Magnum GI

Modern Day Understanding and Treatment of Diverticulitis

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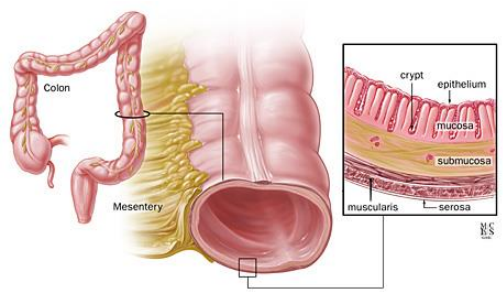
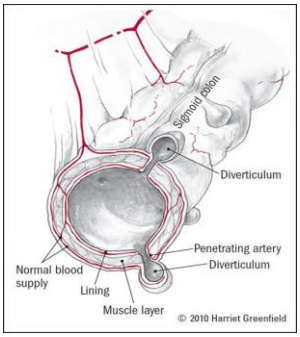
MD

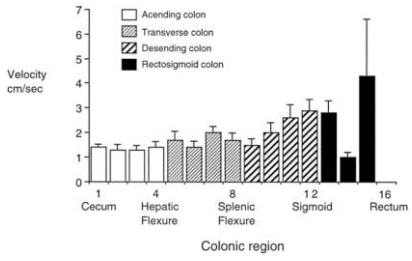
- NO DISCLOSURES



The colon has only one layer of muscle.
The small bowel and rectum have two layers



Blood vessels penetrating the muscle layer form a weak spot



American Journal of Gastroenterology **96**, 1838–1848 (2001)

Several factors may increase your risk of developing diverticulitis:

Aging. The incidence of diverticulitis increases with age.

Obesity. Being seriously overweight increases your odds of developing diverticulitis.

Smoking. People who smoke cigarettes are more likely than nonsmokers

Lack of exercise. Vigorous exercise appears to lower your risk of diverticulitis.

Diet high in animal fat and low in fiber.

Mayo Clinic Web Site

EUROPE	
UK	47%
Germany	21–49 %
Norway	32.1%
Finland	12–50%
Greece	22.9%
Poland	21.8%
Romania	1.29–2.5%
Italy	19.4–51.4%
USA	
Hispanic patients	43%
African American patients	57.7%
AFRICA	
Nigeria	9.4 %
Kenya	6.6 %
Egypt	2%
ASIA	
Thailand	28.5%
Singapore	20%
South east Asia	8.0%
Hong Kong	25.1%
Japan	20.3%
ARAB countries	
Saudi Arabia	7.5 %
Iran	2.4%
Jordan	4.0%

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Risk Factors

- age
- low-fibre diet
- obesity
- physical inactivity
- left-sided colon cancer
- Ehlers-Danlos, Marfan's, polycystic kidney diseases

Rabinovitch, "Diverticular disease of the colon", 2005

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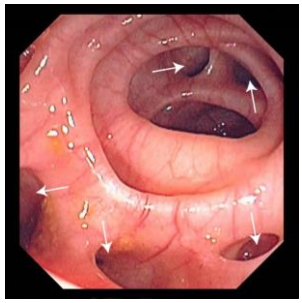

Colonoscopic view of diverticulosis. Where do I go from here?

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Surgical view of diverticulitis.

The clinical presentation of Acute diverticulitis

- Left lower quadrant pain (70% of patients), fever, leucocytosis= diverticulitis
- can be either complicated or uncomplicated.
- results from the micro- or macroperforation of a diverticulum, resulting in anything from subclinical inflammation to feculent peritonitis
- Patients may also complain of nausea and vomiting (20–62%), constipation (50%), diarrhea (25–35%), and urinary symptoms (10–15%).

Shams University, published Feb 2017

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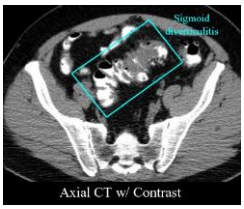

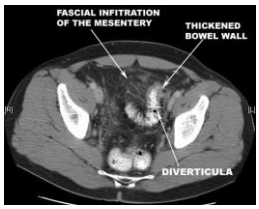

Diagnosis typically made by CT scan. Colonoscopy may miss the process.

