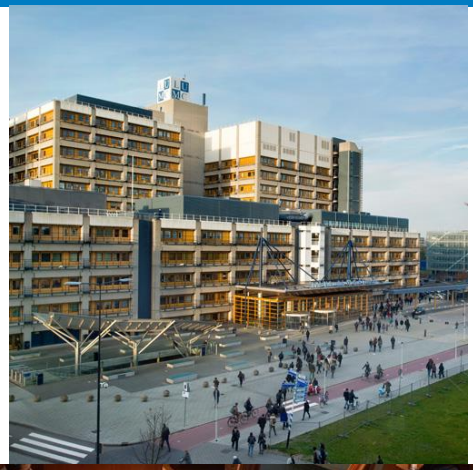
Leids Universitair
Medisch Centrum

Perforatie na poliepectomie

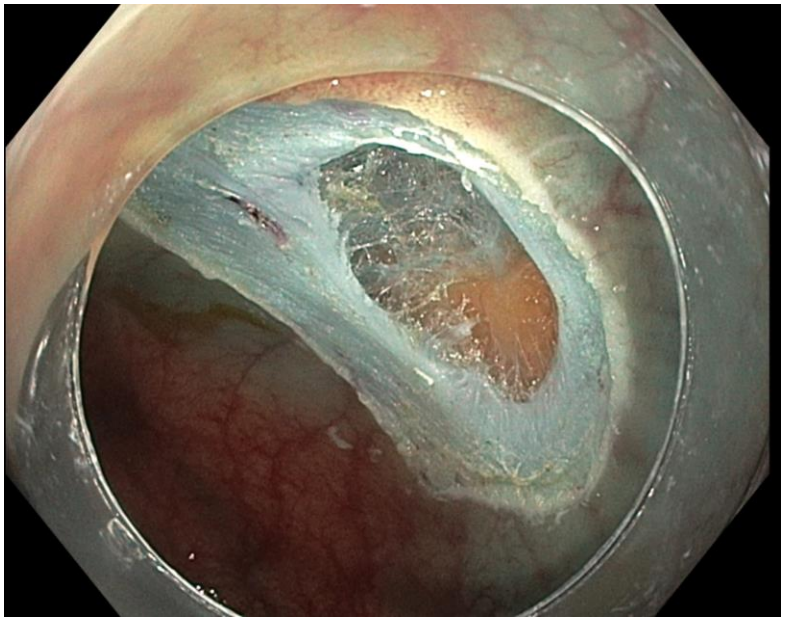
Spoedeisende MDL zorg



Jurjen Boonstra

LEIDEN

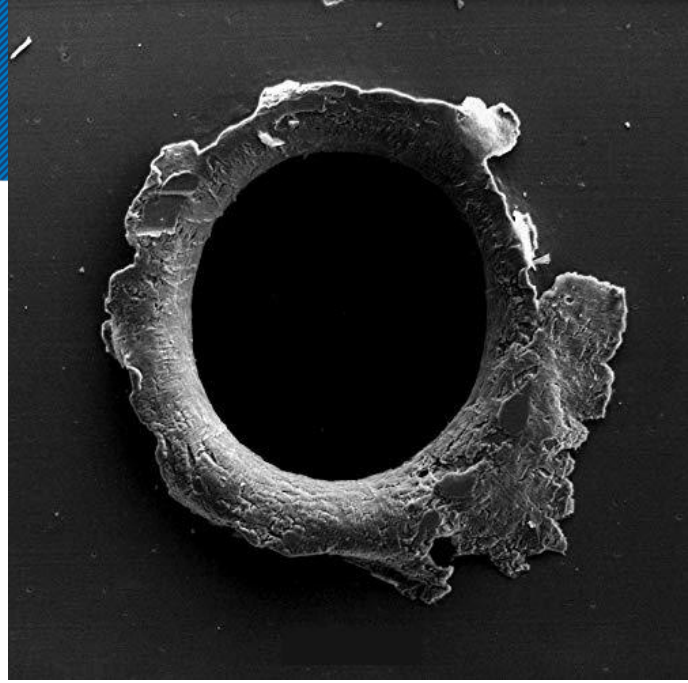
Casus



Hoe classificeert u dit type spierletsel na poliepectomie?

A. Sydney classification Type I
B. Sydney classification Type II
C. Sydney classification Type III
D. Sydney classification Type IV

Inhoud



Historie

Incidentie

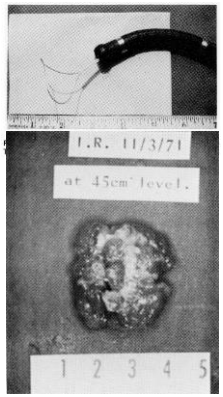
Casus 1 Classificatie van murale schade
Sydney classification

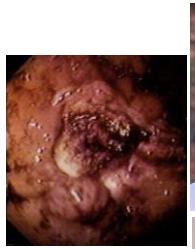
Casus 2 Als classificatie lastig is door bloeding en slecht zicht
Diagnostiek/follow-up

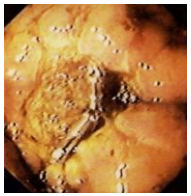
Casus 3 Wat te doen bij grote perforaties
Chirurgie en uitkomsten

