

BSGIE Annual Meeting 2016

GASTRO-INTESTINAL EMERGENCIES IN ENDOSCOPY

SHOULD I STAY OR SHOULD I GO ?

for Endoscopists and Endoscopy Nurses

THURSDAY 22 SEPTEMBER 2016 - KINEPOLIS IMAGIBRAINE

Volvulus, colonic obstruction, pseudo-obstruction

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Should I stay (off)?

- Clinical signs of peritonitis
- High CRP
- Sepsis
- Volvulus: small bowel/caecal

=> SURGERY



Small versus Large bowel obstruction

	Small bowel	Large bowel
Clinical signs <ul style="list-style-type: none">- Onset :- Pain :- Transit :- Vomiting :	acute ++++ +/- ++++	gradual ++++ - +/-
Bowel sounds	High pitched tinkling	Normal
X-Ray		

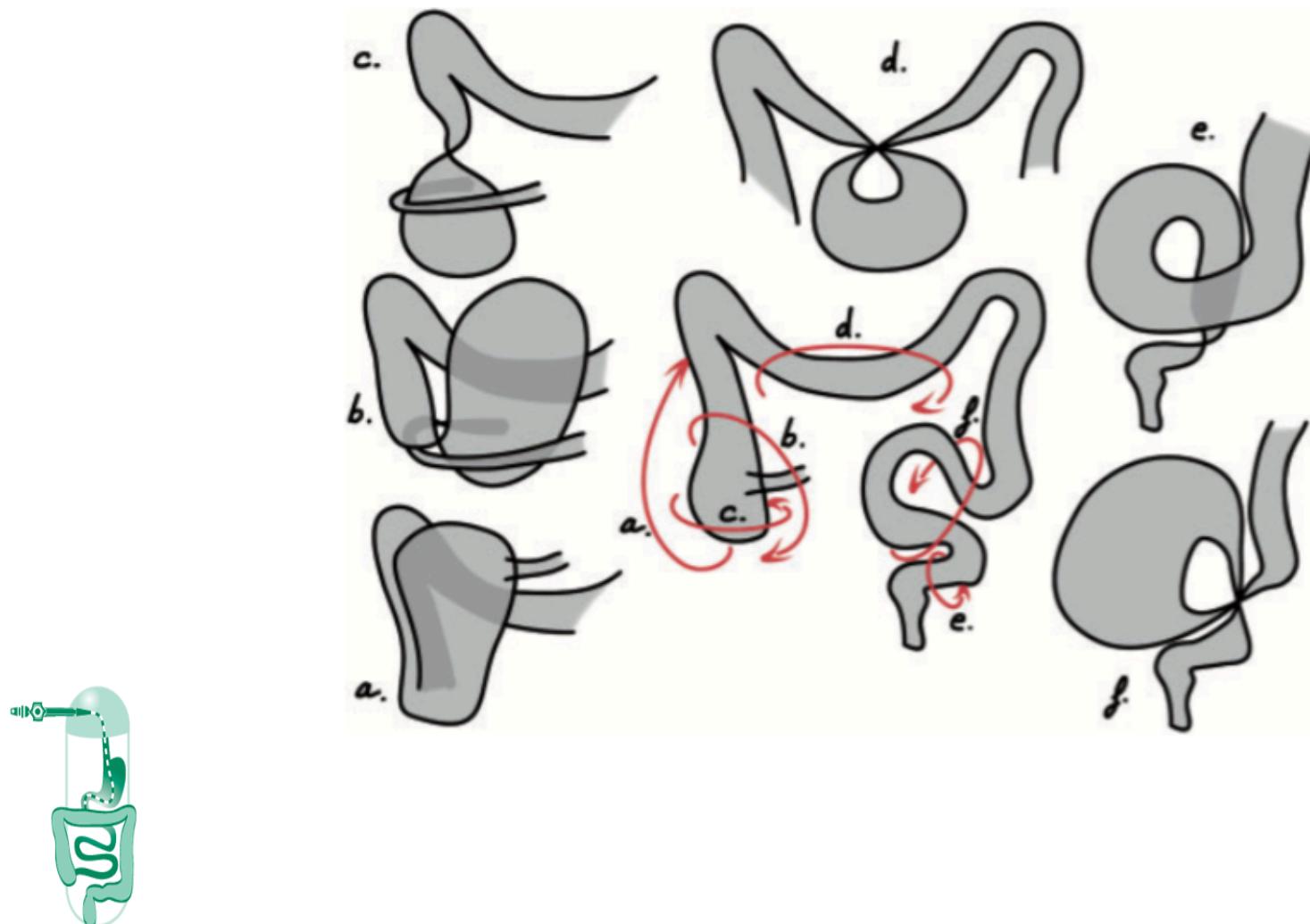


Volvulus

- Gastric volvulus
- Small bowel volvulus
- Colonic volvulus

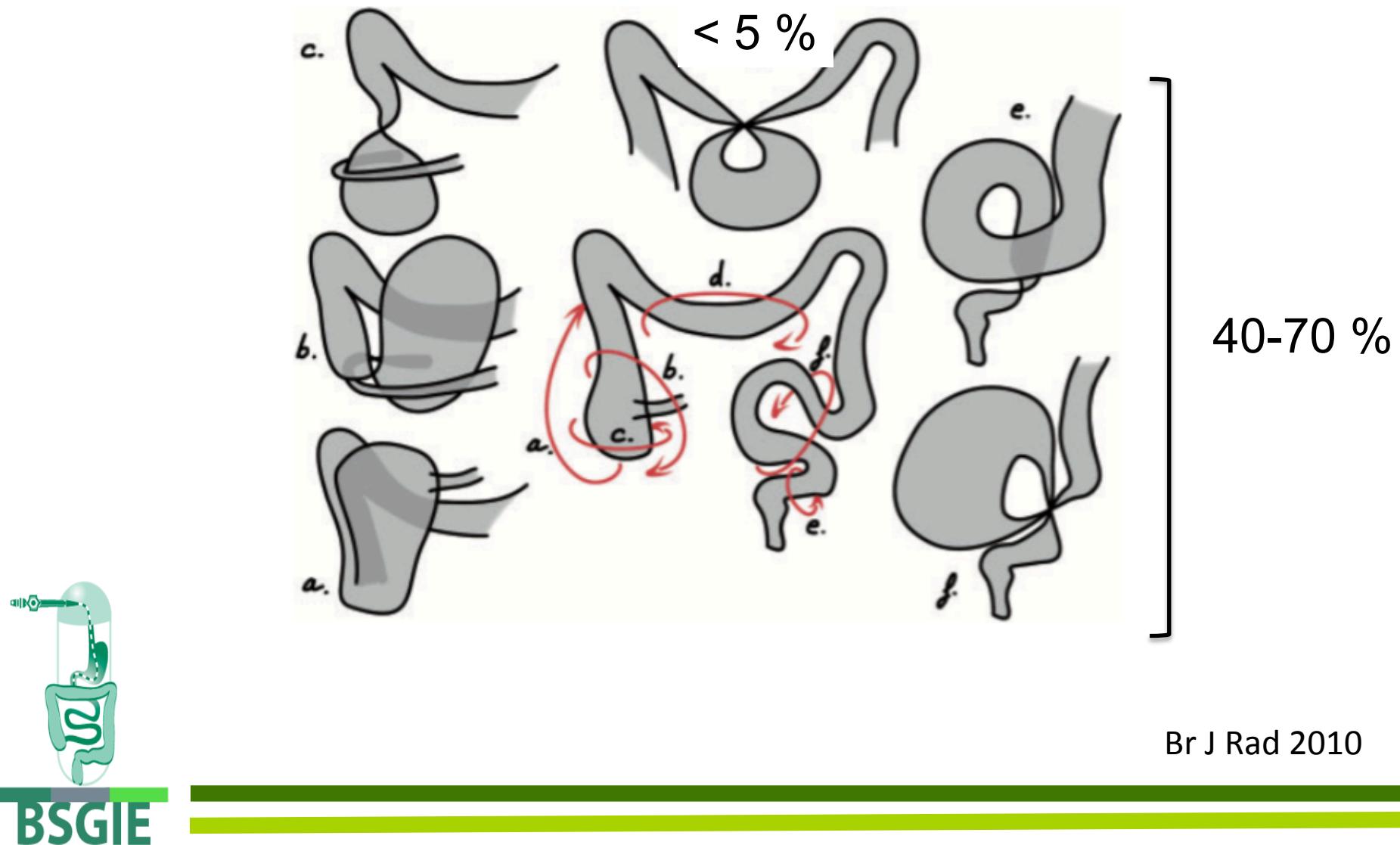


Large bowel Volvulus



Br J Rad 2010

Large bowel Volvulus



Sigmoid Volvulus

Epidemiology

- 5 – 8 % of all “bowel obstructions”
- 40 – 90 % recurrence risk
- 7 % mortality risk
- Risk factors:
 - “long loop of sigmoid”
 - Elongated mesentery
 - Obstipation
 - Neurological disorders



