Body System: Gastrointestinal

Session Topic: Abdominal Pain and Acute Abdomen Emergent and Urgent Care

Educational Format		Faculty Expertise Required
REQUIRED	Interactive Lecture	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required.
OPTIONAL	Problem-Based Learning (PBL)	Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.

Professional Practice Gap	Learning Objective(s) that will close the gap and meet the need	Outcome Being Measured
• Physicians have knowledge gaps with regard to evaluating acute abdominal pain, particularly in the use of specialized maneuvers to evaluate for signs associated with causes of abdominal pain. • Physicians have knowledge gaps in the selection of appropriate diagnostic imaging for the evaluation of abdominal pain. • Physicians have knowledge gaps in identifying red flag symptoms in patients with acute abdominal pain that indicate emergent or urgent conditions that require surgical consult.	1. Treat patients presenting with abdominal pain in the urgent care or emergency care setting judiciously with appropriate analgesics. 2. Narrow the differential diagnosis of acute abdominal pain based on the location of the pain and the age and sex of the patient. 3. Order appropriate diagnostic and imaging studies based on the location of the pain and the presentation of the patient. 4. Identify red flag symptoms in patients with acute abdominal pain that indicate emergent or urgent conditions that require surgical consult.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.

ACGME Core Competencies Addressed (select all that apply)

X	Medical Knowledge		Patient Care
	Interpersonal and Communication Skills		Practice-Based Learning and Improvement
	Professionalism		Systems-Based Practice

Faculty Instructional Goals

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong

learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations
- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
    - Visit http://www.aafp.org/journals for additional resources
    - Visit http://familydoctor.org for patient education and resources
- Provide recommendations for treating patients presenting with abdominal pain in the urgent care or emergency care setting judiciously with appropriate analgesics.
- Provide specific evidence-based examples illustrating the appropriate pain treatment of patients presenting with abdominal pain in the urgent care or emergency care setting
- Provide specific case-based examples illustrating the differential diagnosis of acute abdominal pain
- Provide evidence-based examples illustrating appropriate diagnostic and imaging studies for patients presenting with abdominal pain
- Provide case-based examples illustrating the identification of "red flag" symptoms in patients presenting with acute abdominal pain

Needs Assessment

Although abdominal pain is common and often benign, acute and severe abdominal pain is almost always a symptom of intra-abdominal disease. Approximately 1.6% of office visits and 8% of emergency department visits are for abdominal pain.[1] Ten percent of patients presenting to the emergency department for abdominal pain have a severe or life-threatening cause for their abdominal pain and may require surgery.[2] Approximately one-fourth of patients presenting to the emergency department are older than 50 years of age, and tend to tend to present later in the course of their illness and have more nonspecific symptoms.[3]

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that family physicians have knowledge gaps related to evaluating and managing abdominal pain, including selecting and interpreting appropriate imaging modalities.[4] More specifically, CME outcomes data from 2013 and 2014 AAFP Assembly: *Acute and Chronic Abdominal Pain* sessions suggest that physicians need continuing medical education with regard to evaluation, especially the inclusion of testicular exams in males and pregnancy tests for females of childbearing age presenting with abdominal pain; the identification of red flags for comorbid conditions; selection of appropriate imaging tests; performing appropriate physical examination techniques; and strategies to increase guideline adherence.[5,6]

Physicians may improve their care of patients with acute abdominal pain by engaging in continuing medical education that provides practical integration of current evidence-based

guidelines and recommendations into their standards of care, including, but not limited to the following:[2,3,7,8]

