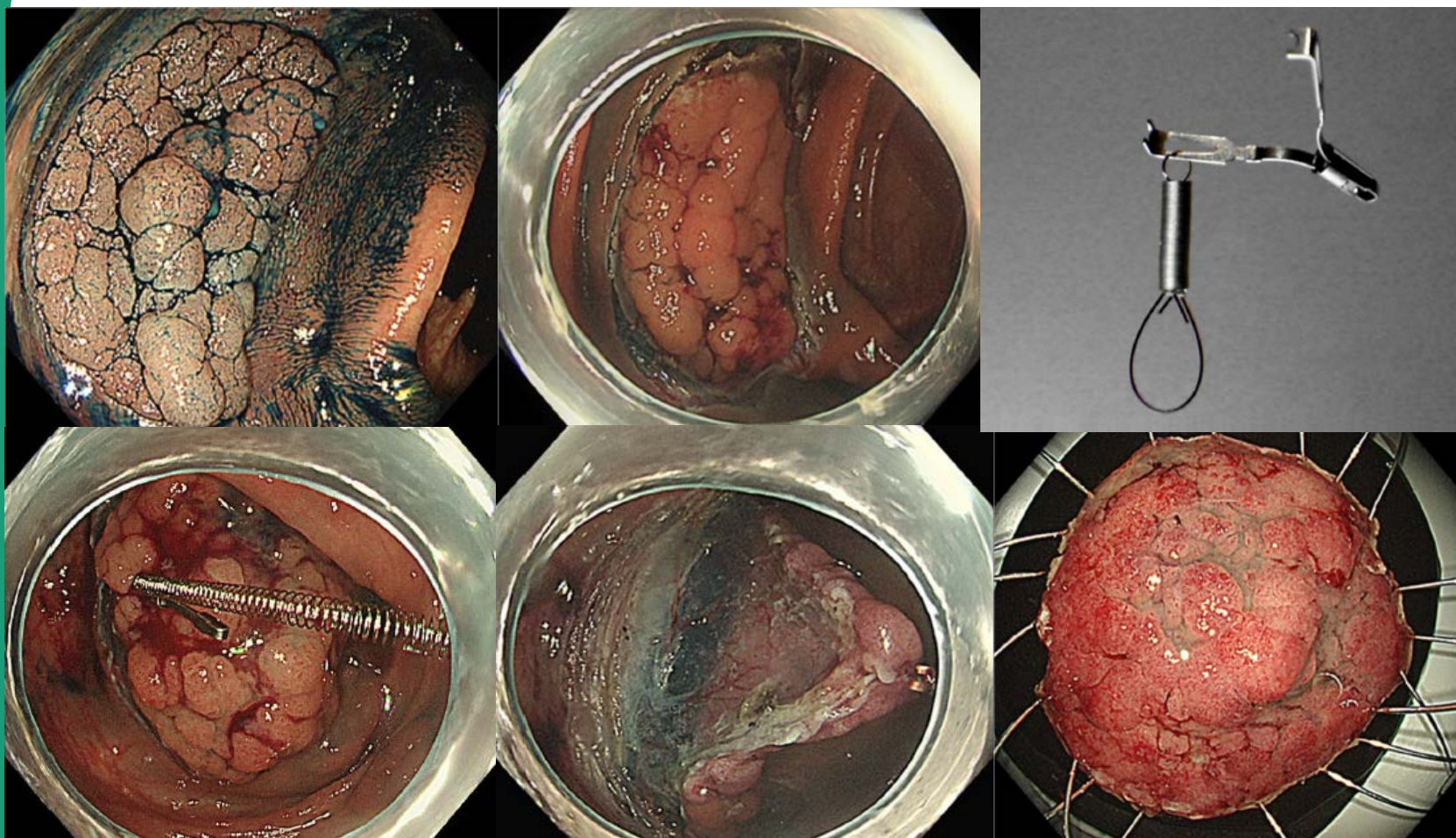
—, no data.
EMR, endoscopic mucosal resection; ESD, endoscopic submucosal dissection.



Article

Effectiveness of S-O Clip-Assisted Colorectal Endoscopic Submucosal Dissection

Haruka Fujinami ^{1,*}, Akira Teramoto ², Saeko Takahashi ², Takayuki Ando ², Shinya Kajiura ³ and Ichiro Yasuda ²





Article

Effectiveness of S-O Clip-Assisted Colorectal Endoscopic Submucosal Dissection

Haruka Fujinami ^{1,*}, Akira Teramoto ², Saeko Takahashi ², Takayuki Ando ², Shinya Kajiura ³ and Ichiro Yasuda ²

Table 2. Overall outcomes.

	CO Group (<i>n</i> = 47)	SO Group (<i>n</i> = 80)	<i>p</i> -Value
Surgery duration, mean ± SD (range), min	73.9 ± 43.5 (31–226)	52.3 ± 21.8 (16–113)	0.0006 *
Lesion area, mean ± SD (range), mm ²	616.8 ± 576.8 (235.6–1507.9)	660.6 ± 333.6 (259.2–1696.4)	0.227
Dissection time, mean ± SD (range), min	49.7 ± 37.1 (17–189)	31.9 ± 16.4 (7–82)	<0.001 *
Dissection speed, mean ± SD (range), mm ² /min	14.8 ± 8.7 (4.1–50.1)	24.4 ± 12.9 (5.5–70.6)	0.0014 *
En bloc resection rate, % (<i>n</i>)	80.9 (38/47)	98.8 (79/80)	<0.001 *
Perforation rate, % (<i>n</i>)	4.3 (2/47)	1.3 (1/80)	0.554
Hemorrhage rate, % (<i>n</i>)	0 (0/47)	2.5 (2/80)	0.530

* A *p* value of < 0.05 was considered statistically significant.



Indications and outcomes of colorectal hybrid endoscopic submucosal dissection: a large multicenter 10-year study

Yuki Okamoto¹ · Shiro Oka¹ · Shinji Tanaka² · Shinji Nagata³ · Masaki Kunihiro⁴ · Toshio Kuwai⁵ · Yuko Hiraga⁶ · Seiji Onogawa⁷ · Takeshi Mizumoto⁸ · Hideharu Okanobu⁹ · Morihisa Akagi¹⁰ · Kazuaki Chayama¹

