

bye bye diverticular dogma

By the age of 80, about 66% of Western adults
will have diverticulosis.

Martel J, Raskin JB, NDSG.

History, Incidence, and epidemiology of diverticulosis.

J Clin Gastroenterol 2008;42:1125-1127.

Rank among GI dx

1

Diverticulitis

2

Acute pancreatitis

3

Cholelithiasis with cholecystitis

4

Acute appendicitis

Peery AF, Dellon ES, Lund J, et al.

Burden of gastrointestinal disease in the United States: 2012 update.

Gastroenterology 2012;143:1179-1187 e1-3.

diverticular dogma

diverticulitis is an infection

high-fiber diet is better

diverticulosis begets diverticulitis

2 attacks, then operate

colonoscopy after diverticulitis

no seeds and pits diet



Inflammation
obstruction
stasis
alteration in local bacterial microflora
local ischemia

ulcerative colitis
segmental colitis
uncomplicated diverticulitis

4 key innovations have changed the thinking about
management of diverticulitis

use of CT

the natural history of diverticulitis

diverticulitis = colitis

less invasive interventions

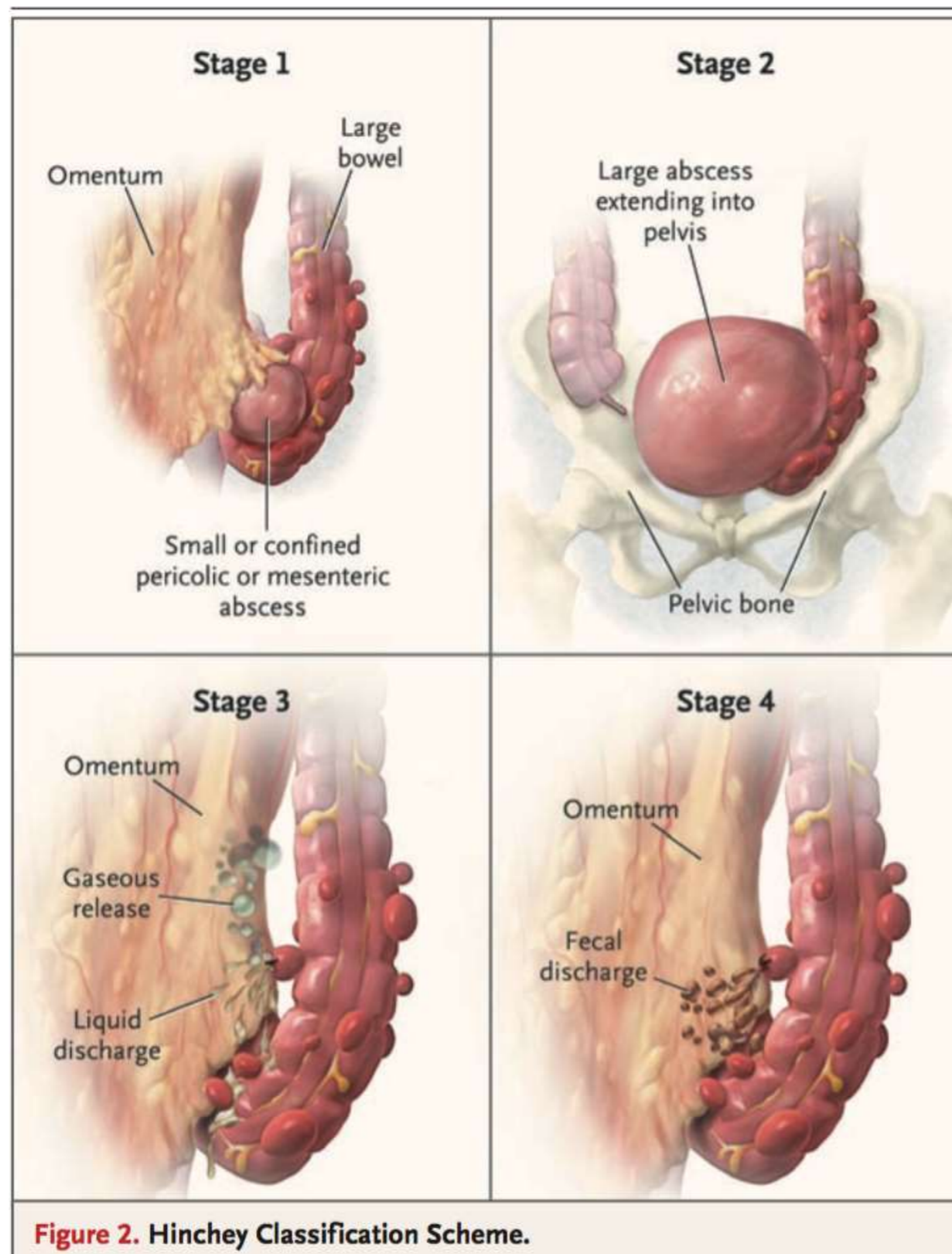


Figure 2. Hinchey Classification Scheme.

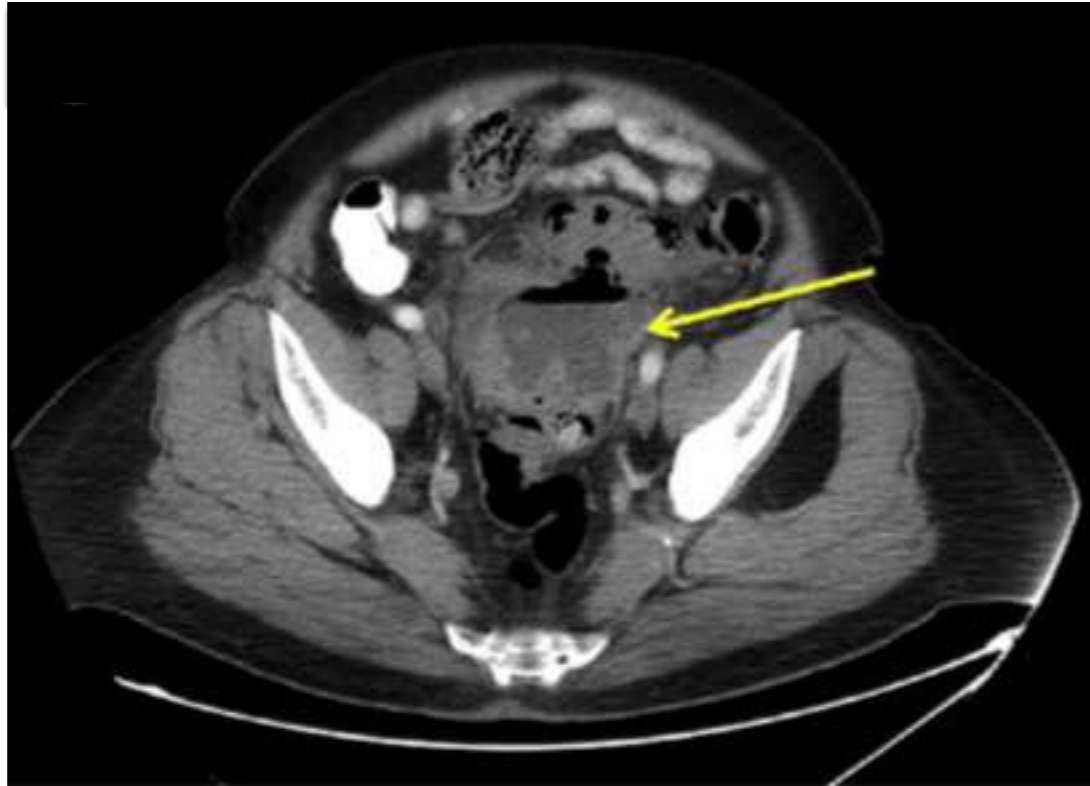
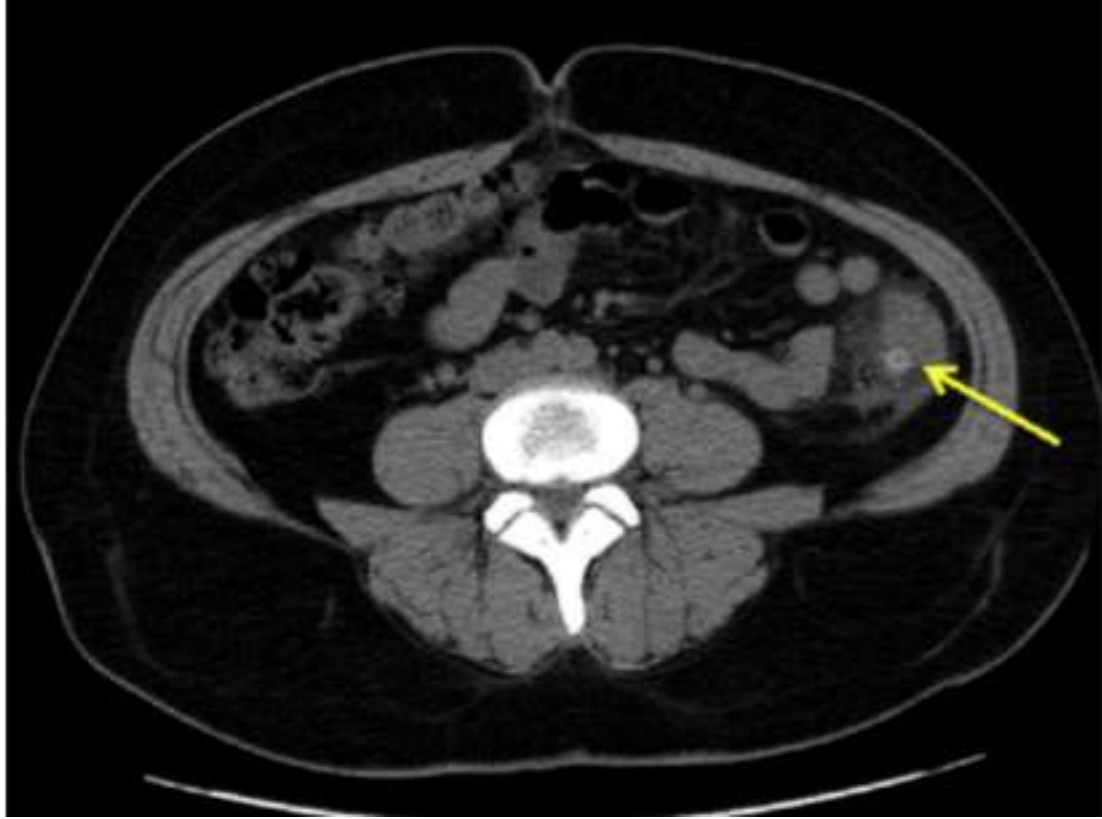
Box 2**Diverticulitis staging**

