



Surgical Quality of Acute Diverticulitis at the University of Louisville

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Introduction

- Acute diverticulitis is a condition characterized by inflammation or infection of one or more diverticula in the digestive tract.
- If left untreated, diverticulitis can lead to serious complications requiring surgery
- Prevalence is age dependent, with 60% of those older than 80 years of age experiencing some form of diverticular disease.
- 85% of cases of acute diverticulitis in the US occur in the sigmoid and descending colons.

Purpose

- To assess the quality of care of patients treated in the Louisville area for acute diverticulitis

Methods

- Comprehensive literature review pertaining to the treatment of acute diverticulitis
- ICD9 codes were used to identify patients
- Retrospective health record reviews
 - physician and nursing notes, admission and discharge documentation, laboratory and diagnostic testing reports, and other clinical or administrative data
- Utilized case report forms to create an acute diverticulitis database

Clinical Relevance

- There remains wide variation and no established standard management protocol for the treatment of acute diverticulitis at the University of Louisville Medical Center

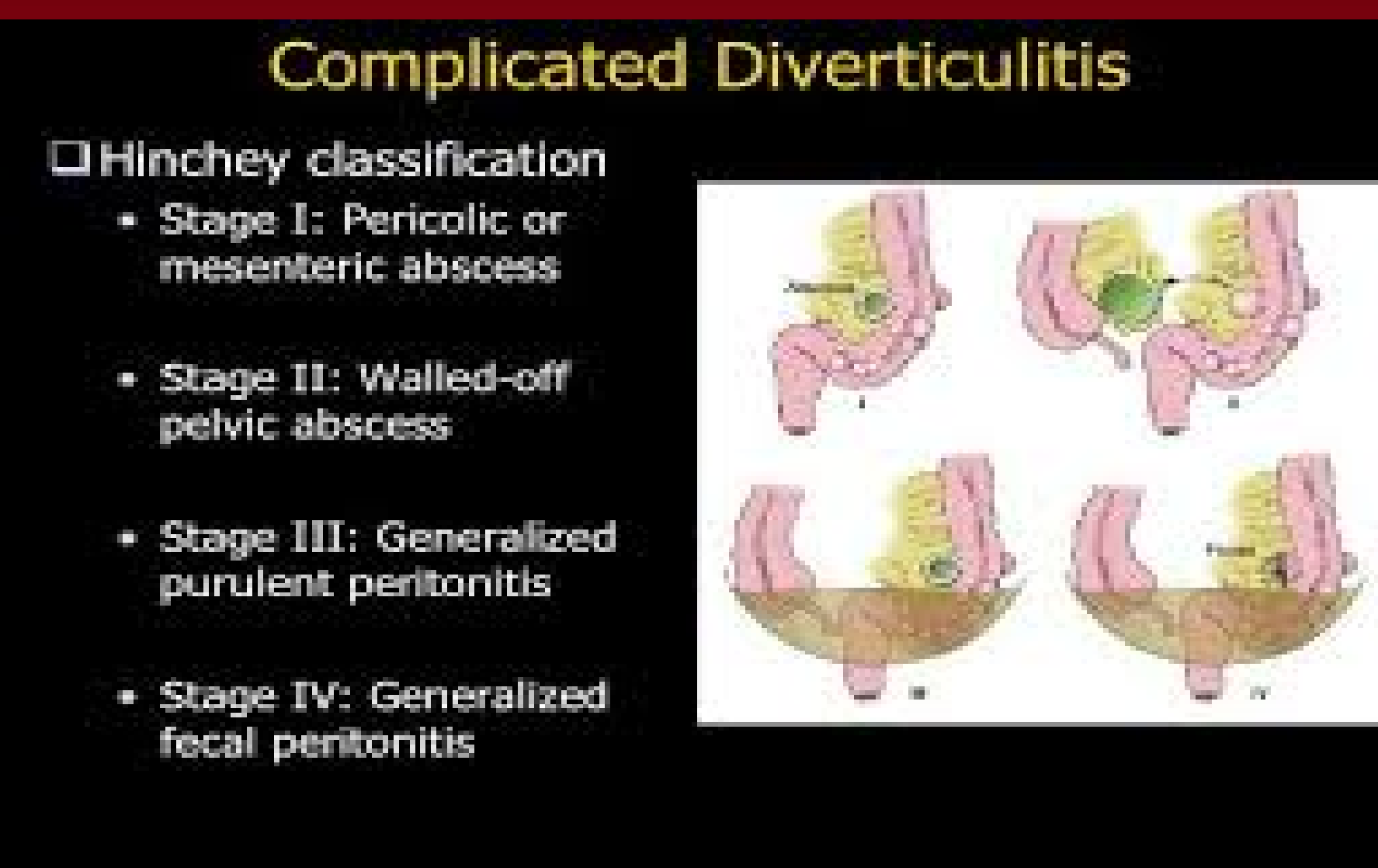


Figure 1. Hinchey Classification

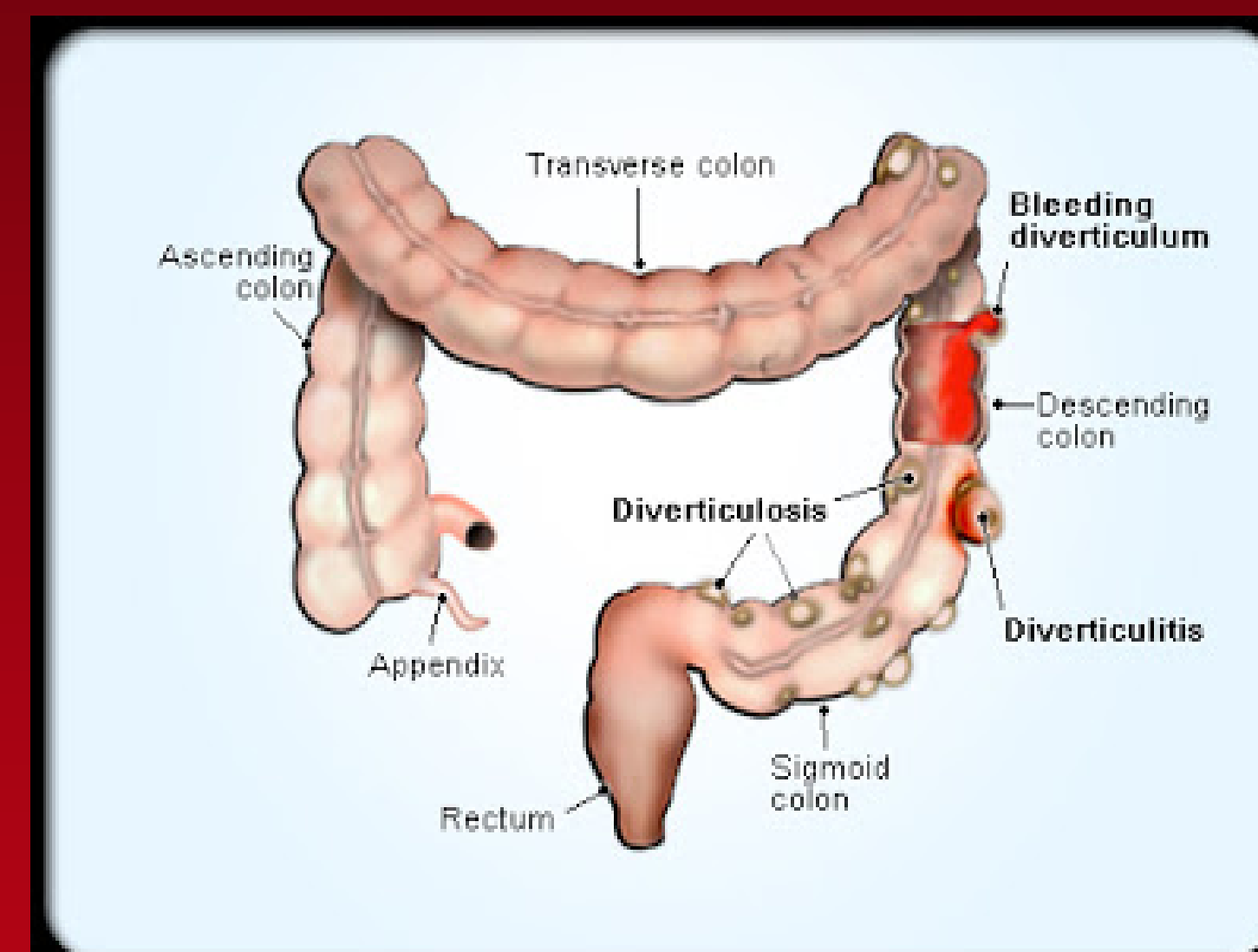


Figure 2. Common Location for Diverticular Disease within the Colon

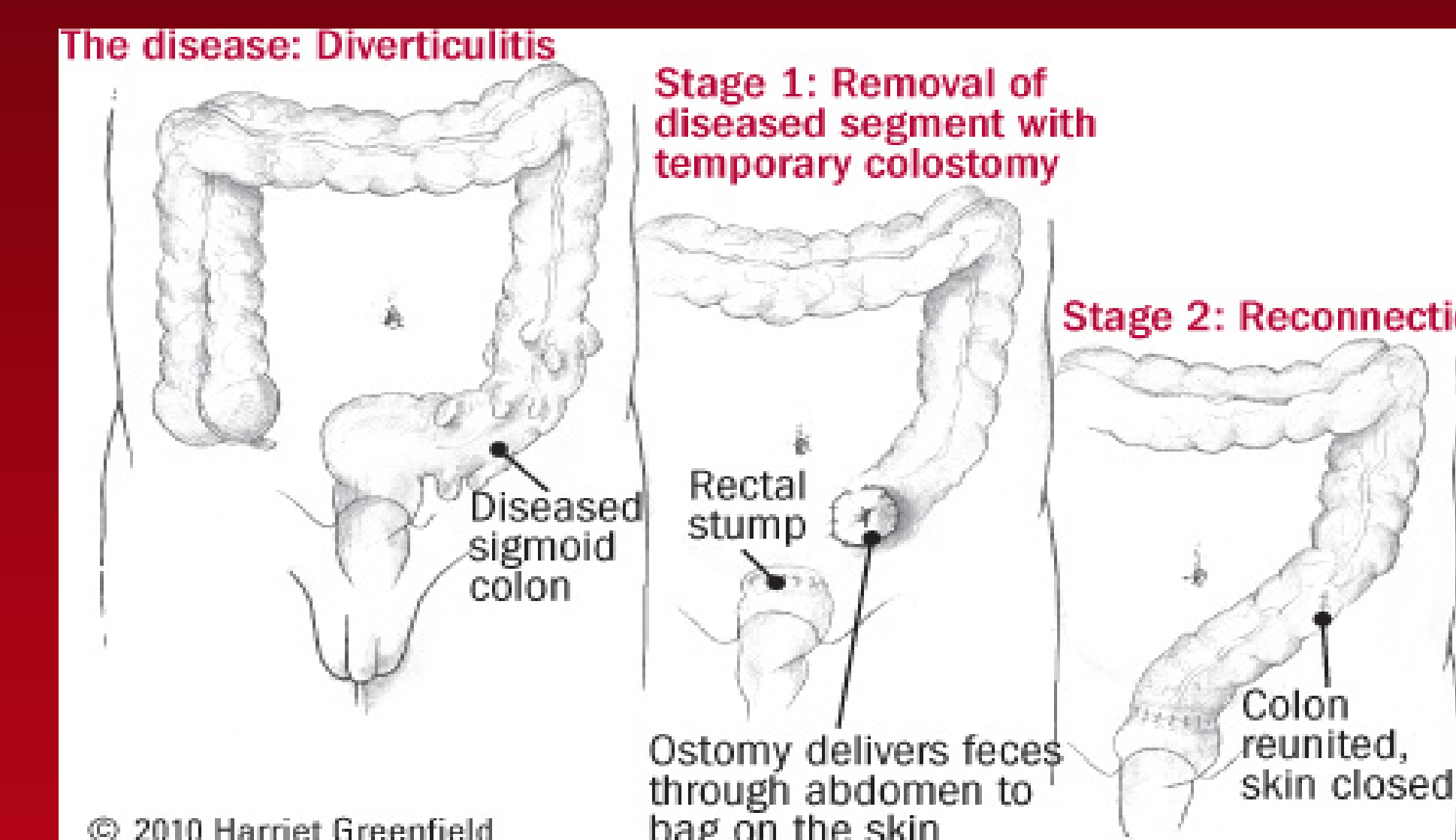


Figure 3. Two-stage surgical management for Acute diverticulitis

Results

Table 1: Patient demographics and baseline characteristics

Sex	
Male	19 (41.3%)
Female	27 (58.7 %)
Race	
African American	10 (21.7%)
White	36 (78.3%)
Age (years)	
Median	57
Range	34-80
Known Diverticulosis	30 (65.22%)
Prior Episode of Diverticulitis	36 (78.26%)
Colon Resection	18 (39.10%)

* n= 46

Table 2: Presenting diverticular presentation

Presenting Hospital	
KentuckyOne Health Jewish Hospital	15 (32.61%)
University of Louisville Hospital	31 (67.39%)