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Sigmoid Volvulus

Treatment

- Endoscopic detorsion
- Decompression tube
- Sigmoidectomy - PEC



Sigmoid Volvulus

Percutaneous Endoscopic Colostomy

Fixation of sigmoid loop

- One or two PEC
- Removal of PEC (or not)



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Sigmoid Volvulus

Percutaneous Endoscopic Colostomy

- Complications

- Death	2/56
- Premature PEC- "extraction"	1/56
- Migration of PEC, faecal spill	1/56
- Pain	1/56
- Leakage	1/56

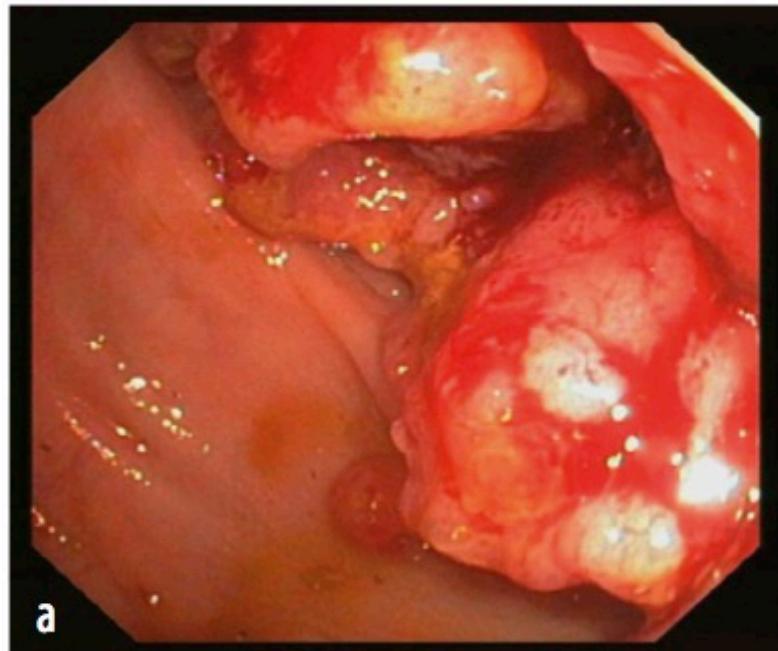
Recurrence

- 2 PEC	0 %
- 1 PEC	25 %

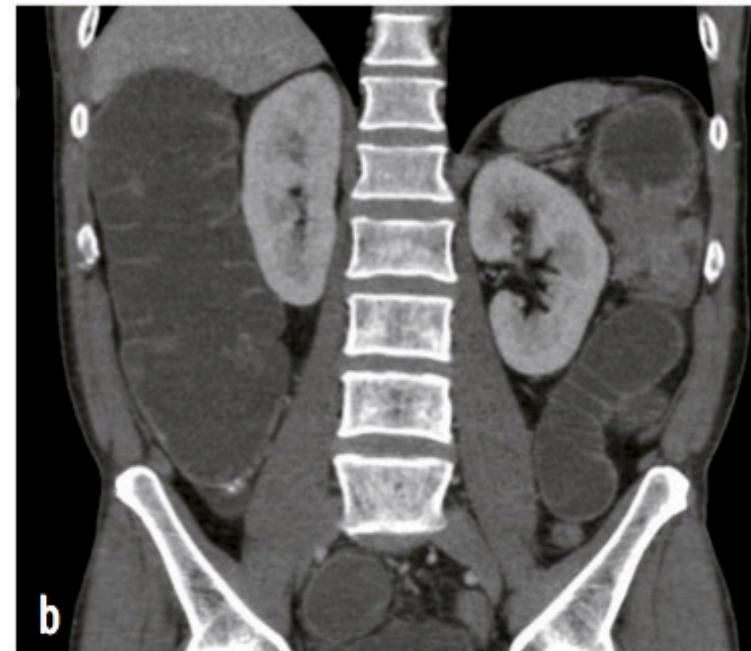
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Malignant colonic obstruction