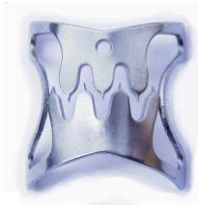
Conclusies

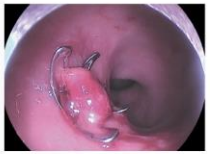
Historie



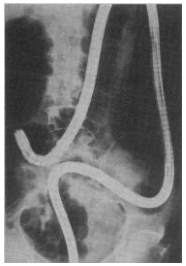


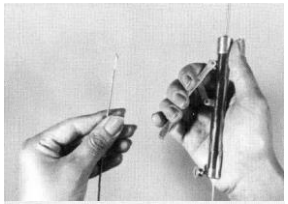


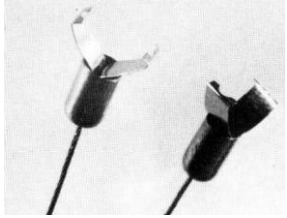


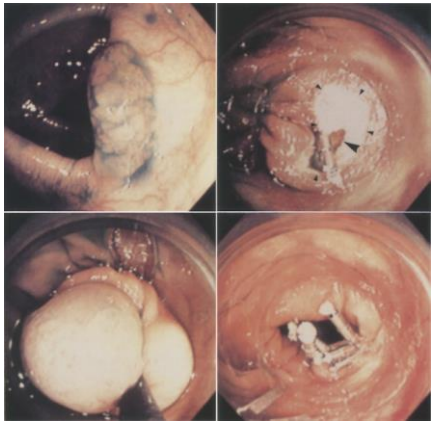


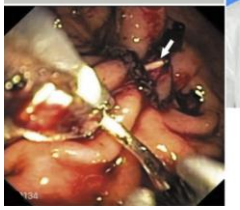
1957 1971 1975 1993 1997 2007 2011









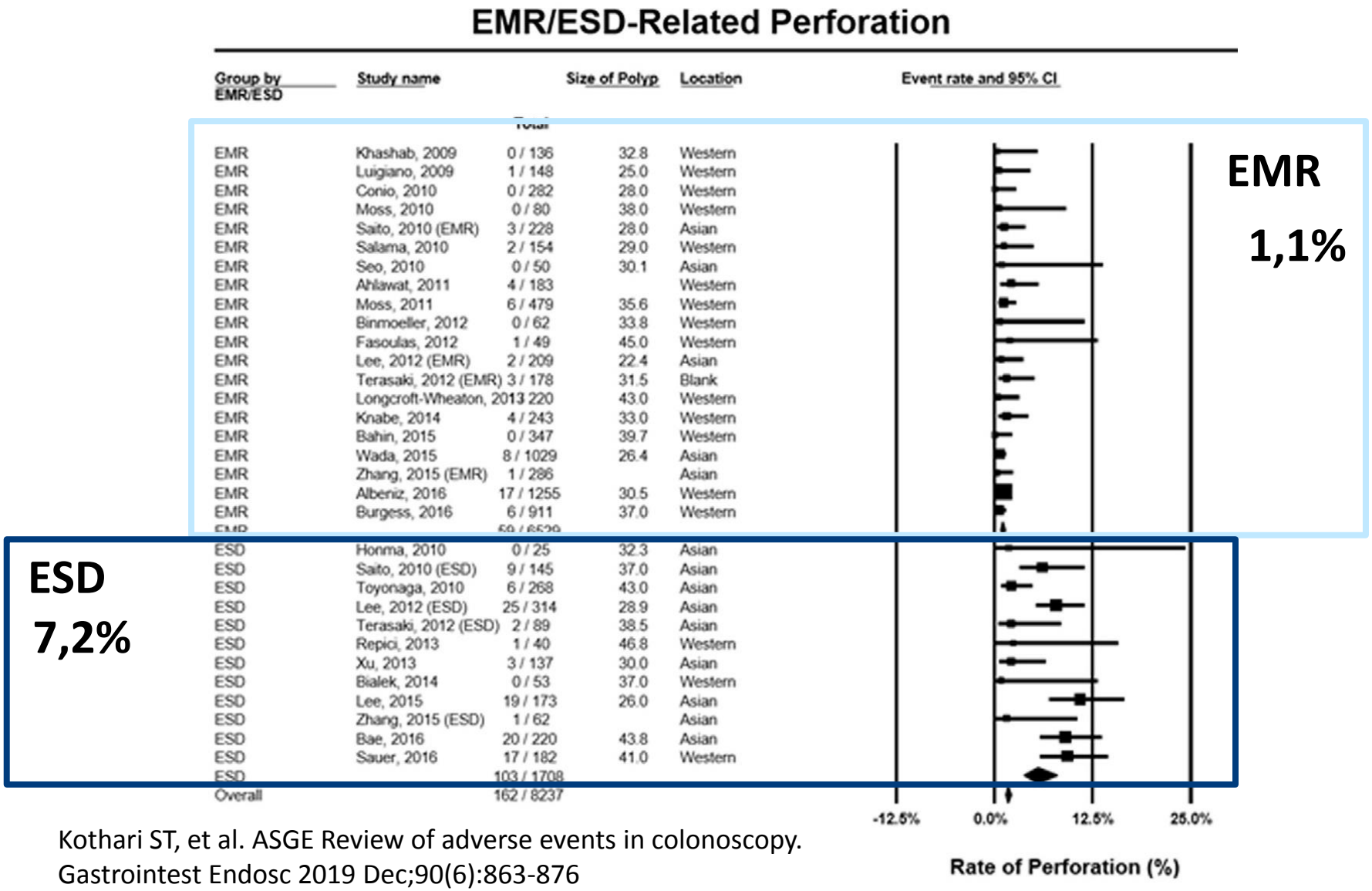


Incidentie van perforaties na poliepectomie

	Heldwein et al. [22], 2005	Gondal et al. [14], 2003	Levin et al. [21], 2006	Sieg et al. [23], 2001
Type of study	Prospective	Prospective	Retrospective	Retrospective
No. of polypectomies	3976	2208	11 083	14 249
Percentage of polyps larger than 1cm	50	19	38	39
Percentage of patients with > 1 polyp	35.6	6.5	49.3	–
No. of perforations	26	6	12	9
Perforations/polypectomies	1/153	1/368	1/923	1/1583
	0,65%	0,27%	0,10%	0,06%

Panteris V et al. Colonoscopy perforation rate, mechanisms and outcome: from diagnostic to therapeutic colonoscopy Endoscopy 2009; 41: 941–951

Perforatie risico na EMR/ESD grote poliep



Kothari ST, et al. ASGE Review of adverse events in colonoscopy. Gastrointest Endosc 2019 Dec;90(6):863-876

Risicofactoren voor een perforatie tijdens poliepectomie

Risicofactoren

Rechtszijdig colon (dunnere colon wand)

Poliep grootte

Ervaring van scopist

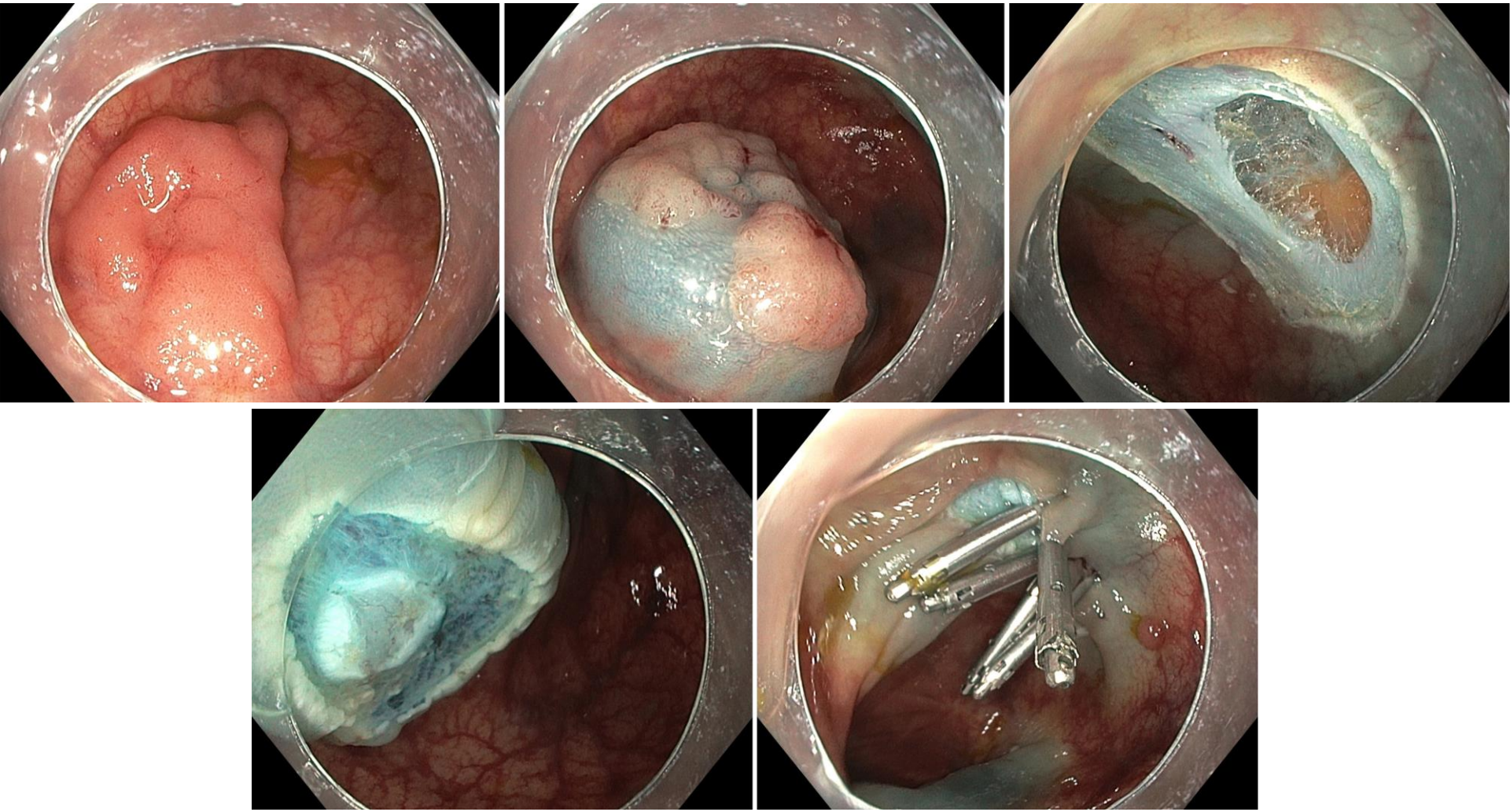
Table 1 [illegible] full colonoscopies.