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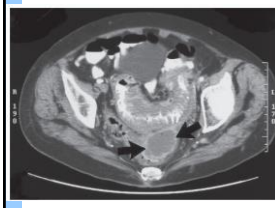
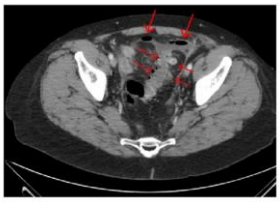


Diverticulitis with abscess



Diverticulitis with perforation

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Management: Acute Uncomplicated Diverticulitis

- Conservative Management
  - Nonoperative: Bowel rest, Antibiotics
    - PO or IV depending on severity
    - Anaerobic/GN coverage
  - Outpatient or Inpatient
- Successful in 70-100% pts
- Etzioni et al. 94% successful outpt mgmt of uncomplicated diverticulitis
- 6-8 weeks later
  - Scope to rule out cancer
- Elective Resection??

Rafferty J, et al. Standards Committee of American Society of Colon and Rectal Surgeons. Practice Parameters for Sigmoid Diverticulitis. Dis Colon Rectum. 2006 Jul;49(7):939-44.

Montefiore THE UNIVERSITY HOSPITAL

EINSTEIN Albert Einstein College of Medicine

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Table 4. Outpatient Antibiotic Regimens (7–10 Days)

- Ciprofloxacin, 500 mg orally twice a day, and metronidazole, 500 mg orally three times a day
- Amoxicillin-clavulanate, 875/125 mg orally twice a day
- Cephalexin, 500 mg orally twice a day, and metronidazole, 500 mg orally three times a day
- Trimethoprim-sulfamethoxazole orally four times a day, and metronidazole, 500 mg orally three times a day
- Clindamycin, 450 mg orally four times a day

Data from Stocchi L. Diverticulitis. In: McNally PR, ed. *GI/Liver Secrets Plus*. 5th ed. Philadelphia, PA: Elsevier; 2015:358–364.

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When should I send the patient for surgical consultation?

Surgery:

- ***Emergency operation is indicated*** for
  1. Peritonitis
  2. uncontrolled sepsis
  3. perforation,
  4. clinical deterioration.
- Indications for ***elective surgery include:***
  1. fistula formation
  2. Stricture
  3. recurrent diverticulitis.
  4. After two episodes one should seriously consider elective resection

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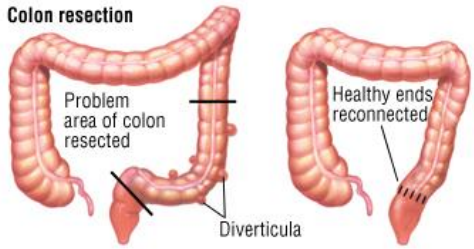
Colon resection



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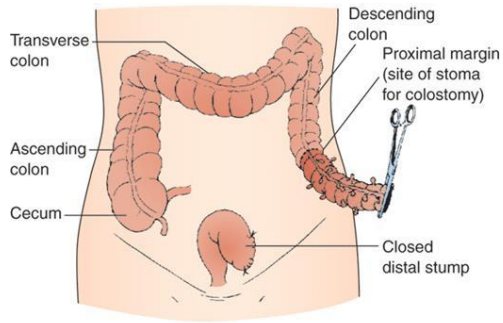

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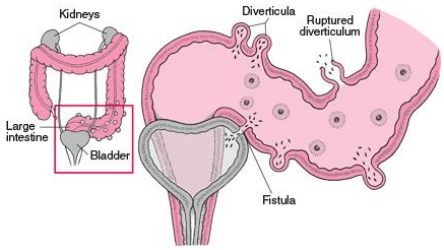
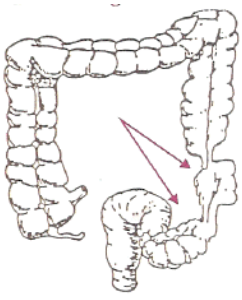


Colovesical fistula



Stricture

Colonoscopic view

Functional Results

- Functional results following elective laparoscopic sigmoidectomy after CT-proven diverticulitis.
  - Ambrosetti et al, J Gastrointest Surg 2007
- N = 43
- Mean follow up 40 months (3-76)
- Post operative questionnaire
  - Recurrent disease
  - Bowel function
  - New abdominal pain
  - Overall satisfaction
- Overall satisfaction rate 95%

Diverticulitis: Summary

- Common disease
- Most patients can be treated as an outpatient
- Diagnosis and evaluation usually requires CT scan
- Can consider referral to surgeon after two significant attacks
- Refer to surgeon for fistula, stricture, chronic pain, recurrent attacks
- May need colonoscopy to rule out other pathology
- Most patients do well following elective surgical resection
- Small number of patients go on to emergent surgical intervention with colostomy and long term sequelae

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