



## Evaluation & Management of a Patient with an Acute Abdomen

<b>Description of the Activity</b>	General surgeons are vital in the evaluation and management of adult and pediatric patients with an acute abdomen. Surgeons must be able to determine if a patient presenting in the inpatient, outpatient, or emergency department setting has an acute abdomen and develop and execute a treatment plan.
<b>Functions</b>	<ul style="list-style-type: none"><li>❖ Nonoperative/Preoperative<ul style="list-style-type: none"><li>➤ Recognize the level of urgency for surgical consultation.</li><li>➤ Perform a focused history and physical examination, assessing pertinent positive and negative signs and symptoms.</li><li>➤ Synthesize essential information from a patient's referring providers, medical records, history, physical examination, and initial diagnostic evaluations to develop a differential diagnosis.</li><li>➤ Determine the need for additional diagnostic studies, including radiologic and laboratory evaluations.</li><li>➤ Determine the need and timing for operative intervention.</li><li>➤ Guide preoperative resuscitation and management.</li><li>➤ Communicate with all health care team members regarding the plan of care.</li><li>➤ Obtain informed consent with cultural humility.<ul style="list-style-type: none"><li>▪ Describe the indications, risks, benefits, alternative therapies, and potential complications of the planned procedure, and incorporate a discussion of the goals of care.</li><li>▪ Ensure patient/caregiver comprehension using applicable language services and audio/visual aids.</li><li>▪ Ensure that the patient/caregiver(s) can ask questions, and address any expressed concerns, taking patient/caregiver preferences into account.</li><li>▪ Document the consent discussion.</li></ul></li><li>➤ Adapt communication style and interventions based on challenging encounters, such as futility or language barriers.</li></ul></li><li>❖ Intraoperative<ul style="list-style-type: none"><li>➤ Manage the perioperative environment, including room setup, equipment check, preprocedural time-out, specimen processing, counts, wound classification, and debriefing functions.</li><li>➤ Develop an initial operative plan that demonstrates understanding of a patient's pathology, anatomy, physiology, indications, contraindications, and potential complications.</li><li>➤ Collaborate with perioperative health care professionals to create and maintain an intraoperative environment that promotes safe patient care.</li><li>➤ Position the patient to expose the operative field, and take precautionary measures to prevent iatrogenic injury.<ul style="list-style-type: none"><li>▪ Position the patient for use of table-mounted retractors.</li></ul></li><li>➤ Explore the abdomen to identify a causative pathology.</li><li>➤ Perform operative intervention, such as:<ul style="list-style-type: none"><li>▪ Bowel resection</li><li>▪ Irrigation and drainage</li><li>▪ Repair of perforation</li></ul></li><li>➤ Integrate new information discovered intraoperatively, and modify the operative plan if necessary, including:</li></ul></li></ul>



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	<ul style="list-style-type: none"><li>▪ Anastomosis versus ostomy as indicated</li><li>▪ Damage control with an open abdomen and a plan for a second look</li><li>▪ Need for intraoperative consultation</li></ul> <p>❖ Postoperative</p> <ul style="list-style-type: none"><li>➤ Initiate and oversee postoperative care, including the patient's postoperative disposition.</li><li>➤ Guide postoperative resuscitation and management.</li><li>➤ Communicate a postencounter plan with a patient/caregiver(s) and other health care team members that considers location, postencounter needs, outcome expectations, and follow-up.</li><li>➤ Develop a postencounter plan that includes analysis of patient-specific barriers to care.</li><li>➤ Recognize and manage the most common complications:<ul style="list-style-type: none"><li>▪ Abdominal compartment syndrome</li><li>▪ Anastomotic leak</li><li>▪ Bleeding</li><li>▪ Bowel obstruction/ileus</li><li>▪ Deep organ-space infection</li><li>▪ Ischemic bowel</li><li>▪ Superficial surgical-site infection</li></ul></li><li>➤ Communicate with the patient/caregiver(s) to ensure understanding of perioperative care and information regarding the prognosis related to further therapy so the patient can carry out the resultant plan within the context of their lives (eg, transportation, living situation, insurance, access to a pharmacy).</li></ul>
<b>Scope</b>	<p>❖ In scope</p> <ul style="list-style-type: none"><li>➤ Adult patients</li><li>➤ Pediatric patients over the age of 2 years</li></ul> <p>❖ Out of scope</p> <ul style="list-style-type: none"><li>➤ Pediatric patients under the age of 2 years</li><li>➤ Recognize surgeon or facility-specific limitations and the need for referral to a subspecialty pediatric surgeon at the surgeon's discretion.</li></ul>