Location	Logistic regression models, odds ratio (95%CI)	
		Perforation (sessile polyps only) (Model 4)
Rectum		
Sigmoid	Distal colon	1.00
Descenc	PCxC	2.65 (0.16 – 42.71)
Splenic f	Cecum	12.19 (1.24 – 119.5)[2]
Transver	Log size*	2.02 (0.60 – 6.84)
Hepatic	Pedunculated	N/A
Ascendi	Pseudo R^2	8.5%
Cecum	(Log likelihood)	(– 31.52)
Total		

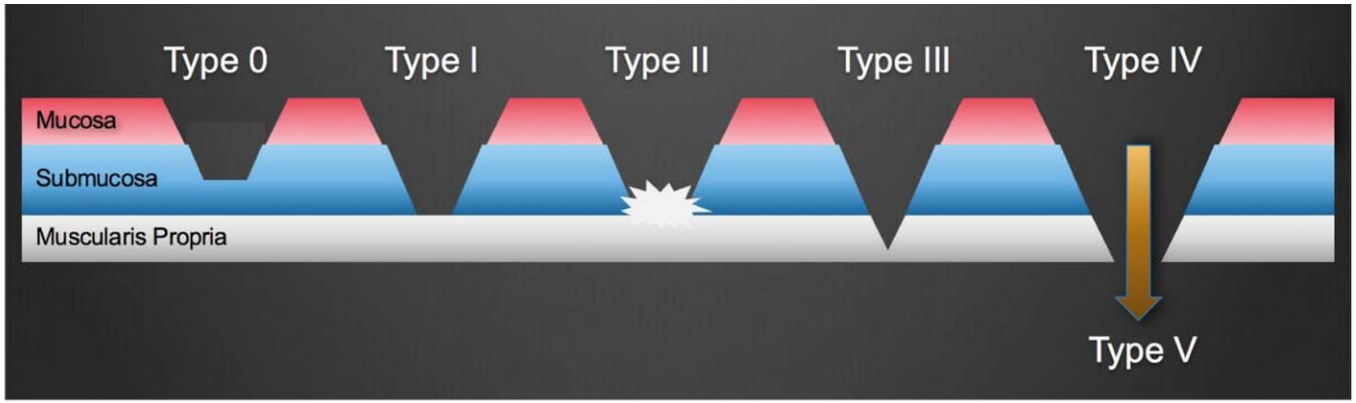
Rutter MD, et al. Risk Factors for Adverse Events Related to Polypectomy in the English Bowel Cancer Screening Programme. Endoscopy 2014 Feb;46(2):90-7.

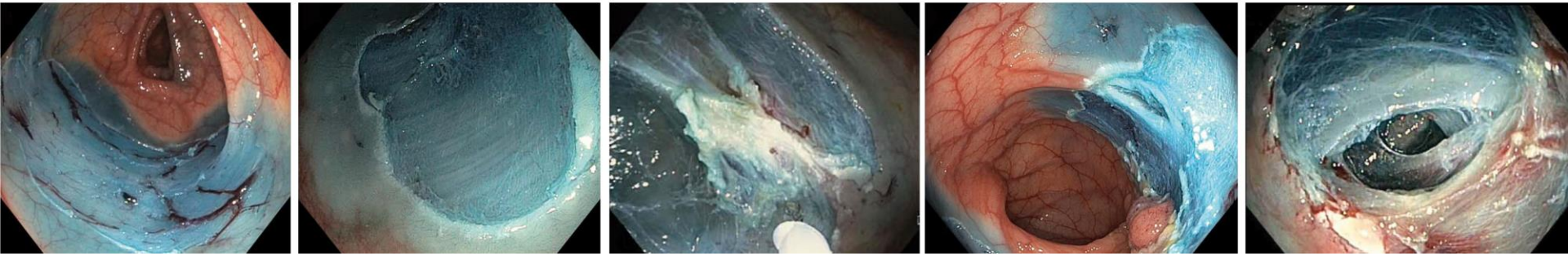

BE CAREFUL! I'M BLACK BELT
IN ENDOSCOPY!!
Zz
Zz
ASTER

Casus 1



Sydney classification

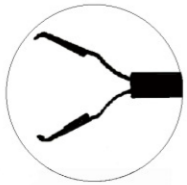




Burgess NG, et al. Deep mural injury and perforation after colonic endoscopic mucosal resection: a new classification and analysis of risk factors
Gut 2017 Oct;66(10):1779-1789.