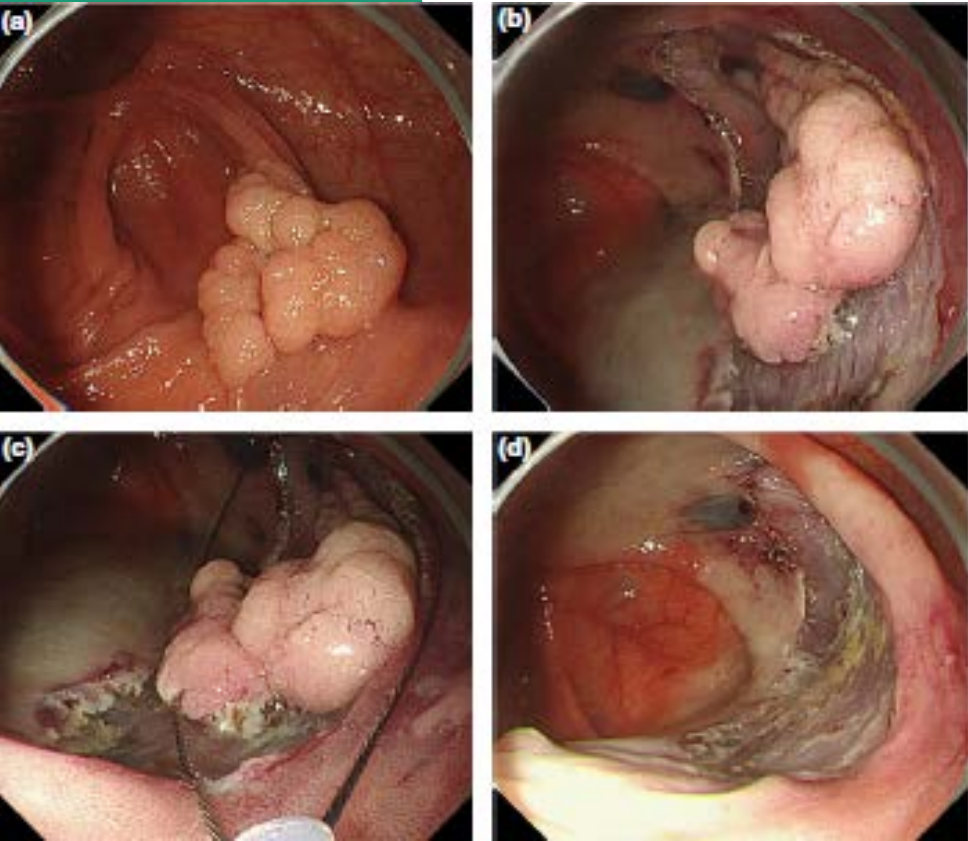


Table 2 A comparison of treatment outcomes between planned and salvage hybrid ESD

Variables	Total	Hybrid ESD		p-value
		Planned N= 56	Salvage N= 116	
Procedure time (min)	63.0 ± 42.7	44.5 ± 26.7	72.0 ± 46.3	< 0.01
En bloc resection	154 (89.5)	53 (94.6)	101 (87.1)	NS
Complete en bloc resection	149 (86.6)	52 (92.9)	97 (83.6)	NS
Delayed bleeding	4 (2.3)	2 (3.6)	2 (1.7)	NS
Perforation (+)	25 (14.5)	0 (0)	25 (21.6)	< 0.01
During submucosal layer dissection	23 (13.4)	0 (0)	23 (19.8)	< 0.01
During snaring	2 (1.1)	0 (0)	2 (1.8)	NS
Delayed perforation	0 (0)	0 (0)	0 (0)	–
Local recurrence	1 (0.6)*	0 (0)	1 (0.9)*	NS
Operator's experience of colorectal ESD	≥ 50 cases	113 (65.7)	34 (60.7)	NS
	< 50 cases	59 (34.3)	22 (39.3)	

*Local recurrence 2 years after treatment was curatively resected with ESD: pTis (tub1), Ly0, V0, HM0, VM0 (%). Hybrid ESD hybrid endoscopic submucosal dissection, NS not significant



EFTR

ENDOSCOPIC FULL-THICKNESS RESECTION



PADLOCK



OVESCO

Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024



RECOMMENDATION

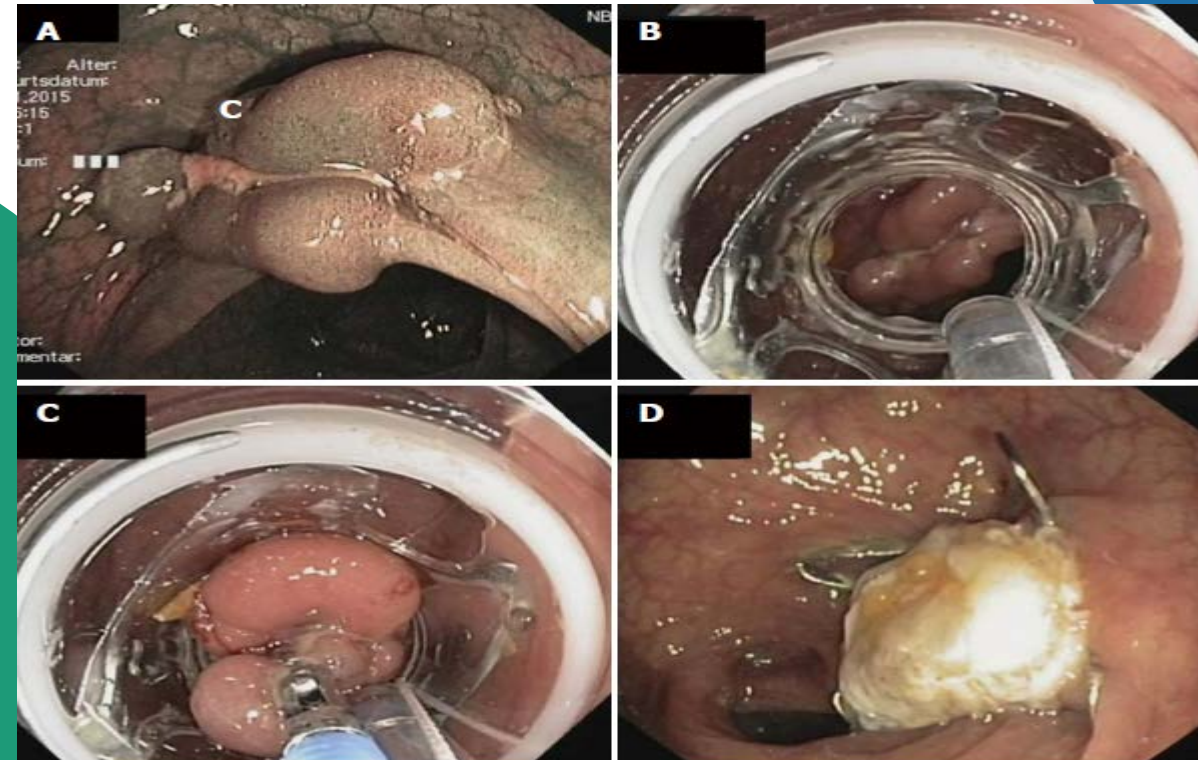
ESGE suggests that EFTR can be considered for endoscopic resection of lesions that otherwise cannot be removed by standard polypectomy, CAST, EMR, or ESD (e.g. nonlifting lesions without signs of submucosal invasion, lesions involving the appendiceal orifice or diverticula).

Weak recommendation, low quality of evidence.

