



Effective Health Care

Diagnosis of Acute Appendicitis

Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Diagnosis of acute appendicitis will go forward for refinement as a systematic review. The scope of this topic, including populations, interventions, comparators, and outcomes, will be further developed in the refinement phase.
 - When key questions have been drafted, they will be posted on the AHRQ Web site and open for public comment. To sign up for notification when this and other Effective Health Care (EHC) Program topics are posted for public comment, please go to <http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/>.
- The effectiveness of various surgical techniques for avoidance of stump appendicitis is not feasible for a review due to insufficient evidence at this time.

Topic Description

Nominator: Individual

Nomination Summary: The nominator is interested in accurate diagnostic testing for acute appendicitis in patients presenting with abdominal pain as well as the effectiveness of various surgical techniques for avoidance of a rare complication – stump appendicitis.

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Population(s): Patients with acute abdominal pain (subgroups include nonpregnant adults, children and pregnant women)

Intervention(s): Clinical evaluation and observation, lab tests, imaging (ultrasound, MRI, and CT with or without contrast)

Comparator(s): Above techniques compared with each other or compared across combinations of techniques

Outcome(s): Accurate diagnosis of surgically/pathologically-confirmed acute appendicitis; timely diagnosis of acute appendicitis (e.g., prior to perforation of the appendix); length of hospital stay; reduction of short- and long-term complications (including mortality, sepsis, stump appendicitis)

Key Questions from Nominator:

1. What is the percentage of microscopic validation of acute inflammation among appendices removed for acute abdominal pain?

Considerations

- The topic meets all EHC Program selection criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- The accurate and timely diagnosis of acute appendicitis has an impact on therapeutic decision-making and patient health outcomes. There are risks associated with diagnosis of acute appendicitis, including under- or late diagnosis leading to increased morbidity and mortality and overdiagnosis leading to unnecessary surgical interventions. There are also risks associated with imaging, particularly for patient subgroups such as children and pregnant women, including harms posed by radiation exposure. There is a need for clearer guidance on the comparative effectiveness, accuracy, and safety of diagnostic techniques for suspected acute appendicitis. Therefore, this topic will move forward as a new systematic review of diagnostic techniques for acute appendicitis.
- The issue of preventing, diagnosing, and treating stump appendicitis is not feasible for a systematic review due to the lack of literature addressing this very rare complication.