Verschillende hemoclips

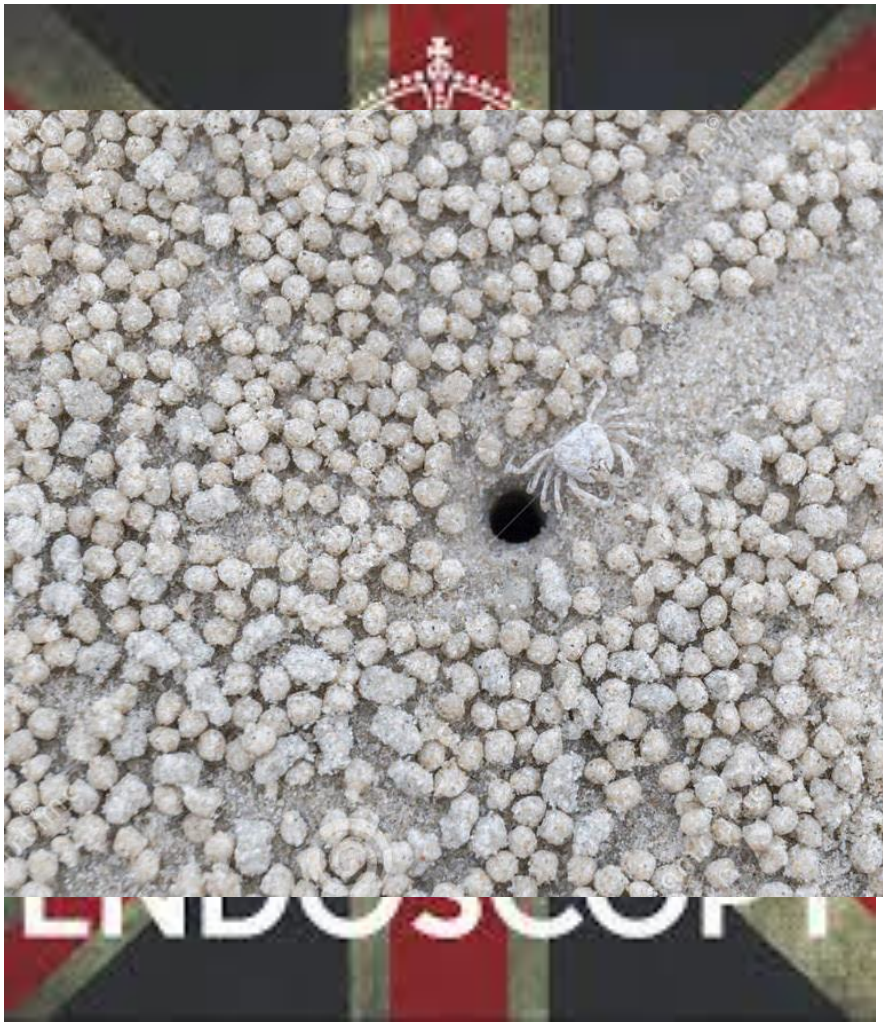
Supplementary file 1: Overview of TTS clips

Clip	Quick Clip Pro	Quick Clip 2	Resolution clip	Instinct clip	Hemoclip	Chinese hemoclip	DuraClip	SureClip
								
Brand	Olympus, Tokyo Japan	Olympus, Tokyo Japan	Boston Scientific, Natick MA	Cook Medical, N USA	Life Partners Europe, Bagnelot, France	Zhuji Pengtian Medical Instrument Co., Zhejiang, China	Conmed, NY, USA	Micro-Tech Endoscopy, MI, USA
Release year	2002	2005	2003	2011	2017 ?	2016	2016	2018
Opening span	11 mm	9 mm (long: 11 mm)	11 mm	16 mm	9/11/13/16 mm	8/11/16mm	11 mm or 16 mm	11 mm or 16 mm
360° rotatable	✓	✓	-/ ✓ (new version Resolution 360 is fully rotatable)	✓	✓	✓	✓	✓
Repositionable	✓ (up to 5 times)	-	✓ (up to 5 times)	-	✓ (Also offers the 'One drop'clip' which is not repositionable)	✓	✓ (unlimited)	-
Average duration of retention	?	Average 9.4 days on normal mucosa. 1-3 weeks on ulcerative mucosa	4 weeks - 180 days 4.2% retention at first FU (3-6 months)	8.6% retention at first FU (3-6 months)	?	?	?	?

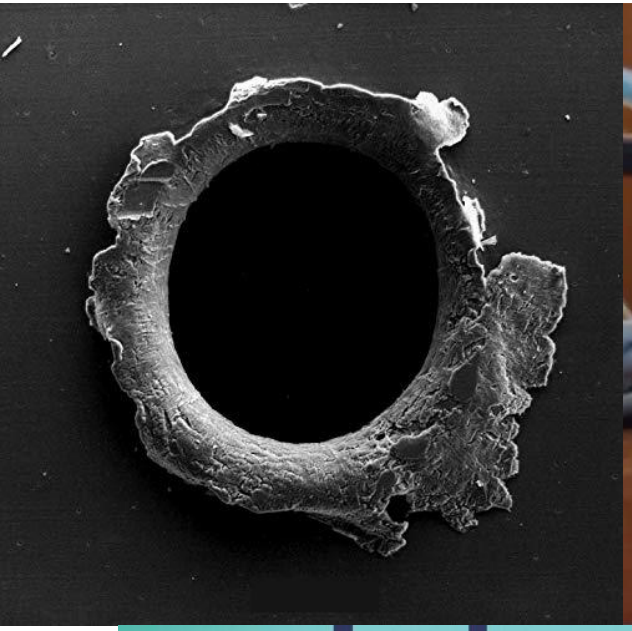
- All clips, except for the QuickClip2, are compatible with standard MRI with a static magnetic field of 3.0 Tesla or less and a maximum spatial magnetic gradient of 1600 Gauss/cm or less.
- All clips in the table are ready-to-use. In addition, Olympus also offers the EZ clip, which is not ready to use. The clip applier costs €40 and can be used to place multiple clips within one person before throwing it away. EZ clips cost €10, so the more clips are needed in one session, the cheaper the price per placement.
- Prices are approximations and may not reflect the exact prices due to price variations.
- Excreted clips are disposed of via the sewage system, where it gets filtered out of the water together with other metal remnants.

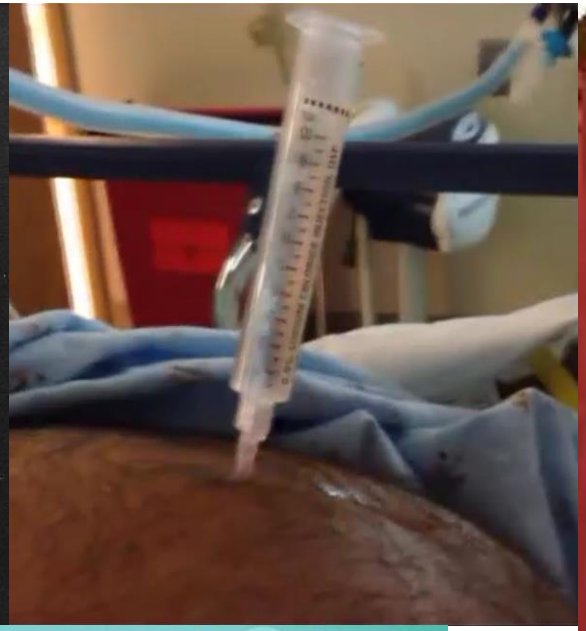
Turan AS, et al. Clips for managing perforation and bleeding after colorectal endoscopic mucosal resection. Expert Review of Medical Devices 2019, 16:6, 493-501

Wat te doen bij perforatie?