- Ultrasonography is the initial imaging study of choice for evaluating patients with acute right upper quadrant pain.
- Computed tomography is the initial imaging study of choice for evaluating patients with acute right lower quadrant or left lower quadrant pain.
- Conventional radiography has limited diagnostic value in the assessment of patients with acute abdominal pain.
- Beta human chorionic gonadotropin testing should be considered before performing diagnostic imaging in all women of reproductive age presenting with acute abdominal pain.
- A normal white blood cell count does not rule out appendicitis.
- Simultaneous amylase and lipase measurements are recommended in patients with epigastric pain.
- Computed tomography is the imaging study of choice for evaluating patients with acute right lower quadrant or left lower quadrant abdominal pain.
- Abdominal radiography is an effective initial examination in patients with suspected intestinal obstruction.
- Consider cholecystitis even if an older patient does not present with classic symptoms, because they often are absent in older persons.
- Consider small bowel obstruction in the older patient with a history of surgery who presents with diffuse, colicky pain, nausea, vomiting, altered bowel sounds, distention, dehydration, diffuse tenderness, and possibly an ill-defined mass.
- Consider abdominal aortic aneurysm in the older patient with back or abdominal pain, particularly if they are male or have a history of tobacco use.
- Consider acute mesenteric ischemia if a patient presents with severe, poorly localized pain out of proportion to physical findings.

Physicians can improve patient satisfaction with the referral process by using readily available strategies and tools such as, improving internal office communication, engaging patients in scheduling, facilitating the appointment, tracking referral results, analyzing data for improvement opportunities, and gathering patient feedback.[9,10]

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Diagnostic Imaging of Acute Abdominal Pain in Adults[8]
- Evaluation of acute abdominal pain in adults[2]
- Diagnosis of acute abdominal pain in older patients[3]
- ACR Appropriateness Criteria: Left lower-quadrant pain[11]
- Acute Pancreatitis[12]
- Abdominal Aortic Aneurysm[13]
- ACR Appropriateness Criteria: right lower quadrant pain--suspected appendicitis[14]
- ACR appropriateness criteria right upper quadrant pain[15]
- Engaging Patients in Collaborative Care Plans[16]
- The Use of Symptom Diaries in Outpatient Care[17]
- Health Coaching: Teaching Patients to Fish[18]
- Encouraging patients to change unhealthy behaviors with motivational interviewing[19]
- Integrating a behavioral health specialist into your practice[20]
- Simple tools to increase patient satisfaction with the referral process[9]
- FamilyDoctor.org. Abdominal Pain, Short-term. Search by Symptom (patient resource)[21]

References

1. Centers for Disease Control and Prevention (CDC). National Ambulatory Medical Care Survey. In: Ambulatory and Hospital Care Statistics Branch, ed2010.

2. Cartwright SL, Knudson MP. Evaluation of acute abdominal pain in adults. *American family physician.* Apr 1 2008;77(7):971-978.

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4. AAFP. 2012 CME Needs Assessment: Clinical Topics. American Academy of Family Physicians; 2012.

5. American Academy of Family Physicians (AAFP). AAFP Assembly CME Outcomes Report. Leawood KS: AAFP; 2014.

6. American Academy of Family Physicians (AAFP). 2013 AAFP Scientific Assembly: CME Outcomes Report. Leawood KS: AAFP; 2013.

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8. Cartwright SL, Knudson MP. Diagnostic imaging of acute abdominal pain in adults. *American family physician.* Apr 1 2015;91(7):452-459.

9. Jarve RK, Dool DW. Simple tools to increase patient satisfaction with the referral process. *Family practice management.* Nov-Dec 2011;18(6):9-14.

10. American Academy of Family Physicians (AAFP). FPM Toolbox: Referral Management. 2013; http://www.aafp.org/fpm/toolBox/viewToolType.htm?toolTypeId=26. Accessed July, 2014.

11. Hammond NA, Nikolaidis P, Miller FH. Left lower-quadrant pain: guidelines from the American College of Radiology appropriateness criteria. *American family physician.* Oct 1 2010;82(7):766-770.

12. Quinlan JD. Acute pancreatitis. *American family physician.* Nov 1 2014;90(9):632-639.

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20. Reitz R, Fifield P, Whistler P. Integrating a behavioral health specialist into your practice. *Family practice management.* Jan-Feb 2011;18(1):18-21.

21. FamilyDoctor.org. Abdominal Pain, Short-term. *Search by Symptom* 2014; http://familydoctor.org/familydoctor/en/health-tools/search-by-symptom/abdominal-pain-short-term.html. Accessed September, 2014.