a



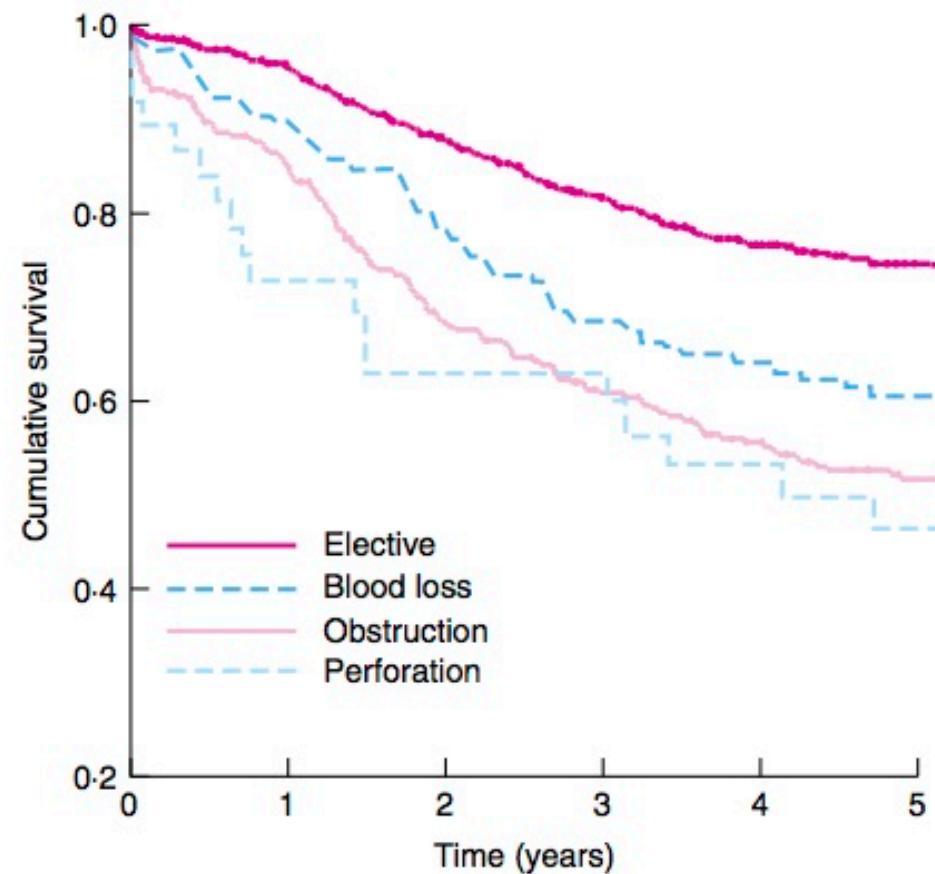
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Colon cancer