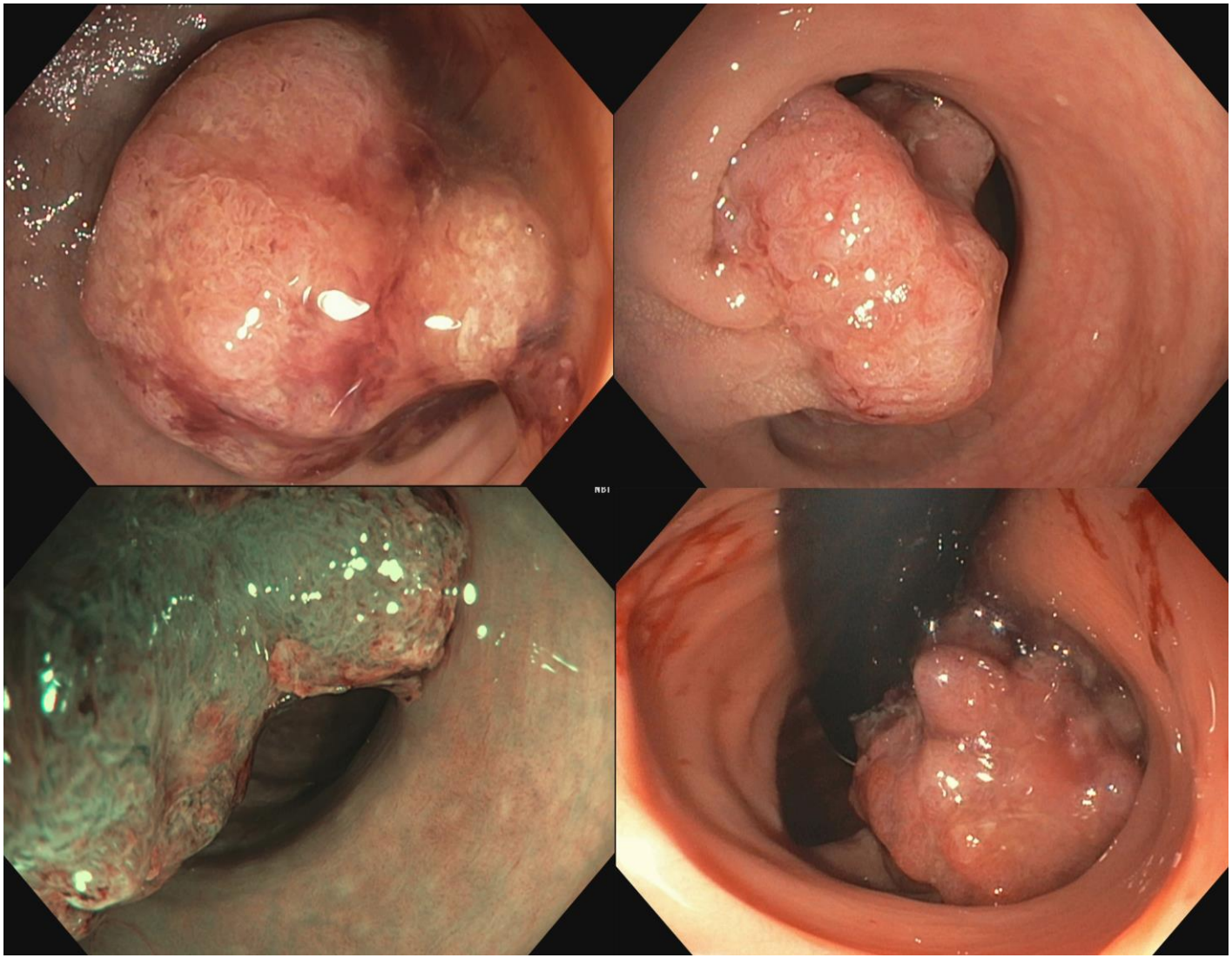


Wat te doen bij perforatie?