Stage	Modified Hinchey Classification	CT Staging
0	Mild clinical diverticulitis	Diverticula with or without wall thickening
Ia	Confined pericolic inflammation/phlegmon	Colonic wall thickening with pericolic soft tissue changes
Ib	Pericolic/mesocolic abscess	Ia changes with pericolic/mesocolic abscess
II	Pelvic, distant intra-abdominal, retroperitoneal abscess	Ia changes with distant abscess
III	Generalized purulent peritonitis	Free air with localized or generalized ascites
IV	Generalized feculent peritonitis	Same findings as III

NA Bodmer

Evaluating the patient with left lower quadrant abdominal pain

Radiol Clin N Am 2015 1171-1188



Definition of acute uncomplicated diverticulitis

Clinical: acute lower abdominal pain

Biological: inflammatory syndrome

CRP > 50 mg/L

WBC > 11.000 G/mm³

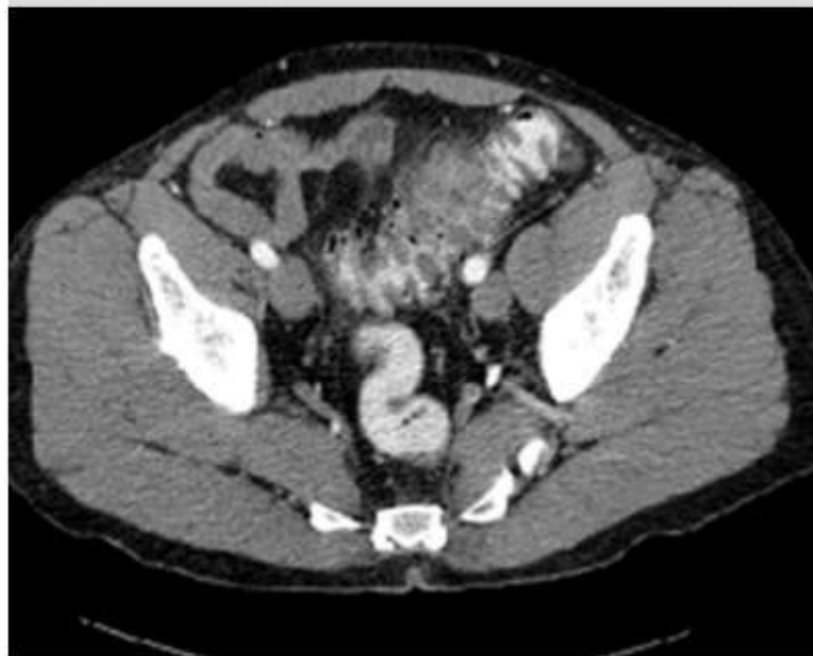
CT scan:

Diverticula, thickening of the wall (4 mm or more),
increasing density of the pericolic fat
lack of abscesses or fistula

The wind of change: uncomplicated diverticulitis

Hungday Kim 2015

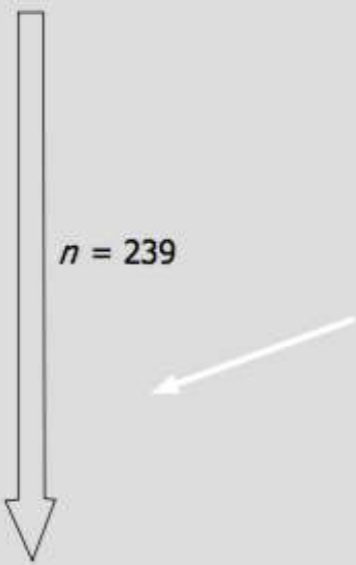
$n = 285$



Recurrent diverticulitis

$n = 40$

$n = 6$

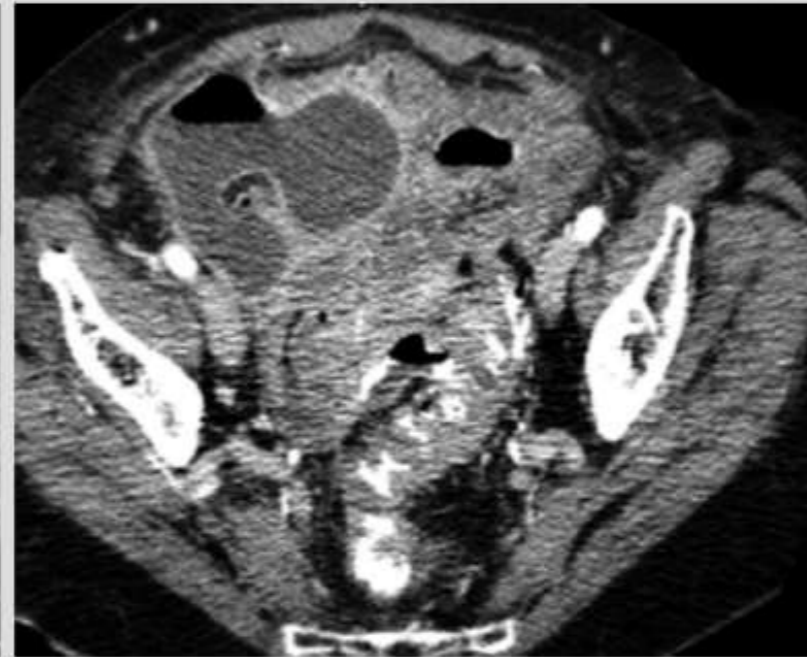


$n = 239$

No recurrence = 84%



Simple = 14%



Complicated = 2%

NC Buchs
Natural history of uncomplicated sigmoid diverticulitis
World J Gastrointest Surg 2015 27 7 11 313-318

Recurrence rate

Age

X

CRP > 200

Comorbidity

X

NC Buchs

Natural history of uncomplicated sigmoid diverticulitis

World J Gastrointest Surg 2015 27(7):11-313-318

A Prospective, Multicenter Randomized Clinical Trial (DIVER Trial)