Survival after surgery



Br J Surg 2006



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Colon cancer

Mortality after emergency surgery

Tekkis, 2004 [18]	Patients undergoing surgery for acute colorectal cancer obstruction (n = 1046)	Multivariate analysis of in-hospital postoperative mortality: <ul style="list-style-type: none">- Age < 65 years: 5.4%- Age 65 – 67 years: 13.1%; OR 2.97 (95%CI 1.26 – 7.08)- Age 75 – 84 years: 21.9%; OR 4.31 (95%CI 1.83 – 10.05)- Age ≥ 85 years: 27.0%; OR 5.87 (95%CI 2.27 – 15.14)- ASA I: 2.6%- ASA II: 7.6%; OR 3.32 (95%CI 0.73 – 15.18)- ASA III: 23.9%; OR 11.73 (95%CI 2.58 – 53.36)- ASA IV – V: 42.9%; OR 22.33 (95%CI 4.58 – 109.68)
Biondo, 2004 [17]	Patients undergoing emergency surgery for acute large-bowel obstruction (n = 234) Colorectal cancer 82.1% Extracolonic cancer 4.7% Benign lesions 13.2%	Univariate analysis of 30-day postoperative mortality: <ul style="list-style-type: none">- Age ≤ 70 years: 10.7% (14/131)- Age > 70 years: 29.1% (30/103); P < 0.001- ASA I – II: 8.1% (9/111)- ASA III – IV: 28.5% (35/123); P < 0.001 Multivariate analysis of 30-day postoperative mortality: <ul style="list-style-type: none">- Age > 70 years: OR 2.05 (95%CI 0.92 – 4.60)- ASA III – IV: OR 2.86 (95%CI 1.15 – 7.11)
Tan, 2010 [19]	Patients who underwent operative intervention for acute obstruction from colorectal malignancy (n = 134)	Perioperative morbidity rate: 77.6% Perioperative mortality rate: 11.9% Multivariate analysis of worse outcome (grade III – V complications, including death): <ul style="list-style-type: none">- Age > 60 years: OR 4.67 (95%CI 1.78 – 12.25)- ASA III – IV: OR 8.36 (95%CI 3.58 – 19.48)



Colon cancer

Surgical procedure

Surgical characteristics (n = 1,816)	Acute resection (n = 1,485)	SEMS followed by resection (n = 196)	Stoma followed by resection (n = 135)	p value
Urgency of surgery (n = 1,815)				
Elective	1,485	195	135	
Urgent	–	162 (83.1)	115 (85.2)	
Emergency	700 (47.1)	17 (8.7)	16 (11.9)	
Emergency	785 (52.9)	16 (8.2)	4 (3.0)	
Surgical procedure (n = 1,813)	1,484	195	134	
Transverse colectomy	12 (0.8)	0	2 (1.5)	0.341
(Extended) left hemicolectomy	379 (25.5)	59 (30.3)	34 (25.4)	
(Low)anterior/sigmoid resection	963 (64.9)	122 (62.6)	89 (66.4)	
(Sub)total colectomy	70 (4.7)	5 (2.6)	0	
Other	60 (4.0)	9 (4.6)	9 (6.7)	
Surgical approach (n = 1,806)	1,476	195	135	
Open	1,340 (90.8)	118 (60.5)	101 (74.8)	<0.001
Laparoscopic	136 (9.2)	77 (39.5)	34 (25.2)	
Anastomosis constructed (n = 1,787)	704/1,459 (48.3)	140/194 (72.2)	104/134 (77.6)	<0.001



Colon cancer

Postoperative outcome

Postoperative outcome (n = 1,816)	Acute resection (n = 1,485)	SEMS followed by resection (n = 196)	Stoma followed by resection (n = 135)	p value
Complicated postoperative course (n = 1,806)	631/1,476 (42.8)	61/195 (31.3)	40/135 (29.6)	<0.001
Re-intervention (n = 1,187)	230/961 (23.9)	33/149 (22.1)	16/77 (20.8)	0.752
Postoperative hospital stay (n = 1,751)	1,431	185	135	
Median	16	12	12	0.007
Range	0–377	2–106	1–157	
30 days or in-hospital mortality	102/1,476 (6.9)	11/195 (5.6)	5/134 (3.7)	0.107
Elective resection	–	7/162 (4.3)	2/114 (1.8)	0.051 ^a
Age <70	20/678 (2.9)	3/81 (3.6)	1/70 (1.4)	0.694
Age ≥70	82/798 (10.3)	8/111 (7.2)	4/63 (6.3)	0.387
Complete resection (n = 1,683)	1,293/1,386 (93.3)	170/174 (97.7)	116/123 (94.3)	0.212
<10 lymph nodes examined (n = 1,778)	299/1,458 (20.5)	24/189 (12.7)	29/131 (22.1)	0.032

