1. Among patients who undergo proctectomy for colorectal cancer, 5-yr survival associated with sphincter-preserving surgery has been found to be __________ compared with abdominoperineal resection, in patients with tumors 5 to 7 cm from the anal verge.

(A) Higher than (B) Equivalent to (C) Lower than

2. Possible adverse effects of reconstructive procedures involving straight anastomoses include:

1. Uncontrollable flatulence
2. Leakage of mucus or stool
3. Abdominal obstruction
4. Urgency or frequency

(A) 1,2,3,4 (B) 1,2,3 (C) 1,2,4 (D) 2,3,4

3. Functional outcomes associated with bowel reconstructive procedures are similar among all techniques within ___ yr after surgery.

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4. Choose the accurate statement about abdominal procedures for managing rectal prolapse.

(A) Outcomes similar for abdominal rectopexy with sigmoid resection and rectopexy alone
(B) Sutured rectopexy associated with higher rates of early recurrence of prolapse
(C) Subtotal colectomy is contraindicated for patients with atomic colon
(D) Anterior approach (ventral rectopexy) associated with high recurrence rates and risk for enterocutaneous fistula

5. Which of the following procedures is most often preferred for frail elderly patients with rectal prolapse?

(A) Abdominal rectopexy
(B) Abdominal rectopexy with sigmoid resection
(C) Peri rectosigmoidectomy
(D) Ripstein anterior rectopexy

6. The risk of needing a permanent stoma in patients who undergo abdominoperineal resection to manage rectal cancer is:

(A) 7% (B) 18% (C) 26% (D) 33%

7. Risk factors for postoperative ileus include all the following, except:

(A) Age
(B) Preoperative history of narcotic use
(C) Female sex
(D) History of previous abdominal surgery

8. Which of the following are the recommended measures for patients who show early signs of postoperative ileus?

1. Nasogastric decompression
2. Have the patient chew gum or suck on hard candies
3. Hydration
4. Prescribe an agent that promotes motility (eg, Reglan)

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9. Fast-track protocols for recovery from abdominal surgery may encourage patients to decide when they are ready to advance from liquids to solid food.

(A) True (B) False

10. Alvimopan (Entereg) is not used routinely to help patients recover from abdominal surgery because of its:

(A) Cost
(B) Toxicity
(C) Questionable efficacy
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Answers to Audio-Digest General Surgery Volume 58, Issue 12: 1-D, 2-D, 3-A, 4-B, 5-C, 6-C, 7-B, 8-B, 9-A, 10-D

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Challenges in Colorectal Disease

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To submit a test form by mail or fax, complete Pretest section before listening and Posttest section after listening.

1. Lose contractility over time, so size of recessive limb may approach, eversion of anus, and direct hand-sewn colo-anal anastomosis; alternatively, stapler may be inserted through open end of J-pouch before closure.

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Laparoscopic surgery: better exposure and shorter hospital stay, compared to open surgery. Laparoscopic versus open colorectal resection associated with lower recurrence rate and decreased risk for enteroleak; operation currently under investigation.

Laparoscopy with robotic assistance: expected to play role in surgery for rectal prolapsed; currently under investigation.

Perineal procedures: perirectal neosigmoidectomy plus levatorplasty associated with higher recurrence rate, loss of rectal capacity, and urgency; general, perineal approaches for elderly high-risk patients.

Perirectal neosigmoidectomy: patient usually in prone jack-knife position; speaker prefers full-thickness transection; cauters most blood vessels, but does not tie significant bleeders; repairs pelvic hernia, then proceeds to levatorplasty; procedure that hand-sutured anastomosis is muscle to muscle. Dehiscence: recurrence rates higher than with rectosigmoidectomy.

Addition of levatorplasty: improves postoperative continence.

Outcomes of laparoscopic resection: 8% of patients in small study worse after procedure; in another study of laparoscopic resection, 53% of patients improved.

Conclusion: abdominal approach usually associated with better outcomes.

Perineal approaches: minimal invasion; cost-effective; minimal risk for local complications; allows for better access to surgical site; offers options for patients undergoing multiple procedures; allows for rapid recovery.

Peritonectomy: successful in treating colorectal cancer: volume and specialization important; additional factors include group surgical practice, access to good consultants for optimizing patients, presence of colorectal specialty nurses in operating room, on floor, and in intensive care unit; specialty residents; pathways for processes and measurement.

Suggested Reading


Discharge criteria: no fever; oral medication tolerated; discharge follow-up: critical for preventing readmission; likelihood of colostomy after proctectomy for rectal cancer: reduced by presence of specialty surgeons; availability of specialty surgeons most important factor in determining whether patient needs proctectomy instead of APR.

Outcomes of laparoscopic resection: 8% of patients in small study worse after procedure; in another study of laparoscopic resection, 53% of patients improved.

Conclusion: abdominal proctopexy usually associated with improved continence.

Perineal procedures: perineal rectosigmoidectomy plus levatorplasty associated with higher recurrence rate, loss of rectal capacity, and urgency; generally, perineal approaches reserved for elderly high-risk patients.