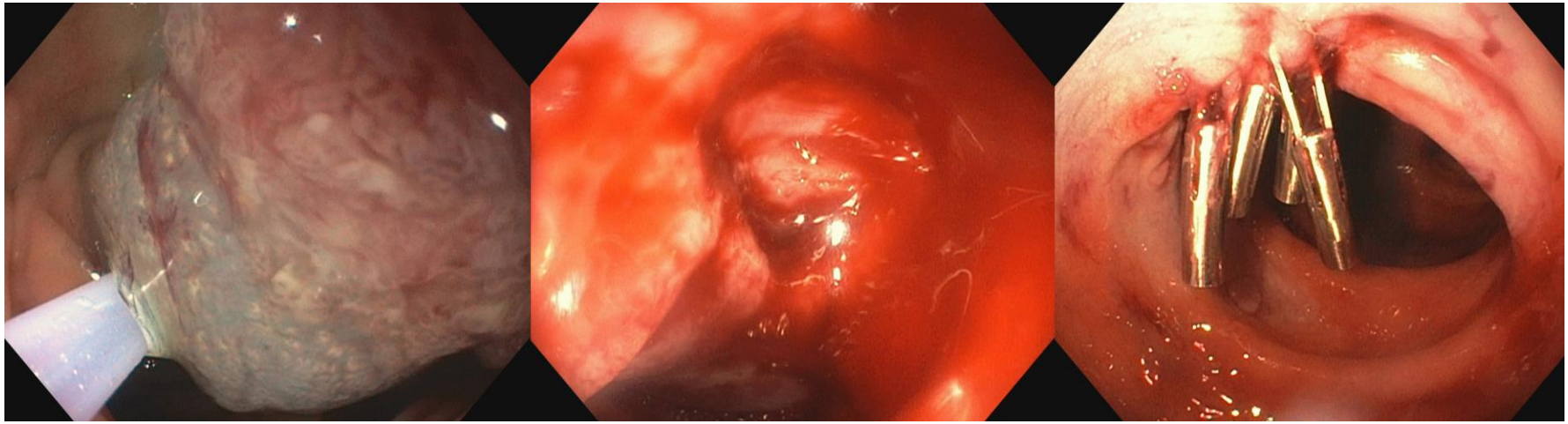




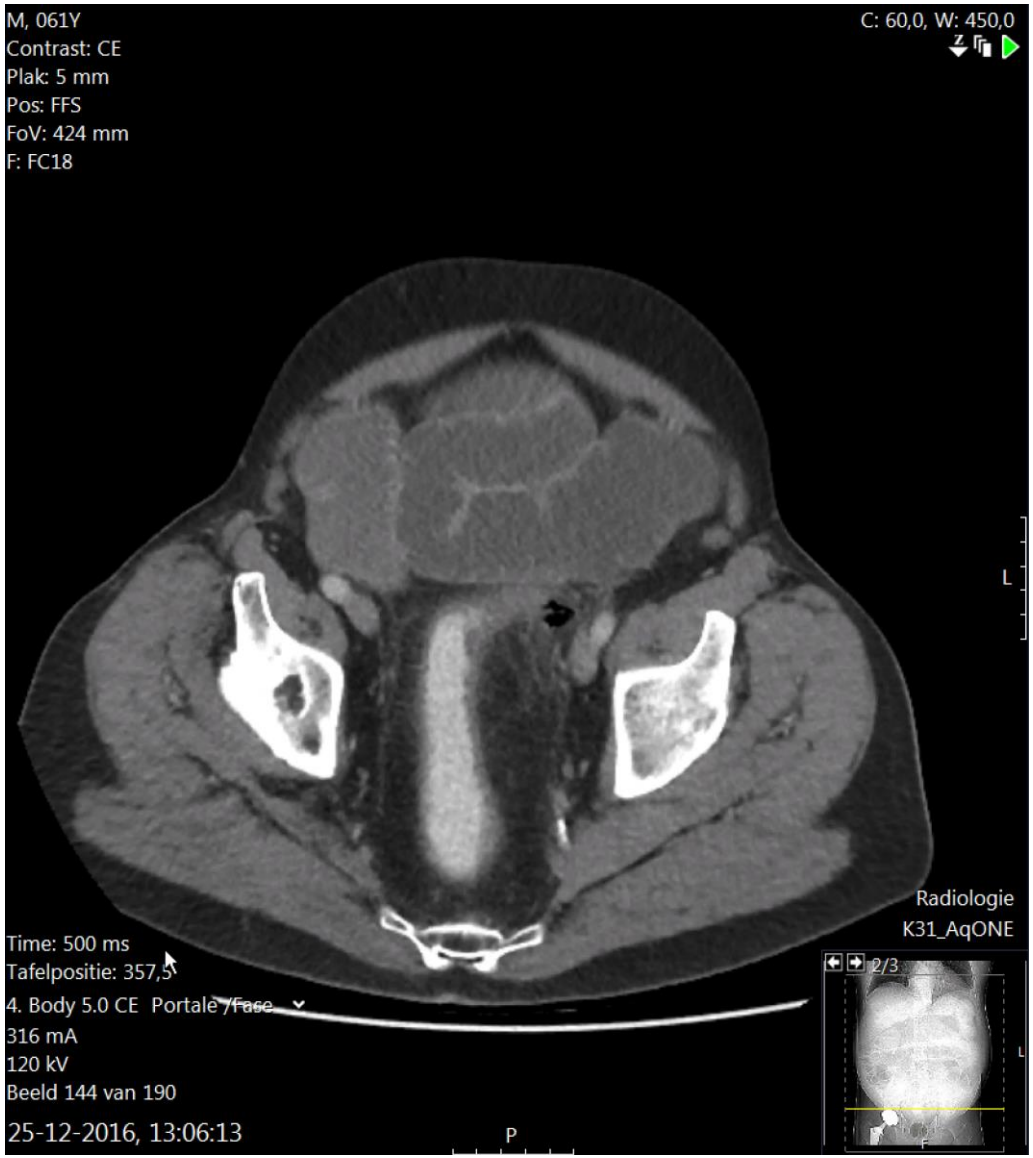
Casus 2



Casus 2 Als classificatie lastig is..



Casus 2 Vervolg (video)



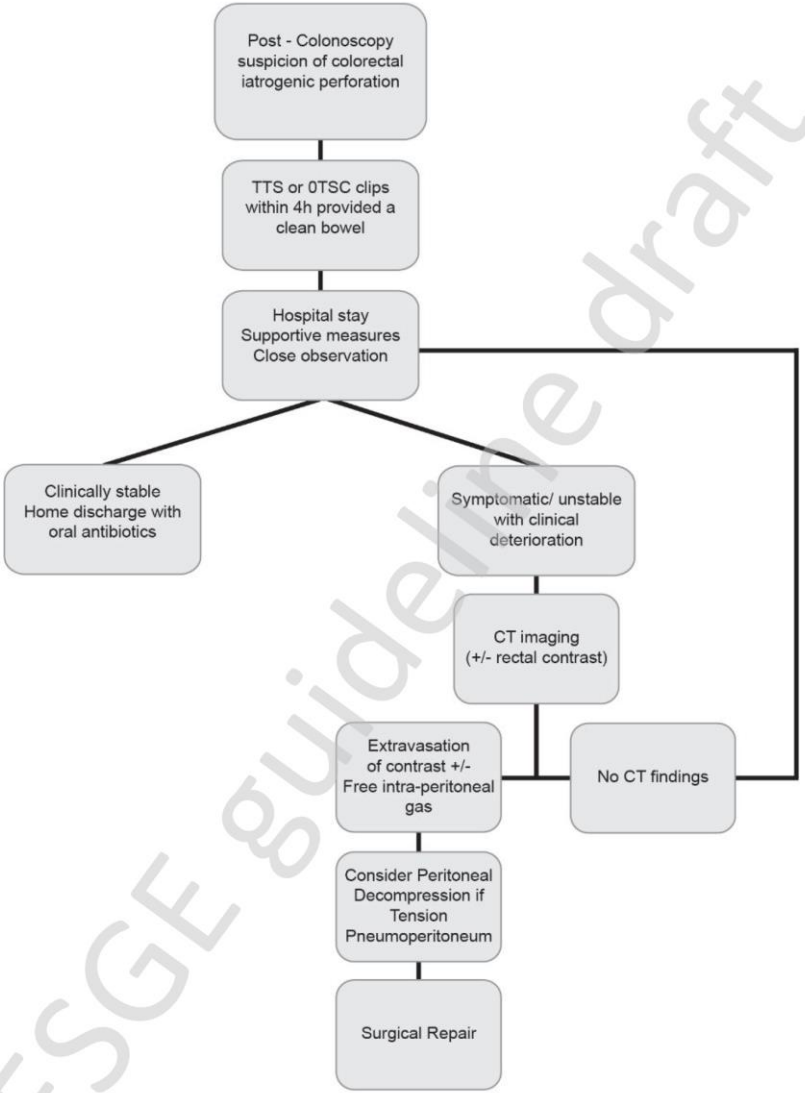
Conservatieve behandeling na perforatie

Close monitoring

Start met antibiotica

Adequate beeldvorming
CT-abdomen met luminaal/rectaal constrast

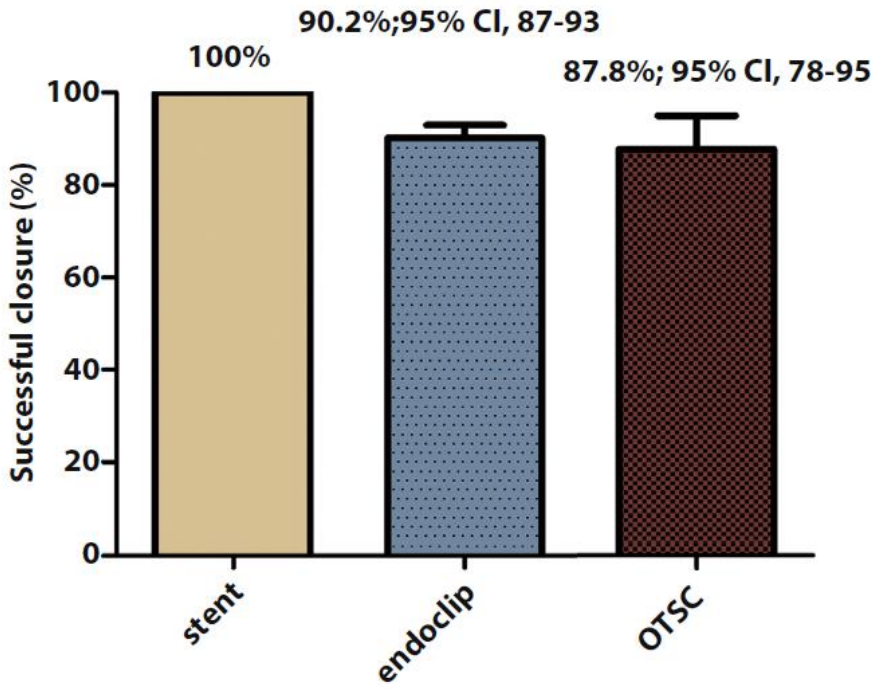
Afstemmen met chirurg



Hoe vaak gaat het goed?