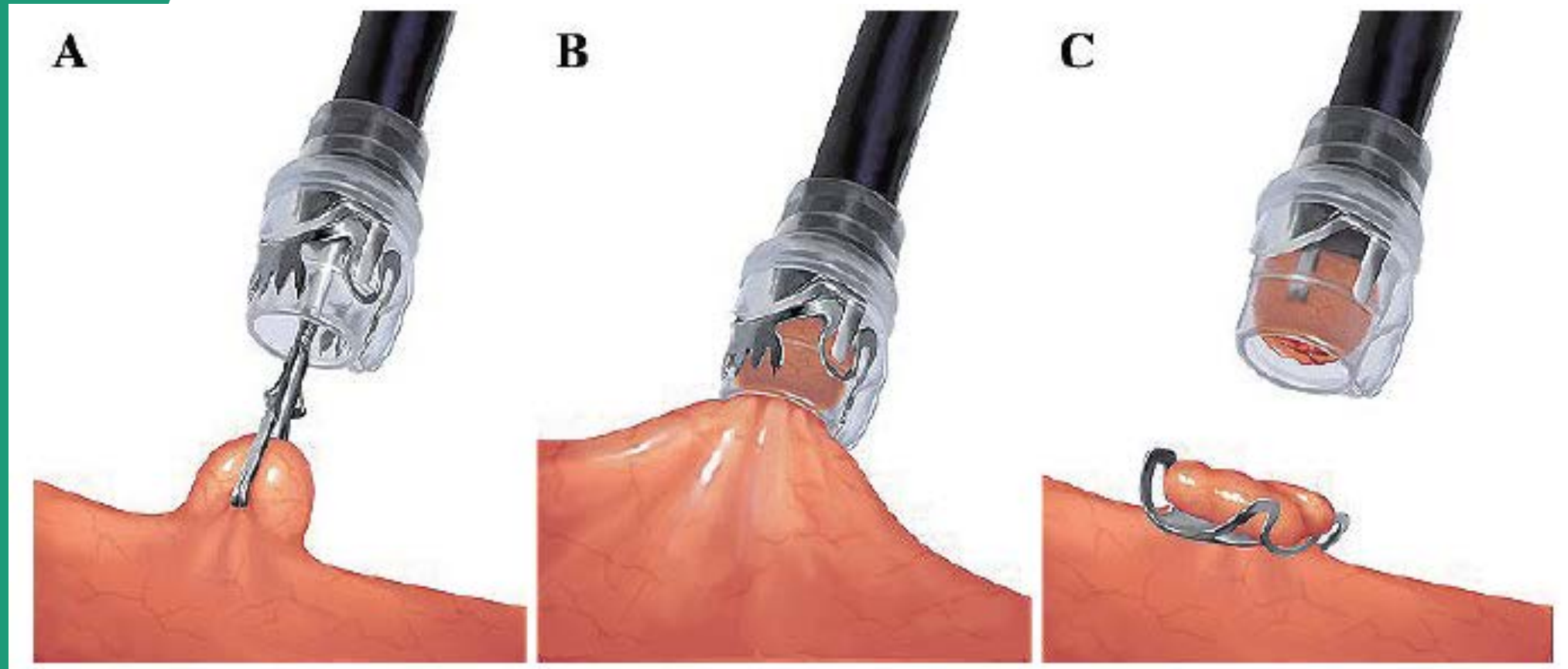
RECOMMENDATION

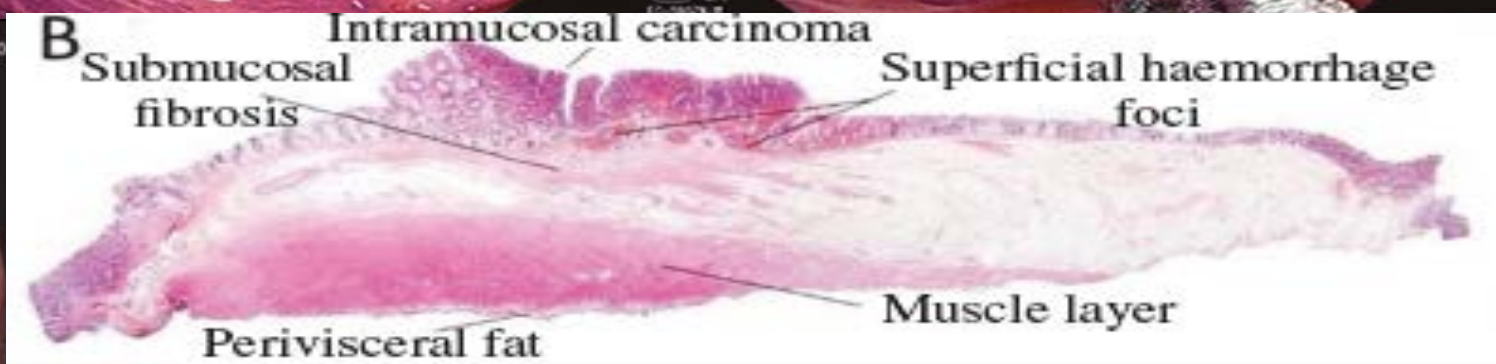
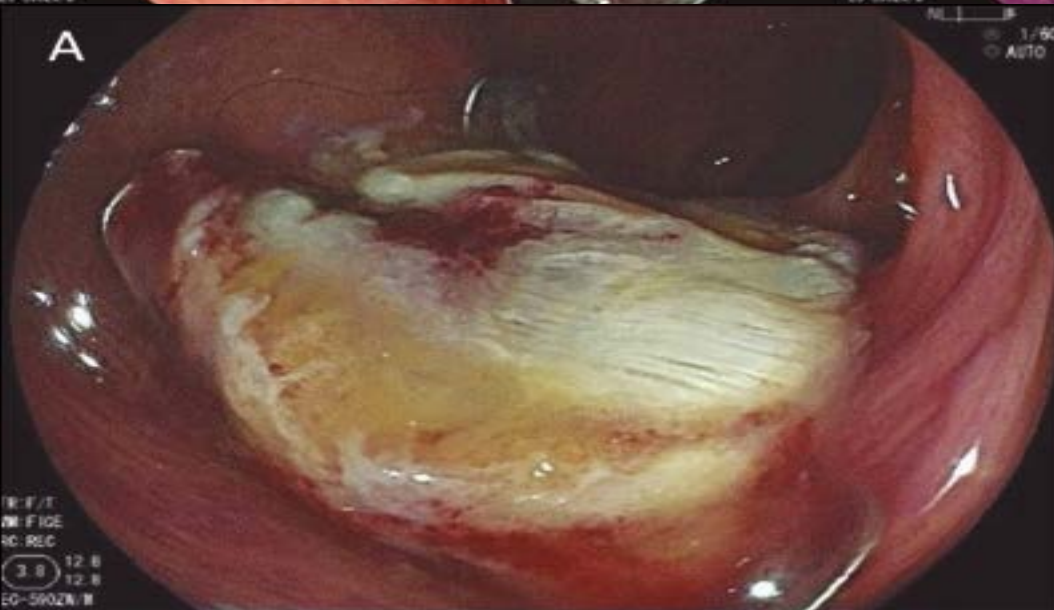
ESGE suggests that EFTR can be considered as a treatment option for residual/recurrent lesions after resection of superficial invasive carcinoma.

Weak recommendation, low quality of evidence.



ENDOSCOPIC FULL-THICKNESS RESECTION





Endoscopic full-thickness resection using a clip non-exposed method for gastrointestinal tract lesions: a meta-analysis

OPEN
ACCESS



Authors

Olaya I. Brewer Gutierrez¹, Venkata S. Akshintala¹, Yervant Ichkhanian¹, Gala G. Brewer¹, Yuri Hanada², Maria P. Truskey³, Amol Agarwal², Gulara Hajiyeva², Vivek Kumbhari¹, Anthony N. Kalloo¹, Mouen A. Khashab¹, Saowanee Ngamruengphong¹



► **Table 3** Subgroup analyses for R0 resection rates.