TC Hinchey 0-Ia: confined pericolic inflammation-phlegmon

IV Amoxicillin and clavulanic acid 1 gr

Hospitalization

66 pt

Outpatient

IV Amoxicillin and clavulanic acid 1 gr X 3

po Amoxicillin and clavulanic acid 1 gr X 3

Primary outcome

4

3

Secondary outcome

€€€

€

Antibiotics in uncomplicated diverticulitis (AVOD study)

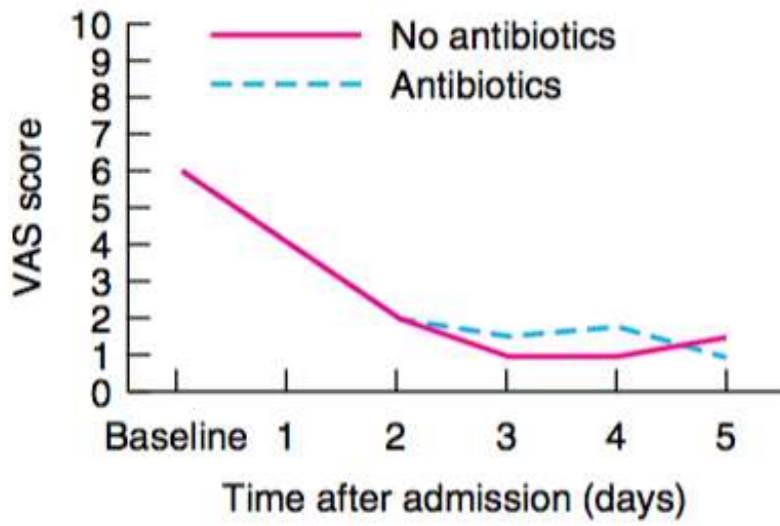
No-antibiotics group

334

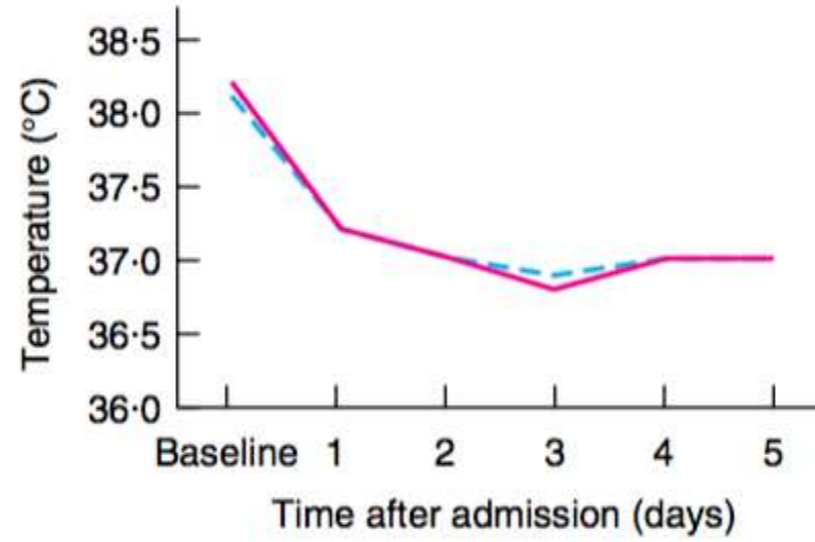
antibiotics group

cefuroxime
metronidazole

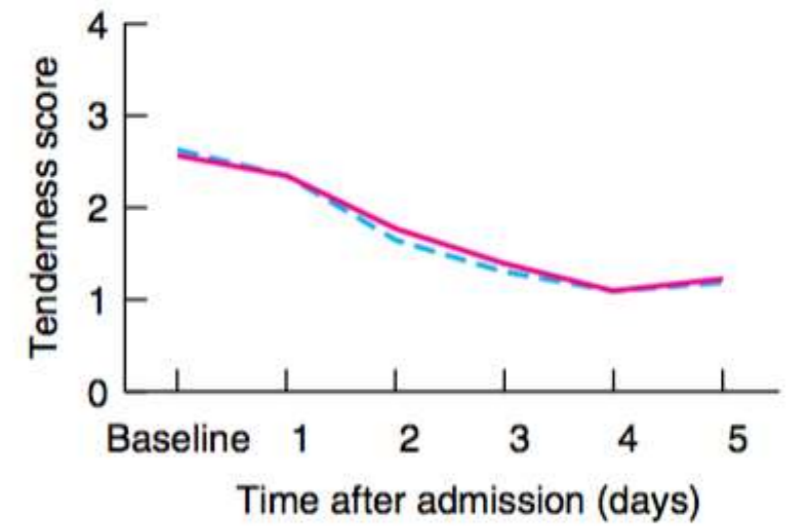
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Pain