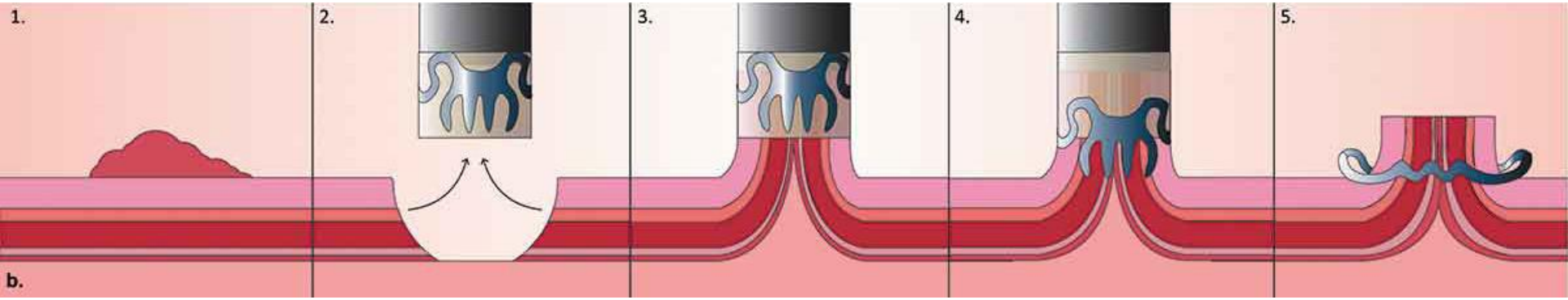
TABLE 2. Characteristics of acute perforations

Total no. of endoscopically closed perforations at <24 h	466
Endoscopic procedure, no.	Therapeutic: 403 (86.5%)
	EMR/ESD: 361
	Polypectomy:38
	ERCP: 4
	Diagnostic: 63 (13.5%)
Location of endoscopically closed perforation, no. (%)	Colon: 253 (54.3)
	Stomach: 182 (39.1)
	Duodenum: 17 (3.6)
	Esophagus: 14 (3.0)



Verlaan T, et al. Endoscopic closure of acute perforations of the GI Tract: A systematic review of the literature. Gastrointest Endosc 2015 Oct;82(4):618-28

Over The Scope Clip (OTSC)



Voordelen

Transmurale sluiting

Grotere defecten sluiten

Nadelen

Weggaan van de plek des onheils

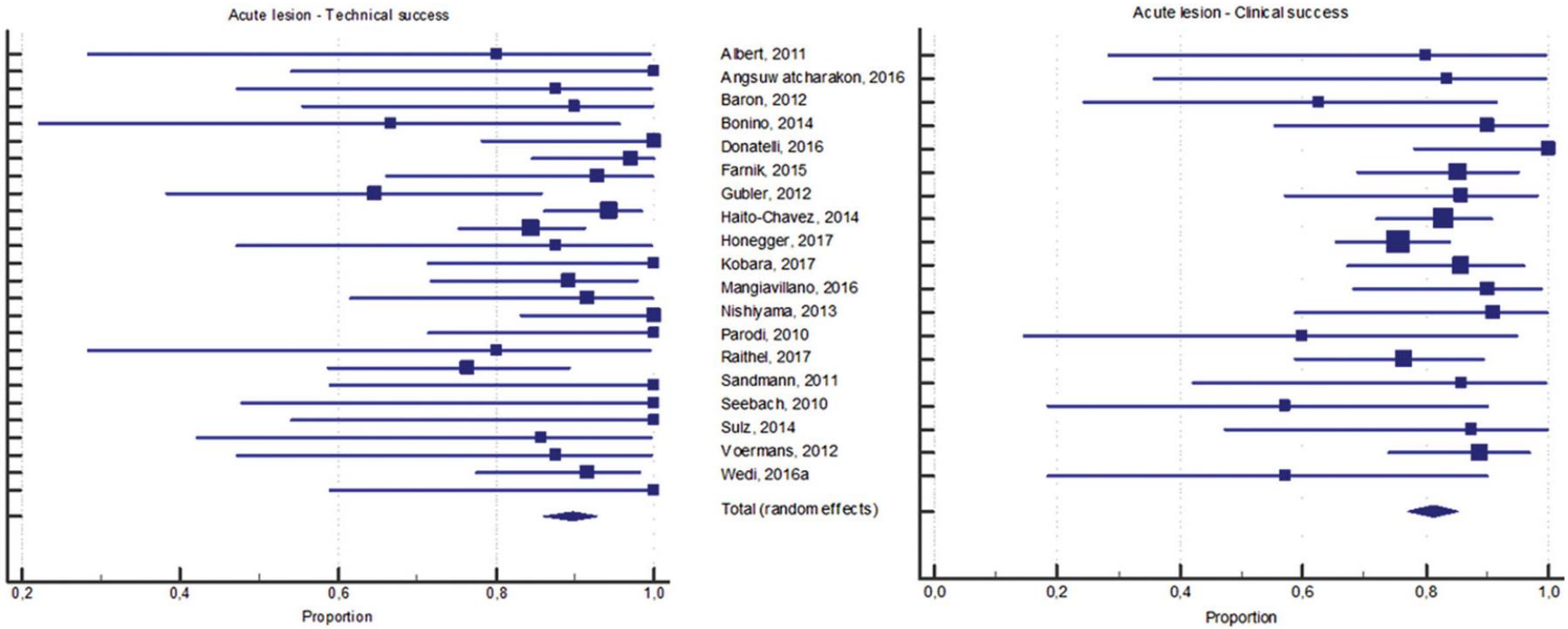
Een kans om tot een goede sluiting te komen

Andere structuren meeclippen

Turan AS, et al. Clips for managing perforation and bleeding after colorectal endoscopic mucosal resection. Expert Review of Medical Devices 2019, 16:6, 493-501