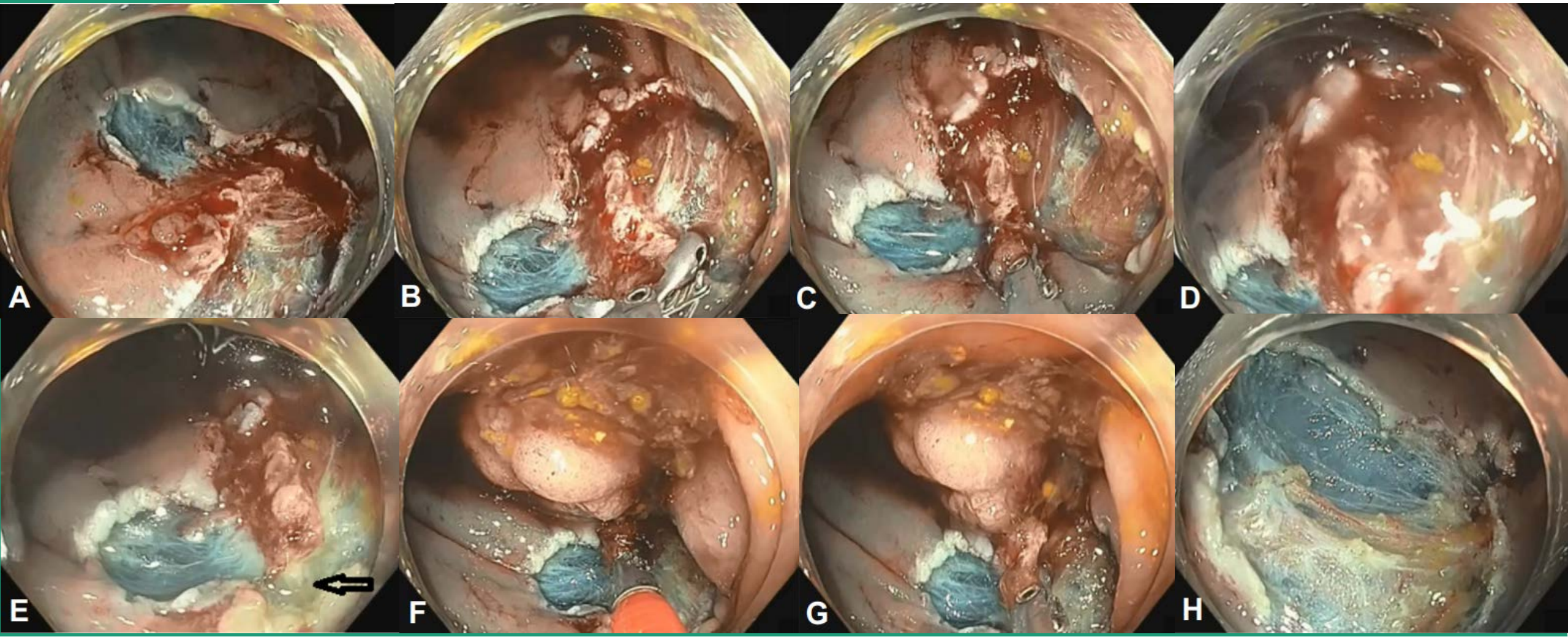
Subgroup	Number of studies included	Number of patients	Pooled rate (95% CI)	I ²	P value
Difficult colorectal polyps	14 [10, 11, 12, 13, 14, 17, 20–26]	324	80 (67–91)	81.83%	<0.01
Colorectal early carcinoma	7 [11, 13, 14, 17, 21, 25]	88	78 (54–95)	68.25%	<0.01
Colorectal SELs	8 [10, 12, 13, 17, 18, 20, 23, 26]	38	100 (95–100)	0	0.99
Upper GI SELs	5 [3, 10, 14, 16, 18, 24]	30	81 (58–97)	47.97%	0.09



AVULSIÓN/ABLACIÓN

Safety and efficacy of hot avulsion as an adjunct to EMR (with videos) 📺

Vinod Kumar, MD,¹ Heather Broadley, MS,² Douglas K. Rex, MD²



Safety and efficacy of hot avulsion as an adjunct to EMR (with videos)

Vinod Kumar, MD,¹ Heather Broadley, MS,² Douglas K. Rex, MD²

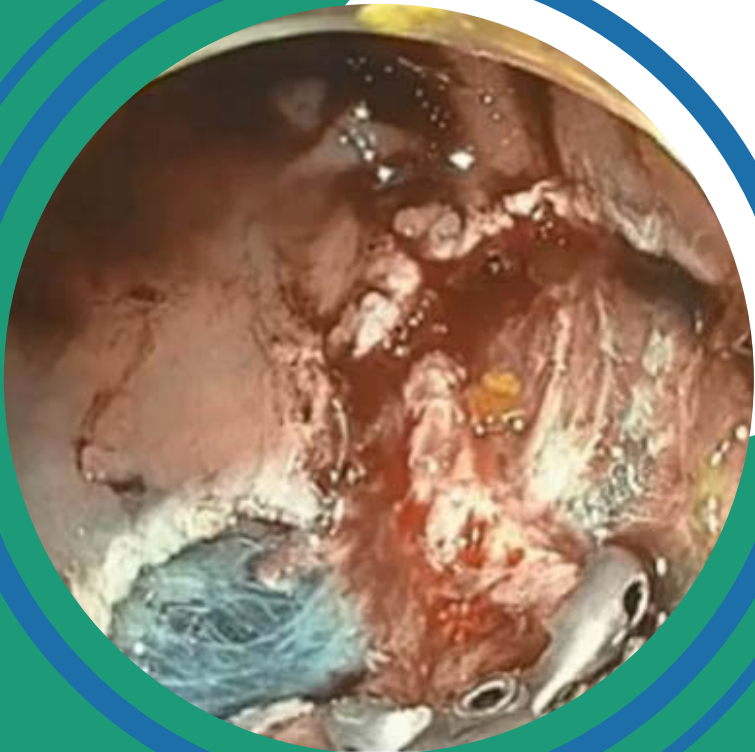


TABLE 2. Comparison of the avulsion and non-avulsion lesions

	Avulsion group	Non-avulsion group	P value
No. of lesions	112	425	
Size of polyp (mm), mean (±SD)	30.55 (±12.70)	24.85 (±13.11)	<.001
Location of polyps			
Right sided	98 (87.5)	341 (80.24)	
Left sided	14 (12.5)	84 (19.76)	.76
Adverse events (total)			
Number with delayed bleeding	6 (5.35)	11 (2.58)	.15
Size of polyp associated with bleeding event (mm), mean (±SD)	44.16 (±21.07)	31 (±11.57)	.2
Post-coagulation syndrome	2 (1.8)	2 (0.47)	.15
Recurrence	17/97 (17.52)	50/312 (16.02)	.76

Impact of margin thermal ablation after cold-forceps avulsion with snare-tip soft coagulation for nonlifting large nonpedunculated colorectal polyps

Francesco Vito Mandarino¹, Timothy O'Sullivan^{1 2}, Julia L Gauci¹, Clarence Kerrison^{1 2}, Anthony Whitfield^{1 2}, Brian Lam¹, Varan Perananthan¹, Sunil Gupta^{1 2}, Oliver Cronin^{1 2}, Renato Medas¹, David J Tate¹, Eric Y Lee¹, Nicholas G Burgess^{1 2}, Michael J Bourke^{1 2}

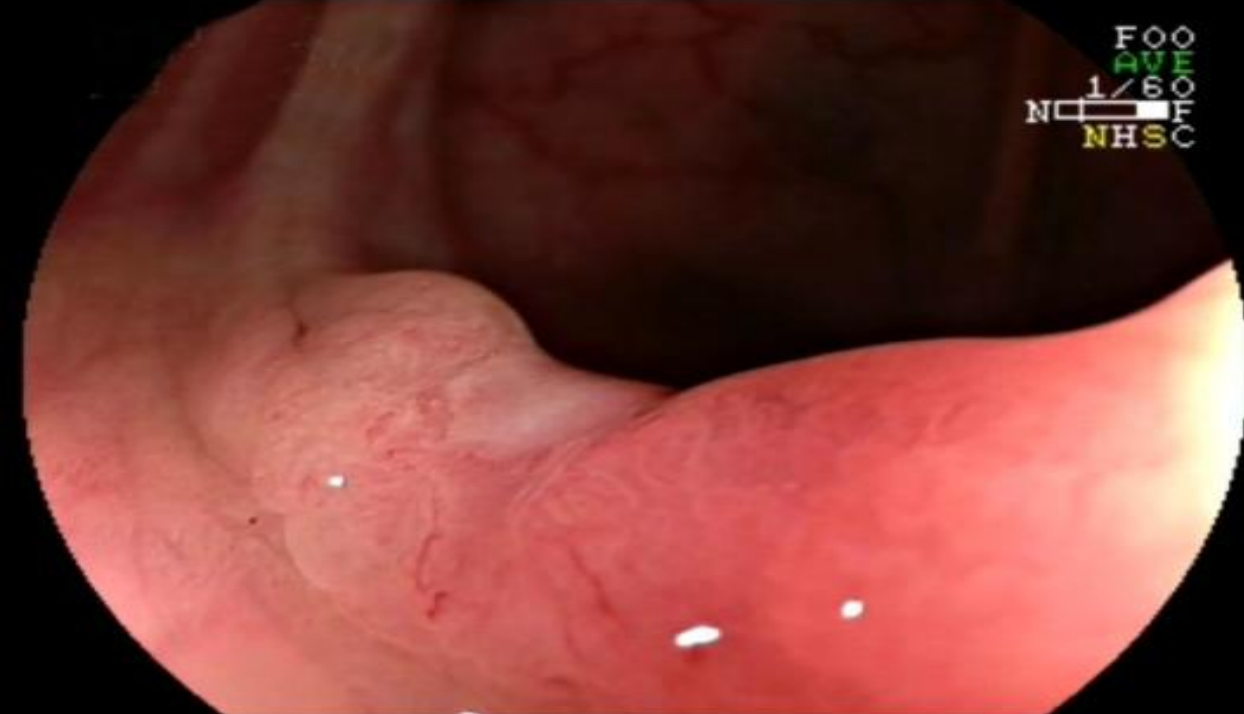
are however a significant limitation. We aimed to compare the outcomes of CAST plus margin thermal ablation (MTA) versus CAST alone for NL-LNPCPs. Prospective observational data on consecutive patients with NL-LNPCPs treated by EMR and CAST at a single tertiary center were retrospectively

