



Effective Health Care Management of Acute Complicated Diverticulitis

Next Steps

The nominator, the American College of Physicians (ACP), is interested in a comprehensive systematic review that will focus on management of acute complicated diverticulitis (ACD). The systematic review will be used to inform development of a new clinical practice guideline.

After additional discussion with nominator, ACP decided to withdraw the nomination. No further activity will be undertaken by the EHC Program at this time.

Topic Summary and Considerations

Topic Name and Number: 0772 Management of Acute Complicated Diverticulitis (ACD)

Topic Summary Date: 05/2018

Key Questions

Key Question 1: What are the effectiveness/harms and comparative effectiveness/harms of oral or parenteral antibiotics for the treatment of acute complicated diverticulitis?

- a. Do the effectiveness/harms vary by route of administration of antibiotic, type of antibiotic, duration of course of antibiotic?
- b. Do the effectiveness/harms vary by patient characteristics or presentation of illness?

Key Question 2: What are the benefits and harms of CT imaging for the initial diagnosis of acute complicated diverticulitis?

- a. Do the benefits and harms vary by patient characteristics or presentation of illness?

Key Question 3: What are the benefits and harms of distant colonoscopy following an episode of acute complicated diverticulitis?

- a. Do the benefits and harms vary by patient characteristics or presentation/course of illness?

Key Question 4: What are the benefits and harms of interventional versus surgical management of complicated diverticulitis?

- a. Do the benefits and harms vary by patient characteristics or presentation/course of illness?

Key Question 5: What are the effectiveness and harms of pharmacological (e.g., mesalamine) and non-pharmacologic (e.g., dietary advice) interventions to prevent recurrent complicated diverticulitis?

Population, Interventions, Comparator, Outcomes, Timing and Setting

| | KQ1: Antibiotics | KQ2: Diagnostic imaging | KQ3: Follow-up colonoscopy | KQ4: Surgical and interventional management | KQ5: Prevention of recurrence |
|----------------------|--|---|---|---|--|
| Population | Adults with ACD Subgroups: age, ethnicity, gender, comorbidities, disease presentation | Adults with suspected ACD Subgroups: age, ethnicity, gender, comorbidities, disease presentation | Adults with resolved episode of ACD Subgroups: age, ethnicity, gender, comorbidities, disease presentation | Adults with ACD Subgroups: age, ethnicity, gender, comorbidities, disease presentation | Adults with history of ACD Subgroups: age, ethnicity, gender, comorbidities, disease presentation |
| Interventions | Antibiotics (oral or parenteral) | CT scan, MRI, ultrasound | Colonoscopy | <ul style="list-style-type: none"> • Laparoscopic lavage and drainage • Percutaneous drainage (interventional radiology) • Surgical resection with primary anastomosis • Hartmann's procedure | Drug (ex. 5-amino salicylates, etc.) and non-drug (ex. dietary) interventions |
| Comparators | No antibiotics, antibiotics by other route of administration, type of antibiotic, duration of course | Other included intervention | No colonoscopy | No intervention, Other active intervention | No intervention, other drug, other non-drug, drug vs. non-drug, combinations |
| Outcomes | Resolution of diverticulitis, recurrent diverticulitis, avoidance of surgery, morbidity, mortality, adverse events | Diagnostic accuracy, adverse events | Occult colorectal cancer, recurrent diverticulitis, adverse events | Resolution of diverticulitis, morbidity, mortality, adverse events | Recurrent diverticulitis, adverse events |
| Timing | All | All | Acute vs. convalescent | All | All |
| Setting | Inpatient, outpatient | Inpatient, outpatient | Outpatient | Inpatient, outpatient | Outpatient |

Abbreviations: KQ=Key Questions; ACD=Acute Complicated Diverticulitis; MRI=Magnetic Resonance Imaging; CT=Computed Tomography

Colonic diverticulosis is a common condition in Western countries with prevalence rates that exponentially increases with age (5% by 40 years up to 65% by 85 years of age).¹ Inflammation leads to a condition termed acute diverticulitis, which can be subdivided into complicated and uncomplicated categories. In their lifetime, approximately 15–20% of individuals with diverticulosis will develop ACD.² As opposed to uncomplicated diverticulitis, ACD is characterized by the presence of phlegmon, abscess, or perforation.³ Recently, there has been a substantial increase in incidence rates of both complicated and uncomplicated diverticulitis as well as a considerable rise in hospital admissions. This has led to a significant cost burden of up to \$2.4 billion annually in the United States.^{4, 5}

In recent years, several controversies have emerged with regards to the optimal management of ACD. Due to unfavorable mortality and complication rates, physicians have opted to delay definitive surgical management by employing antibiotics and interventional radiology procedures such as percutaneous drainage of abscesses. Surgical approaches have also evolved from Hartmann's procedure to primary anastomosis with protective stoma or even laparoscopic lavage and drainage for perforations with purulent or feculent peritonitis.⁶ Other areas of controversy include selection of the optimal imaging modality to diagnose ACD as well as appropriateness of performing distal colonoscopy following a resolved episode of ACD to detect occult colonic malignancy.^{7, 8} In addition, pharmacologic and non-pharmacologic measures such as 5-aminosalicylates and dietary modification, respectively, to prevent recurrent attacks have been of recent interest for physicians.^{9, 10}

The nomination was submitted on March 1, 2018. After discussions with the nominator about the scope and timing of a potential AHRQ systematic review, ACP decided to withdraw their nomination at this time with plans to submit a new nomination with a revised expanded scope in the near future.

References

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