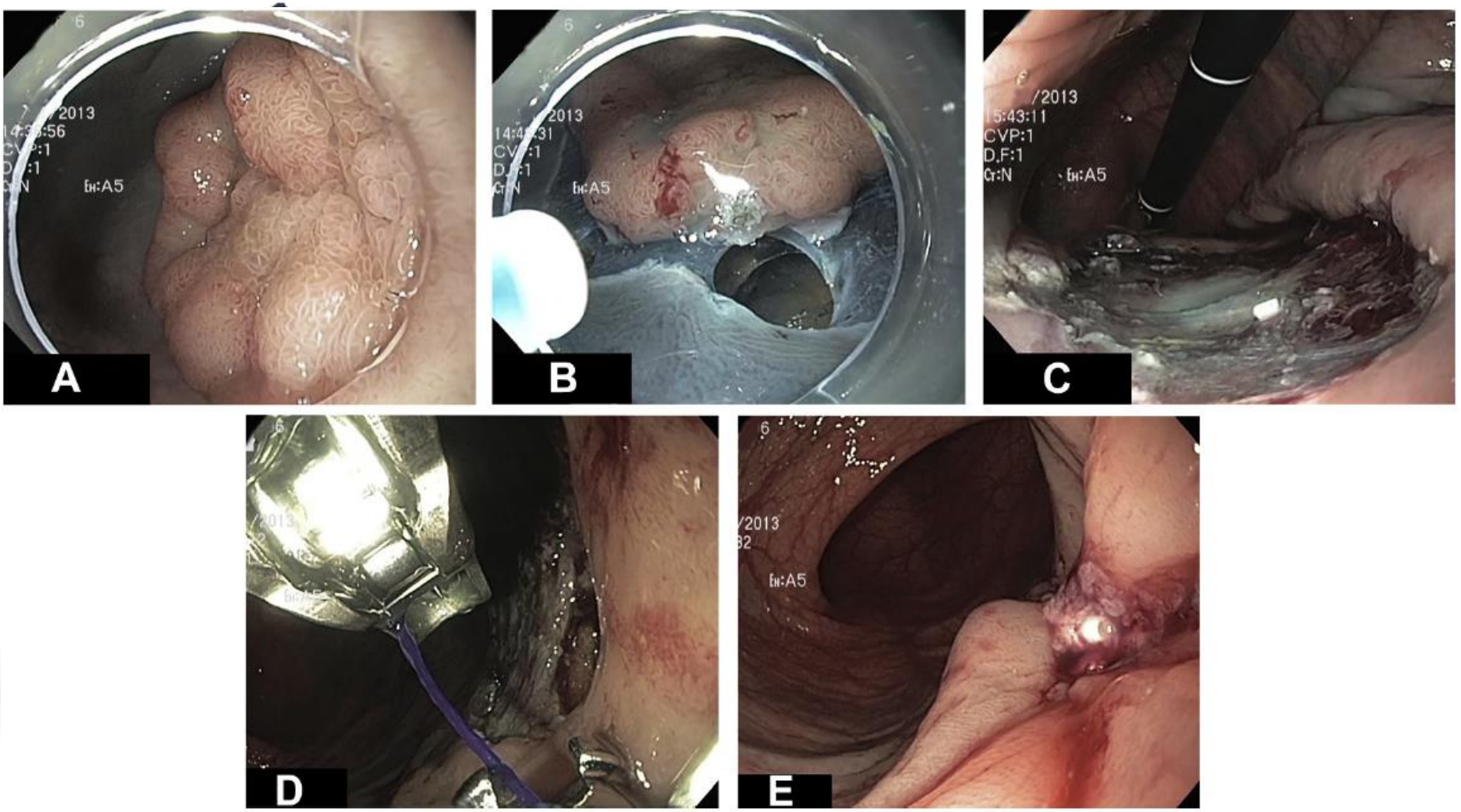
Over The Scope Clip (OTSC)

Technisch succes: 90%
Klinisch succes: 81%



Weiland T, et al. Efficacy of the OTSC System in the treatment of GI bleeding and wall defects: a PMCF meta-analysis. Minimally Invasive Therapy & Allied Technologies, 29:3, 121-139

Endoscopisch hechten



Kantsevoy SV, et al. Endoscopic management of colonic perforations: clips versus suturing closure (with video). Gastrointest Endosc . 2016 Sep;84(3):487-93

Endoscopisch hechten

Resultaten Kantsevoy et al. (2016)

16 pt -> technisch succes in 14/16 patiënten

2 pt met pijn ondergingen een laparoscopie, echter zonder aanvullende behandeling

Resultaten Sharaiha et al. (2016)

TABLE 1. Demographics and Characteristics of Patients, Defects

	Perforations (n = 15)
Age [mean + SD] (y)	
Defect diameter (mm)	35
Sex [n (%)]	
Female	12 (80)
Location of gastrointestinal defect [n (%)]	
Foregut	13
Duodenum	1
Gastrojejunal	
Colon	1
Rectum	

Casus III Grote perforatie

Chirurgische behandeling

Bij voorkeur laparoscopische benadering

Chirurgische technieken

Primair overhechten

Segmentresectie met primaire anastomose

Techniek afhankelijk van

Kwaliteit van het weefsel (<24h kans om primair te overhechten groter)

Overhechten heeft een kortere procedure tijd en verblijf in ziekenhuis

Conclusie

Gebruik de Sydney classificatie voor het inschatten van de (colon)wandschade na poliepectomie

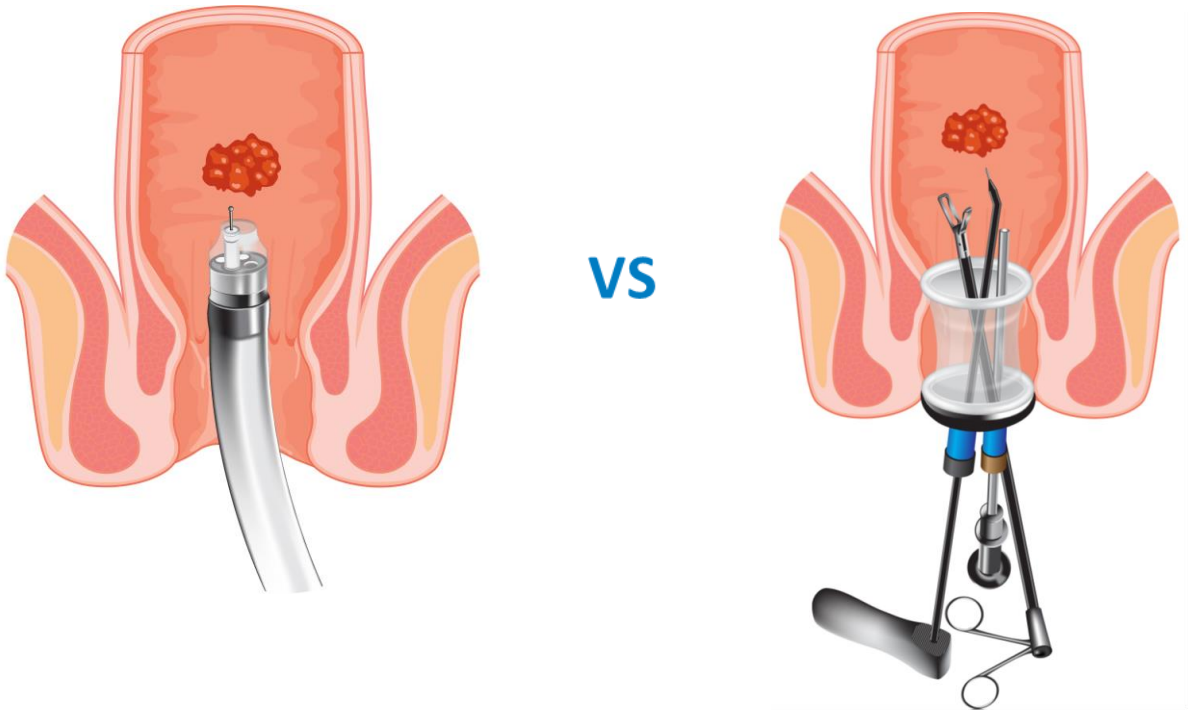
Blijf kalm, check je verpleging en patiënt, ga door waar mogelijk, sluit de perforatie

Endoscopische behandeling van een perforatie is heel vaak (~90%) succesvol

THE TRIASSIC STUDY

✓ Rectum poliepen >2cm

✓Benigne en/of verdenking beginnende invasie



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