

DIVERTICULITIS IN YOUNG PATIENTS

Practice Parameters for the Treatment of Sigmoid Diverticulitis-Supporting Documentation. *The Standards Task Force. The American Society of Colon and Rectal Surgeons. Dis Colon Rectum 2000; 43: 289-297.*

- Increasing in prevalence, particularly in the Western Hemisphere
- Diverticulosis present in 1/3 population >45 and 2/3>85
- 10-25% will develop diverticulitis

Initial Evaluation:

- LLQ pain (93-100%), fever (57-100%), and leukocytosis (69-83%)
- Differential Diagnosis: IBS, colon cancer, IBD, ischemic colitis, appendicitis, bowel obstruction, GYN and GU diseases
- Labs: CBC and UA
- Imaging: from none at all to Obst. Series, enema, US, CT

Medical Management:

- Uncomplicated Diverticulitis:
 - NPO or clears, IV fluids, antibiotics
 - Resolution of symptoms in 70-100%
 - Long term-BE or colonoscopy, high fiber diet
 - Risk of recurrence is 7-45% (70% success of medical treatment with 1st attack, 6% after 3rd attack), therefore after 2 attacks surgery often recommended.
- Complicated Diverticulitis: abscess, fistula, obstruction, stricture, or perforation.
 - Hinchey Classification: diverticulitis associated with-
 - Stage I: pericolic abscess
 - Stage II: distant abscess (retroperitoneal or pelvic)
 - Stage III: purulent peritonitis
 - Stage IV: fecal peritonitis
 - Bowel rest and antibiotics, percutaneous drainage, surgical drainage.
 - **YOUNG PATIENT:** “Although some surgeons recommend elective resection in the young patient after one well-documented episode of uncomplicated diverticulitis, this tenet remains controversial, because the natural history of diverticular disease in the young patient has not been clearly defined. Two recent studies failed to substantiate a “more aggressive” nature of diverticulitis in young patients.”
 - Recurrence after resection: 4-7% (all ages)

Diverticulitis in Young Patients: Is Resection After a Single Attack Always

Warrented? *Guzzo and Hyman. Dis Colon Rectum. 2004; 47: 1187-1191..*

- Background: Papers from '73-'88 reported diverticulitis in young patients as a more virulent disease with recommendations of elective resection after a single attack.
- Method:
 - Hypothesis: Young patients who do not present initially with perforative complication requiring surgery are unlikely to present at a later date with perforation.

- Population: A retrospective chart review at the U. of Vermont between 1990-2001. Identified by ICD-9 coding sigmoid diverticulitis. Demographics were assessed as was comparison of patient's age (50).
- Median f/u 5.2 (1-11.2) years.
- Results: Total of 762 patients
 - 259 (34%) under 50 years (Group 1), 118 (16%) under age 40
 - 594 (69%) managed non-operatively, 31% had an operation at some point.
 - Group 1: 63 pts (24%) required surgery on initial hospitalization vs. 22% for group 2. [perforation or failed medical management]
 - However, 40% vs 26% required surgery at some point (P=0.001), secondary to elective resection.
 - 41 later surgeries, 1 for perforation, 3 for recurrent diverticulitis, 1 for colonoscopic perf., remaining elective resection.
 - 155/259 (60%) were treated non-operatively!
- Discussion:
 - Recent literature suggests increasing incidence of diverticulitis in the young (from 2-5% to 10-25%).
 - Additional 16% underwent surgery, almost always electively.
 - "It seems obvious that a significant proportion of young patients have undergone surgery because of an error in diagnosis rather than the virulent nature of their diverticulitis."
- Conclusions: "Advising surgery for younger patients strictly based on the risk of a subsequent intra-abdominal catastrophe does not seem justified. A more selective approach based on lingering symptoms or recurrent episodes seems preferable.
- Criticisms:
 - Outpatient information missing from chart (ongoing symptoms not requiring hospitalization).
 - Patients may have been treated at another hospital.
 - Misdiagnosis (no surgical specimen).

Acute Colonic Diverticulitis in the Young. *Spivak et al. Dis Colon Rectum 1997; 40: 570-574.*

- Background: Colonic diverticulitis in the young has been considered to have a virulent course, with a high morbidity and operative rate. This resulted in the elective resection of the involved colonic segment after the first clinical episode has been the usual practice.
- Methods: From 1986-1995, 63 patients younger than 45 years were treated for acute diverticulitis at Beth Israel (total 661 patients). A retrospective review was performed to determine the clinical course and outcome of these patients.
- Results:
 - Hinchey I: 57
 - Hinchey II: 2
 - Hinchey III: 4
 - 41 patients (65 percent) were successfully treated medically with antibiotics and bowel rest.
 - Of 22 patients (35 percent) who underwent emergent operations, 12 patients' diseases had been erroneously diagnosed preoperatively (9 "appendicitis").
 - 41 patients with conservative management.

- 11 underwent planned elective resection
- 20/30 with no surgery were followed
 - 5(25%) complained of infrequent abdominal pain
 - No further medical treatment was necessary (All Hinchey I)
 - Prior diverticulitis in 13 of the original 63 patients
- Conclusion:
 - Diverticulitis at a young age does not have a specific aggressive nature.
 - Although, it is associated with a high rate of emergency operations, many of these are performed for a mistaken diagnosis.
 - The recommendation for routine elective resection following the first episode of diverticulitis should be reassessed.

Long-term management of diverticulitis in young patients. Vignati et al. *Dis Colon Rectum*. 1995 Jun;38(6):627-9

- Purpose: This study was designed to determine the natural history of documented diverticulitis that resolves after treatment with intravenous antibiotics and bowel rest in patients under the age of 50.
- Methods: Records of 40 patients aged 50 or under who were hospitalized with the diagnosis of acute diverticulitis between 1980 and 1984 were reviewed. Patients successfully treated with antibiotics were contacted five to nine years after their attack and surveyed via telephone questionnaire about symptoms, recurrent attacks, and surgical interventions.
- Results:
 - A total of 40 patients were included in the study.
 - Ten patients (25 percent) required surgery during initial admission
 - 30 patients were discharged with resolution of their symptoms after treatment with intravenous antibiotics and bowel rest.
 - A five-year to nine-year follow-up was obtained on patients treated medically (28/30 or 93%)
 - one-third (32%) of whom underwent operation for diverticulitis during this period (recurrence, but none required colostomy)
 - two-thirds of whom did not require surgery during the follow-up period.
 - All operations were elective with single-stage resections.
 - 58% completely symptom free
- Conclusion: Based on our data, we do not recommend surgery in this population after a single episode of diverticulitis that resolves after treatment with antibiotics.

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