Perineal rectosigmoidectomy: patient usually in prone jackknife position; speech performed fully in transverse section; cathersizes most blood vessels, but does not tie off significant bleeders; repairs pelvic hernia, then proceeds to levatorplasty; ensure that hand-sutured anastomosis is muscle to muscle.

Delorme operation: recurrence rates higher than with rectosigmoidectomy.

Addition of levatorplasty: improves postoperative continence; positive outcomes; recurrent prolapse and incontinence: consider abdominal proctopexy with end-sigmoid colostomy if patient compro mised, young patients, consider artificial bowel sphincter.

Conclusions: abdominal rectopexy procedure of choice for recurrent prolapse with no significant bleeders; comparable with sutured and mesh rectopexy (speaker does not use mesh); Risti et al.’s study showed significant improvement; sigmoid resection reserved for severely constipated patients, markedly redundant sigmoid, or diverticular disease always mobile anteriorly and posteriorly; preoperative assessment for incontinence and constipation important; perineal approaches preferred for poor-risk patient.

Quality in Rectal Cancer Surgery

Lester Rosen, MD, Professor of Surgery, Florida Interna tional University, Herbert Wertheim School of Medicine, Miami, and Staff Colorectal Surgeon, Cleveland Clinic Florida, Weston.

Abdominopерineal resection (APR) for managing rectal cancer: in review by speaker and colleagues, mortality rate low and morbidity high (impact on sexual function not studied); several studies show little or no impact of volume of procedures on outcomes of rectal cancer APR; rate low and morbidity high (impact on sexual function not studied); in a study of 569 cases from Cleveland Clinic Weston, index APR rate 20%, but 34% of patients had permanent stoma at 1 yr follow-up; warn patients that risk for permanent stoma approximately 1 in 3; in study of 364 patients who under went colon or rectal surgery, mortality 0.82% after surgery performed for colorectal cancer in patients aged ≥ 70 yr, grade 2 severity, compared to 3.8% of 236 cases performed by general surgeons; among patients with grade 3 severity, mortality not reported for colorectal surgeons, vs 16.4% of 183 operations by general surgeons (highly significant); conclusion—despite laparoscopic surgery, particular for a high-risk patient, is unacceptable if superior quality is demonstrated by legislat ed outcome databases.

Likelihood of colostomy after proctectomy for rectal cancer: reduced by presence of specialty surgeons; availability of specialty surgeons most important factor in determining whether patient needs proctectomy instead of APR.

Quality model for performance of colorectal cancer: volume and specialization important; additional factors include group surgical practice; access to good consultants for optimizing patients; presence of colorectal specialist nurses in operating room, on floor, and in intensive care unit; specialty residents; pathways for processes and measurements.

Suggested Reading


Take pretest 10 minutes

Listen to audio program 60 minutes

Take posttest 10 minutes
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4. Urgency or frequency

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3. Functional outcomes associated with bowel reconstructive procedures are similar among all techniques within 2 yr after surgery.

(A) True (B) False

4. Choose the accurate statement about abdominal procedures for managing rectal prolapse.

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5. Which of the following procedures is most often preferred for frail elderly patients with rectal prolapse?

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(C) Perineal resection + transsphincterotomy
(D) RIPSTEIN anterior rectopexy

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(A) < 7% (B) > 18% (C) 26% (D) > 33%

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Methods of Reconstruction After Proctectomy

Ian C. Lavery, MD, Staff Colorectal Surgeon, Department of Colorectal Surgery, Cleveland Clinic, Cleveland, OH

Oncologic outcomes: of 1000 patients, those with tumors 5 to 7 cm from anal verge underwent either sphincter-preserving surgery or abdominopereineal resection; no difference seen in 5-yr survival. Complications: leakage (≤ 5%; 3-pouch; higher with high anastomosis). Ileostomy usually diverted, unless sphincter preservation does not compromise chances for cure if patient selected appropriately.

Surgery: proximal margin depends on blood supply and level of vascular ligation; speaker prefers high ligation of inferior mesenteric artery after division of artery, removal of entire sigmoid; mobilization should be sufficient for anastomosis; speaker ligates off aorta and preserves bifurcation of left colic artery, transects at junction of sigmoid and descending colon, and divides inferior mesenteric vein at level of left colic artery; subsequently, often divides vein at lower pancreas border for sufficient mobilization down to anus; splenic flexure usually requires mobilization; remove mesentery from transverse colon to obtain sufficient length; anastomosis based on middle colic artery; anastomosis for reconstruction can be in distal rectum, at anorectal ring, or at dentate line. Exposure: governed by patient's sex and body habitus; may be transabdominal; evasion of rectal stump may be necessary to attain sufficient access; endosigmoidal procedures (direct anastomosis performed by hand) require submucosal dissection, colorectal anastomosis, or endoscopic dissection; if eversion of rectal stump may be necessary to achieve sufficient mobilization down to anus; splenic flexure usually requires mobilization; remove mesentery from transverse colon to obtain sufficient length; anastomosis based on middle colic artery; anastomosis for reconstruction can be in distal rectum, at anorectal ring, or at dentate line.

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