period (July 2017-October 2023). The primary outcome was the residual/recurrent adenoma (RRA) rate at first surveillance colonoscopy (SC1). Secondary outcomes included the RRA rate at SC2 and adverse events. Over 142 months, 300 patients underwent EMR and CAST for LNPCP: 103 lesions pre-MTA and 197 with MTA. At SC1 and SC2, recurrence was lower in the MTA cohort compared with the pre-MTA cohort (5.0% vs. 18.8% and 0.8% vs. 10.0%, respectively; both $P < 0.001$). Adverse events were similar between the two cohorts for deep mural injury types III-V (pre-MTA 2.9% vs. MTA 5.6%; $P = 0.29$) and delayed bleeding (pre-MTA 8.7% vs. MTA 7.1%; $P = 0.49$). On multivariate analysis, MTA

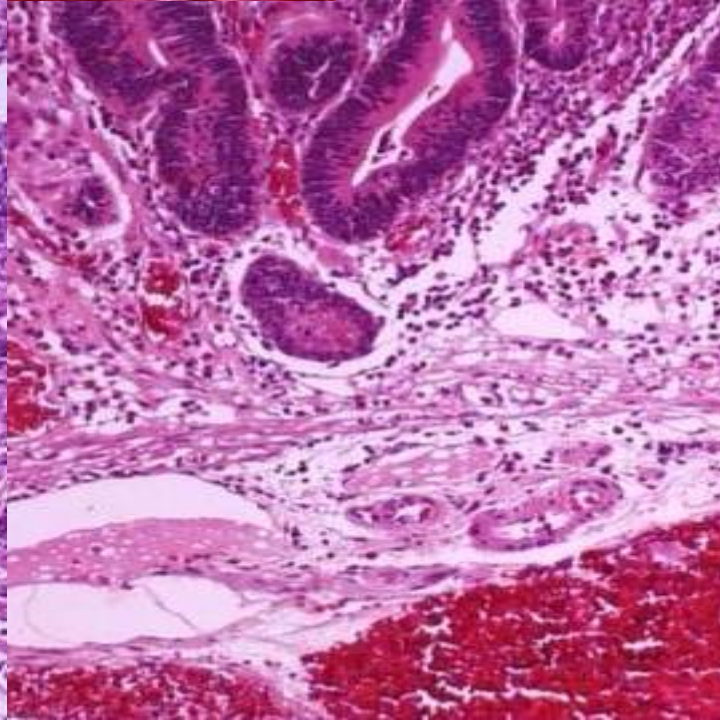
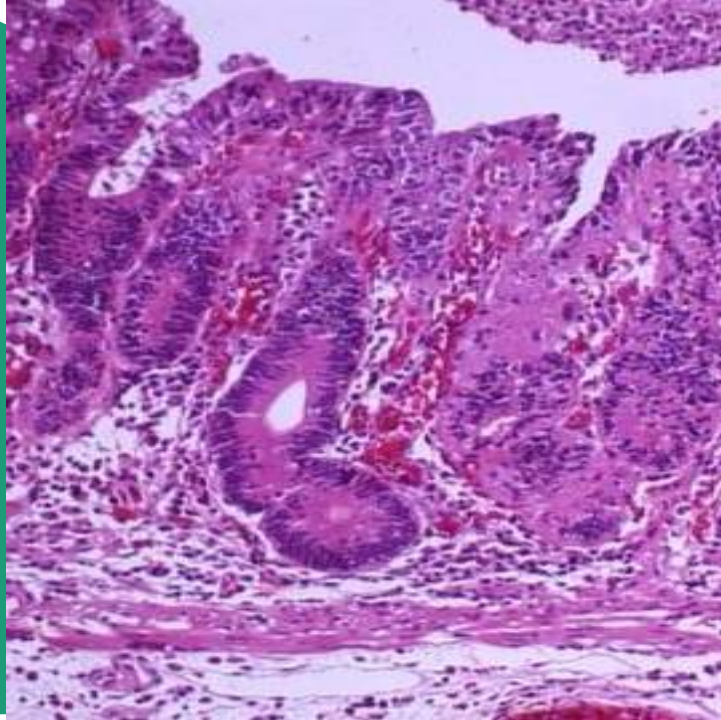
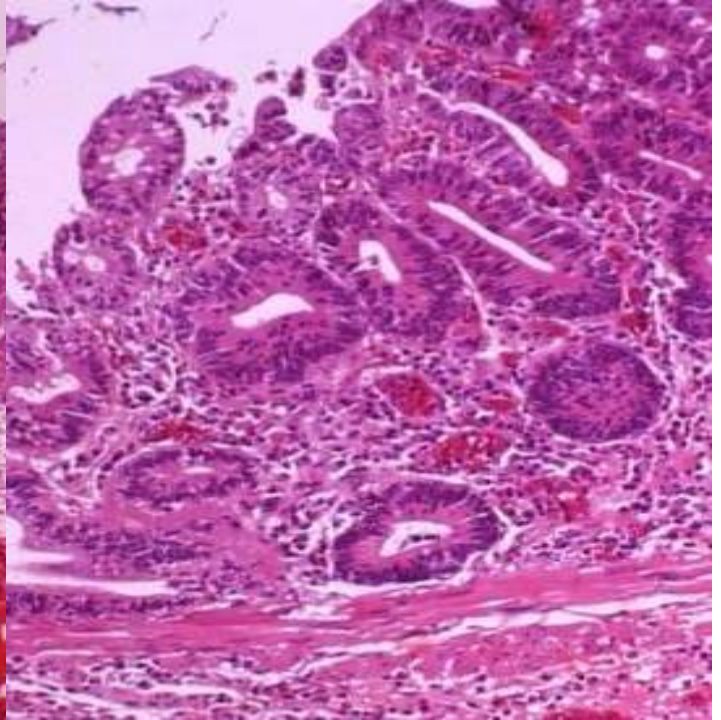
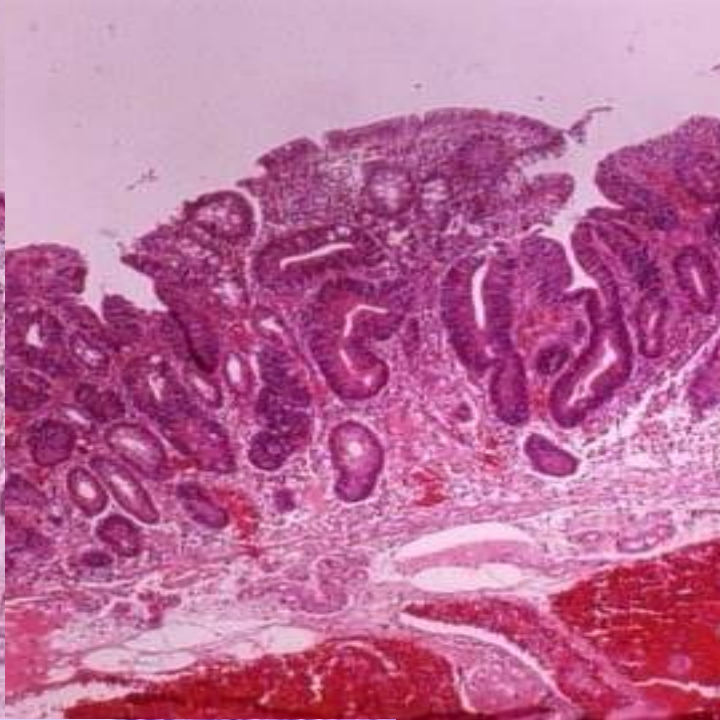
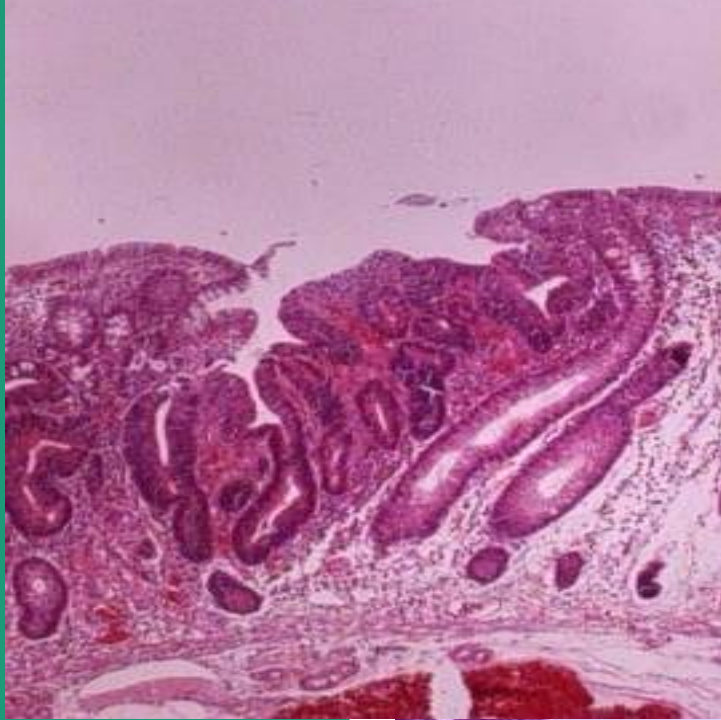
Efficacy and safety of endoscopic resection of large colorectal polyps: a systematic review and meta-analysis