Temp



Tenderness

A Chabon, L Pahlman
 Br J Surg 2012 99 532-539

	No antibiotics (n = 309)	Antibiotics (n = 314)	P†
Complications	6 (1.9)	3 (1.0)	0.302
Sigmoid perforation	3 (1.0)	3 (1.0)	0.985
Abscess	3 (1.0)	0 (0)	0.080
Sigmoid resections	7 (2.3)	5 (1.6)	0.541
During hospital stay	1 (0.3)	3 (1.0)	0.324
During follow-up	6 (1.9)	2 (0.6)	0.148
Hospital stay (days)*	2.9(1.6)	2.9(1.9)	0.717‡
Recurrent diverticulitis	47 of 290 (16.2)	46 of 292 (15.8)	0.881

The results indicate that antibiotics do not prevent complications.

A Chabon, L Pahlman
Br J Surg 2012 99 532-539

Nonoperative treatment typically includes dietary modification and oral or intravenous antibiotics.

Diseases of the
Colon & Rectum

Practice
Parameters

Practice Parameters for Sigmoid Diverticulitis

Janice Rafferty, M.D., Paul Shellito, M.D., Neil H. Hyman, M.D., W. Donald Buie, M.D., and the Standards Committee of The American Society of Colon and Rectal Surgeons

The American Society of Colon and Rectal Surgeons is dedicated to ensuring high-quality patient care by advancing the science, prevention, and management of disorders and diseases of the colon, rectum, and anus. The Standards Committee is composed of Society members who are chosen because they have demonstrated expertise in the specialty of colon and rectal surgery. This Committee was created to lead international efforts in defining quality care for conditions related to the colon, rectum, and anus. This is accompanied by developing Clinical Practice Guidelines based on the best available evidence. These guidelines are inclusive, and not prescriptive. Their purpose is to provide information on which decisions can be made, rather than dictate a specific form of treatment. These guidelines are intended for the use of all practitioners, health care workers, and patients who desire information about the management of the conditions addressed by the topics covered in these guidelines. It should be recognized that these guidelines should not be deemed inclusive of all proper methods of care or exclusive of methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific procedure must be made by the

physician in light of all of the circumstances presented by the individual patient.

PRACTICE GUIDELINE: SIGMOID DIVERTICULITIS

These guidelines address the evaluation and management of sigmoid diverticulitis and are built on the last set of guidelines for the treatment of diverticulitis published by The American Society of Colon and Rectal Surgeons (ASCRS) in 2011.¹ Additional pertinent information from the published literature from January 2009 to August 2009 was retrieved and reviewed. Searches of MEDLINE were performed by using keywords: diverticulitis, diverticulosis, peridiverticulitis, and fistula.

STATEMENT OF PROBLEM

Acquired idiopathic diverticular disease affects the sigmoid colon in 95 percent of cases. Thirty-five percent of patients with sigmoid diverticulosis also have disease in the more proximal colon. Diverticula are rare below the pelvic peritoneal reflection. Prevalence correlates with age; approximately 50 percent of the population has acquired diverticulae change by age 60 years, whereas almost 90 percent of those aged 80 years and older are affected. Ten to 25 percent of patients with diverticulosis will develop diverticulitis.²⁻¹²

Initial Evaluation of Acute Diverticulitis

1. The initial evaluation of a new patient with suspected acute diverticulitis should include a problem-

PRACTICE PARAMETERS

Practice Parameters for the Treatment of Sigmoid Diverticulitis

Daniel Feingold, M.D. • Scott R. Steele, M.D. • Sang Lee, M.D. • Andreas Kaiser, M.D. • Robin Boushey, M.D. • W. Donald Buie, M.D. • Janice Frederick Rafferty, M.D.