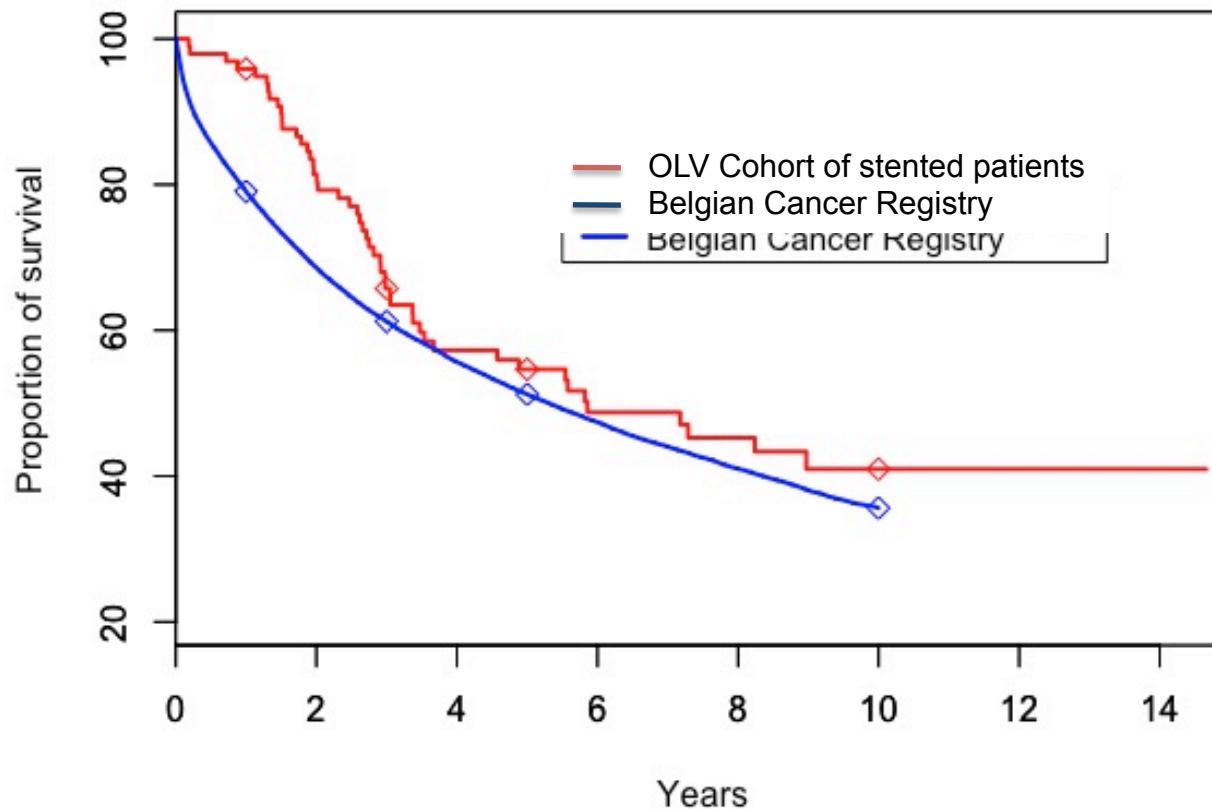


Dig Surg 2015

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Colon cancer

Postoperative outcome



Data J. Vandervoort



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Self-expandable metal stents for obstructing colonic and extracolonic cancer: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline



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Endoscopy 2014

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Clinical indication: palliative SEMS placement

(► Table e4, available online)



SEMS placement is the preferred treatment for palliation of malignant colonic obstruction (strong recommendation, high quality evidence).

Clinical indication: SEMS placement as a bridge to elective surgery (► Table e3, available online)



Colonic SEMS placement as a bridge to elective surgery is not recommended as a standard treatment of symptomatic left-sided malignant colonic obstruction (strong recommendation, high quality evidence). For patients with potentially curable left-sided obstructing colonic cancer, stent placement may be considered as an alternative to emergency surgery in those who have an increased risk of post-operative mortality, i.e. ASA \geq III and/or age $>$ 70 years (weak recommendation, low quality evidence).



Acute Colonic Pseudo-obstruction

Ogilvie Syndrome

- Dysregulation of autonomic impulses in enteric nervous system
- Old, hospitalized/institutionalized patients
- Progression to ischemic perforation (3-15 %)
 - Cecal dilation > 12cm, leucocytosis, CRP, fever, ...



Acute Colonic Pseudo-obstruction

Acute treatment

- Endoscopy NOT recommended
- Supportive therapy
 - Bowel rest, fluid, electrolyte, drugs, infection, rectal tube, optimal position, renal function ...
- Neostigmine ¹ --- Endoscopy



Serial imaging (X-Ray abdomen)

Dis Colon Rectum 2016, ¹ NEJM, 1999