C Hassan,¹ A Repici,² P Sharma,³ L Correale,⁴ A Zullo,¹ M Bretthauer,^{5,6} C Senore,⁷ C Spada,⁸ Cristina Bellisario,⁹ P Bhandari,¹⁰ D K Rex¹⁰

- ✓ 50 estudios: 6442 pacientes - 6779 lesiones
- ✓ 14% de los pacientes fueron enviados directamente a cirugía sin ningún intento de resección endoscópica, debido a un aspecto endoscópico sugestivo de invasión submucosa

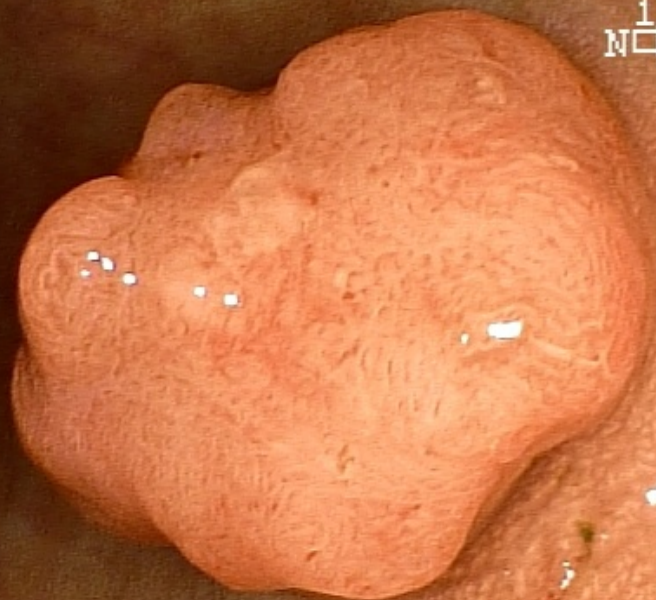






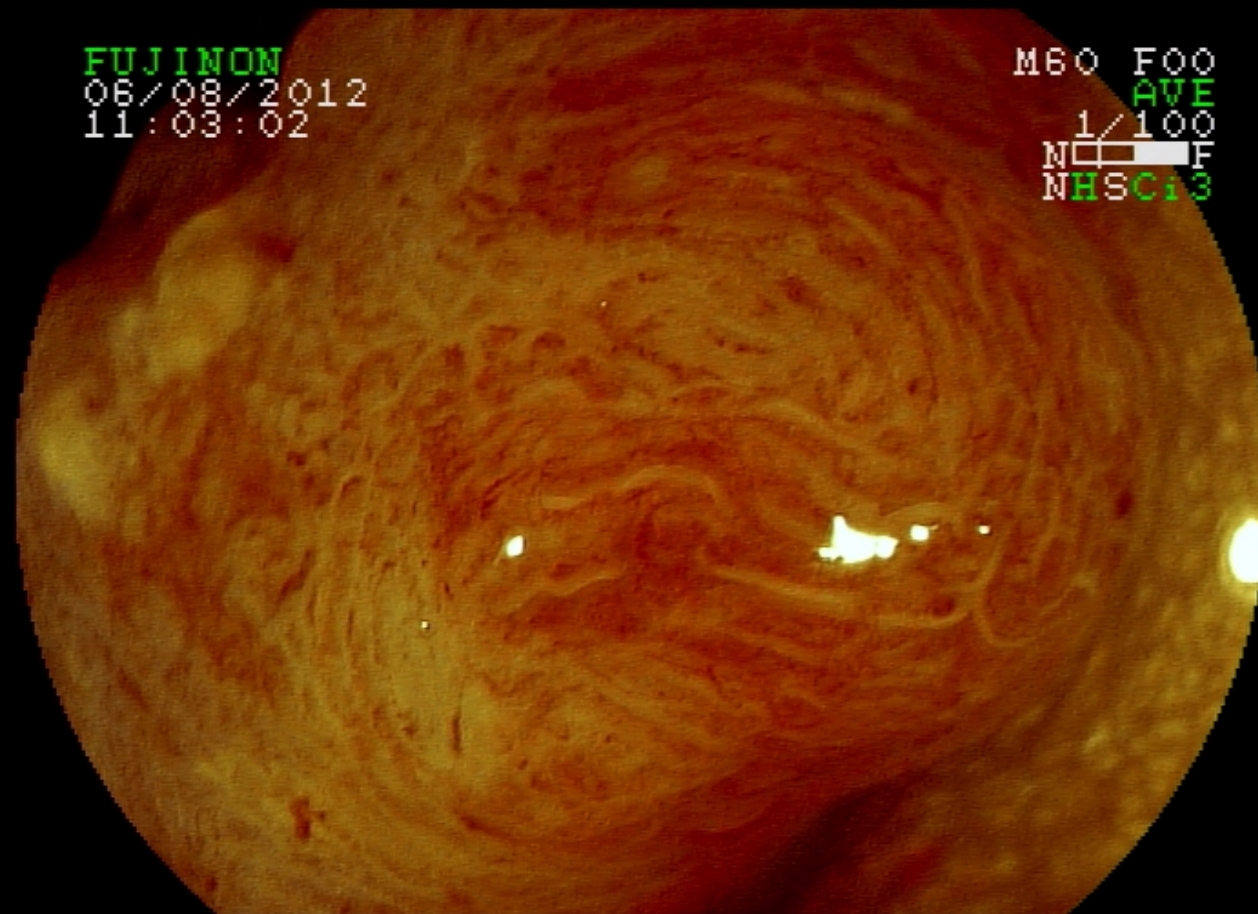
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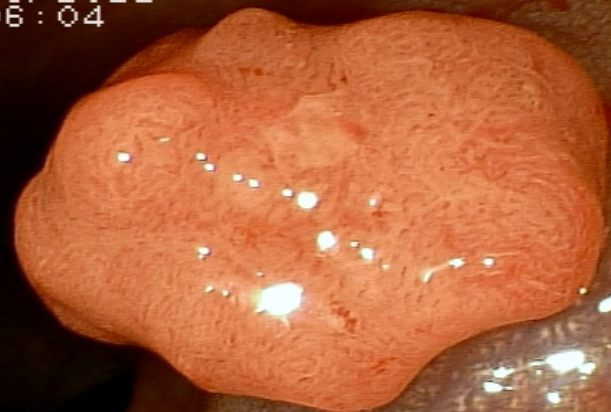