Diverticulitis	
Fistula	0 (0%)
Bleeding	0 (0%)
Abscess & Fistula	1 (2.17%)
Perforation	7 (15.22%)
Abscess	8 (17.39%)
Abscess & Perforation	9 (19.57%)

* n= 46

Table 3: Surgical treatment

Surgery at Initial Presentation	19 (51.35%)
Type of Operation	
Open	1 (2.7%)
Through Ostomy	1 (2.7%)
Laporoscopic	35 (94.59%)
Operation Performed	
Lysis of Adhesions	1 (2.7%)
CT Guided Aspiration	2 (5.41%)
Endoscopy	4 (10.81%)
Surgical Ressection	23 (62.16%)

* n= 37

Table 4: Common Anti-Bx used w/ patient treatment

Antibiotic Regimen	Number of Patients
Vancomycin	1 (4.35%)
Augmentin	2 (8.7%)
Ciprofloaxcin	4 (17.39%)
Levofloaxcin (levaquin)	8 (34.78%)
Piperacillin/Tazobactam (Zosyn)	8 (34.78%)
Metronidazole (flagyl)	19 (82.61%)

* n= 23; 50% of patients were placed on antibiotics

Results

- A total of 46 patients with a history of diverticulitis were included in this study.
- Although diverticular disease is most common in those over 60, some as young as 34 were present in our study.
- 78% of patients had at least 1 prior episode of diverticulitis; and 39% had had a previous colon resection.
- Duration of antibiotics was dependent upon the patients' length of stay (LOS) in the hospital.
 - Few continued antibiotics post discharge
 - Patients who were non-surgical recieved more antibiotics than those who were surgical
- No significant difference in the average LOS for non-surgical and surgical patients, 4.6 and 4.9 (days) respectively
- SAPS II scores of non-surgical were slightly higher compared to those of surgical patients, 15.9 and 13.5, respectively

Conclusions/Future Direction

- Standardize management of acute diverticulitis
 - There is a variability for management in the Louisville area.
- Longer term follow-up after initial acute episode is NEEDED
- Education on disease prevention during patient screenings remains a CRITICAL UNMET NEED
- Ostomy preventions:
 - Increasing the number of patients who are treated with 1-stage procedures versus 2-stage procedures

Acknowledgements

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