Prepared by the Clinical Practice Guidelines Task Force of the American Society of Colon and Rectal Surgeons

The American Society of Colon and Rectal Surgeons is dedicated to ensuring high-quality patient care by advancing the science, prevention, and management of disorders and diseases of the colon, rectum, and anus. The Clinical Practice Guideline Committee is composed of Society members who are chosen because they have demonstrated expertise in the specialty of colon and rectal surgery. This Committee was created to lead international efforts in defining quality care for conditions related to the colon, rectum, and anus. This is accompanied by developing Clinical Practice Guidelines based on the best available evidence. These guidelines are inclusive, and not prescriptive. Their purpose is to provide information on which decisions can be made, rather than dictate a specific form of treatment. These guidelines are intended for the use of all practitioners, health care workers, and patients who desire information about the management of the conditions addressed by the topics covered in these guidelines. It should be recognized that these guidelines should not be deemed inclusive of all proper methods of care or exclusive of methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific procedure must be made by the physician in light of all the circumstances presented by the individual patient.

METHODOLOGY

These guidelines are built on the last Practice Parameter for the Treatment of Sigmoid Diverticulitis published by the American Society of Colon and Rectal Surgeons.¹ An organized search of MEDLINE, PubMed, EMBASE, and the Cochrane Database of Collected Reviews was performed through August 2013. Key-word combinations using the mesh terms included "diverticulitis," "diverticulosis," "diverticular," "diverticula," "fistula," "leak," "com-

plexed," "uncomplicated," "strains," "ureter," "bowel preparation," "fistula," "CT," "MRI," "ultrasound," "antibiotics," "resection," "percutaneous drainage," "laparoscopic," and "colectomy." Directed searches of the embedded references from the primary articles were also performed in selected circumstances. Although not intended to be exhaustive, the authors primarily focused on English language manuscripts and studies in adults. Recommendations were formulated by the primary authors and reviewed by the entire Clinical Practice Guideline Committee. The final grade of recommendation was performed by using the Grades of Recommendation, Assessment, Development, and Evaluation (GRADE) system (Table 1).¹³

STATEMENT OF THE PROBLEM

The prevalence of diverticulosis in the United States has increased dramatically over the past century, and it increases substantially with age. It is generally estimated that approximately 20% of patients with diverticulosis develop diverticulitis over the course of their lifetime.¹⁴ Diverticular disease accounts for approximately 300,000 hospitalizations per year in the United States, resulting in 1.5 million days of inpatient care.¹⁵ Additionally, roughly 1.5 million outpatient visits each year are due to diverticular disease.¹⁶ Over the past several years, research describing the natural biology of diverticulitis has been incorporated into the management recommendations for this challenging disease. The continuously evolving diagnostic and treatment options for diverticulitis are reflected in this updated review. Although diverticulitis may affect any location in the colon, this parameter will focus on left-sided disease.

Initial Evaluation of Acute Diverticulitis

1. The initial evaluation of a patient with suspected acute diverticulitis should include a problem-specific history and physical examination, a complete blood count, urinalysis, and abdominal radiographs in selected clinical scenarios. Grade of Recommendation: Strong recommendation based on low-quality evidence, 1C.

Dis Colon Rectum 2014; 57: 284-294
DOI: 10.1097/DOR.0000000000000107
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JOURNAL OF THE COLON & RECTUM SOCIETY 57:4 (2014)

2006

2014

Grade of Recommendation: B

Grade of Recommendation: 1C

American Gastroenterological Association Institute Guideline for the Management of Acute Diverticulitis.

Authors: Neil Stollman,¹ Walter Smalley,² Ikuo Hirano,³ and the AGA Institute Clinical Guidelines Committee

RECOMMENDATION	Strength of Recommendation	Quality of Evidence
The AGA suggests that antibiotics should be used selectively, rather than routinely, in patients with acute uncomplicated diverticulitis.	Conditional	Low

Is it safe to send home an uncomplicated diverticulitis? The DIVER trial

Ciro Paolillo · Ilenia Spallino

TAC

Valutare caso per caso

Comunicazione

Follow up