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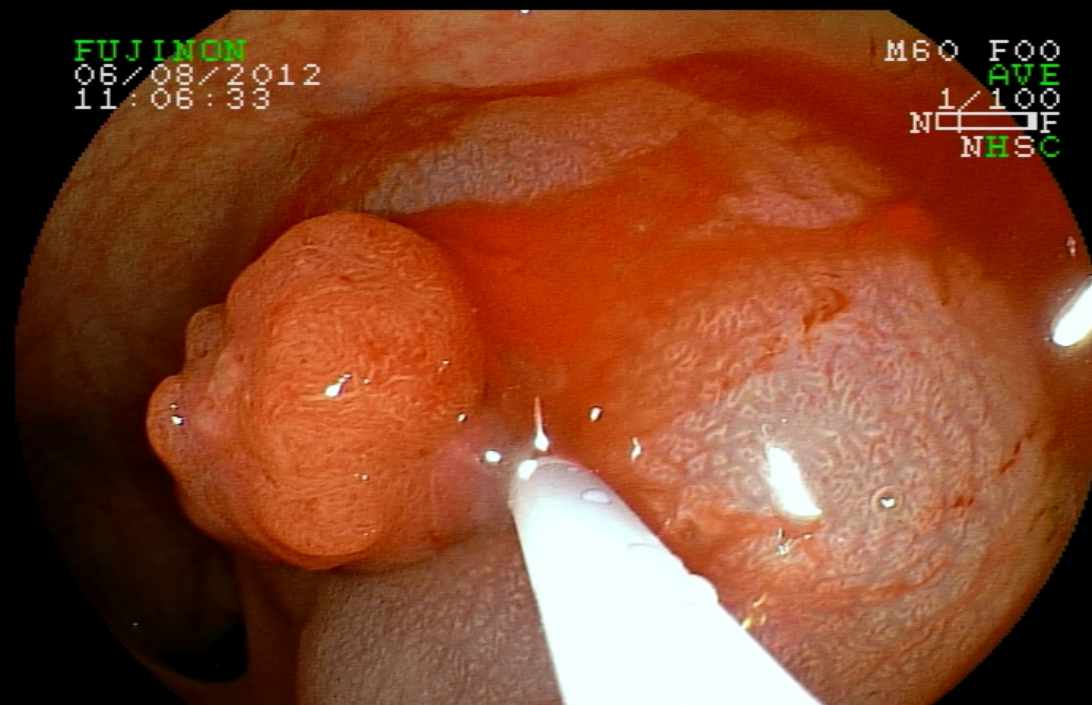
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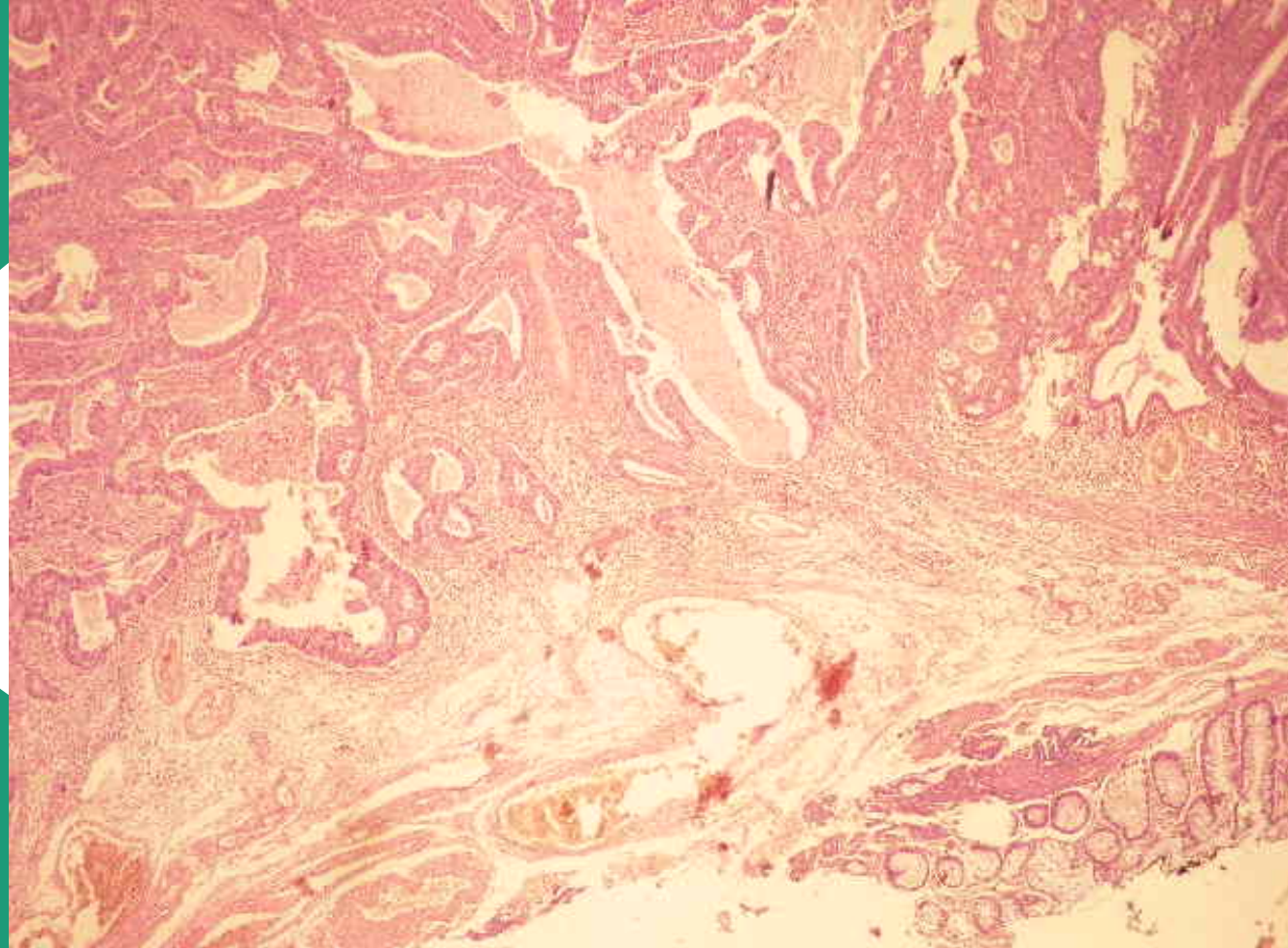
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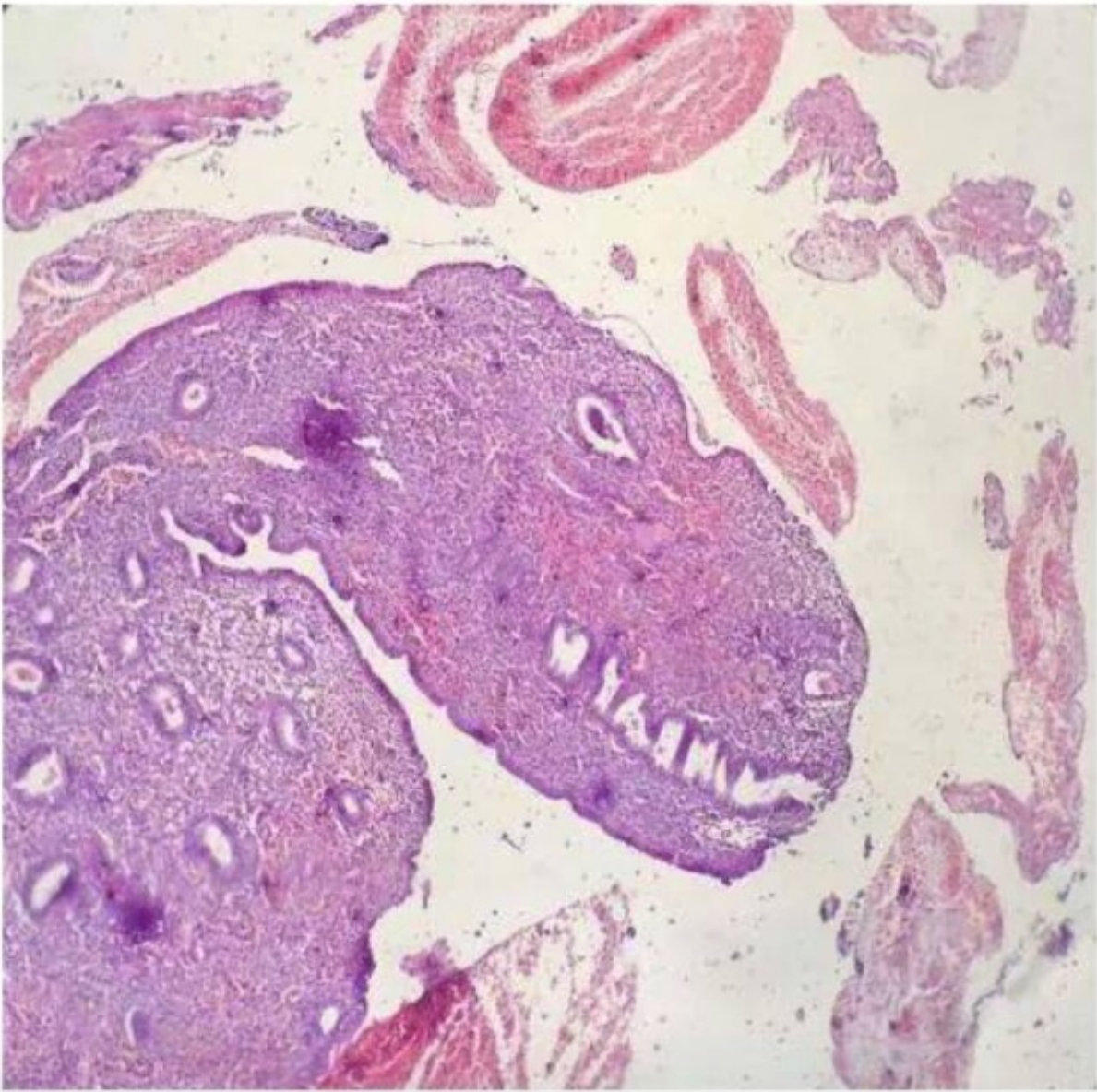
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- ADENOCARCINOMA MODERADAMENTE DIFERENCIADO EM ADENOMA VILOSO DE ALTO GRAU (DISPLASIA MODERADA A ALTA), COM INVASÃO PARA SUBMUCOSA (0,655 MILÍMETROS = 655 MICRÔMETROS).
- AUSÊNCIA DE INVASÃO ANGIOLINFÁTICA.
- MARGENS CIRÚRGICAS LATERAIS E PROFUNDA LIVRES.



Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024

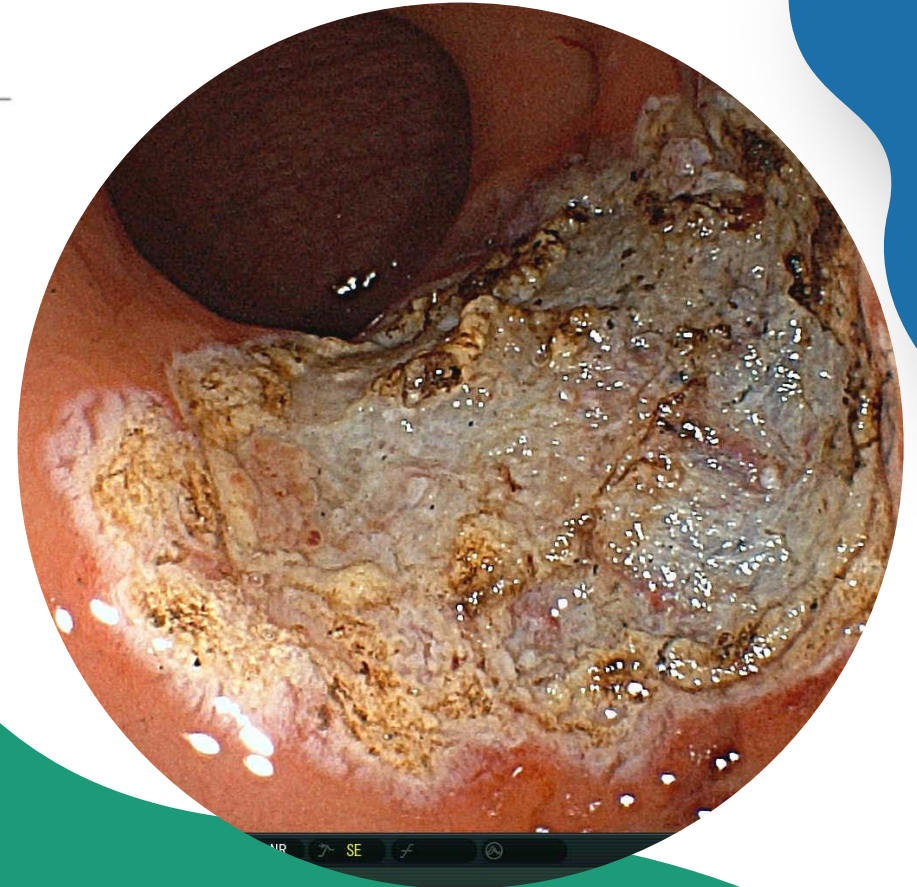


RECOMMENDATION

ESGE recommends that the majority of colonic and rectal lesions can be effectively removed in a curative way by standard polypectomy and/or by EMR.
Strong recommendation, high quality of evidence.

RECOMMENDATION

ESGE recommends that polyps without characteristics of deep submucosal invasion should not be referred for surgery, without consultation with an expert endoscopy center for evaluation for polypectomy/EMR/ESD.
Strong recommendation, moderate quality of evidence.



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