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<p><b>1</b></p> <p><b><u>Limited Participation</u></b></p> <p>Demonstrates understanding of information and has very basic skills</p> <p><b><u>Framework:</u></b> What a learner directly out of medical school should know</p> <p>The attending can show and tell.</p>	<ul style="list-style-type: none"> <li>Obtains an H&amp;P with cultural humility and develops a limited differential for a patient presenting with acute abdominal pain/peritonitis</li> <li>Initiates diagnostic testing for a patient with acute abdominal pain but in an unfocused way and without urgency</li> <li>Communicates the elements of an informed consent discussion but omits some elements when documenting the discussion</li> <li>Completes admitting documentation to a non-ICU level of care with assistance</li> <li>Displays limited ability to communicate clearly with all care team members regarding the plan of care</li> </ul>	<ul style="list-style-type: none"> <li>Assists with surgical positioning and preparation of the patient</li> <li>Assists with adequate exposure</li> <li>Maintains a sterile field</li> <li>Handles instruments safely but tentatively; displays a lack of coordination between both hands; performs suturing and knot tying inefficiently</li> <li>Performs superficial wound closure</li> </ul>	<ul style="list-style-type: none"> <li>Communicates basic aspects of the operation and ongoing management plan with a patient/caregiver(s) but needs prompting to clarify expected outcomes and the anticipated treatment course</li> <li>Documents brief operative notes and postop evaluation, with some errors or omissions</li> <li>Writes routine postop orders for a patient being admitted to the floor</li> <li>Performs a postop evaluation and relays patient status, including abnormal status</li> </ul>
<p><b>2</b></p> <p><b><u>Direct Supervision</u></b></p> <p>Demonstrates understanding of the steps of the operation but requires direction through principles and does not know the nuances of a basic case</p>	<ul style="list-style-type: none"> <li>Evaluates a patient presenting with acute abdominal pain/peritonitis, recommends and interprets lab and imaging studies, and stratifies the urgency of the presentation</li> <li>Initiates resuscitation and develops a plan for managing a patient presenting with acute abdominal pain/peritonitis</li> <li>Initiates informed consent for an operation, requiring help to address best- and worst-case scenarios for the short, medium, and long term and ensure patient/caregiver comprehension</li> <li>Completes admitting documentation to the floor or ICU</li> <li>Articulates all key facts to supervisors, including the urgency of the condition</li> </ul>	<ul style="list-style-type: none"> <li>Identifies the area of concern but has difficulty identifying causative pathology; requires coaching for most intraoperative decisions</li> <li>Anticipates some next steps in the operation and necessary instruments</li> <li>Places subsequent laparoscopic trocars after initial entry and closes skin independently</li> <li>Demonstrates understanding of triangulation of port sites and safe entry into the abdomen</li> <li>Uses surgical energy safely throughout the case</li> <li>Positions the patient for maximal operative exposure and takes</li> </ul>	<ul style="list-style-type: none"> <li>Communicates details of the operative procedure and postop instructions to a patient/caregiver(s) with cultural humility but omits some elements when discussing expected outcomes and the overall anticipated treatment course</li> <li>Documents postop plans for a patient, with some errors or omissions</li> <li>Writes postop orders for a patient being admitted to the ICU or receiving coordinated care from multiple services</li> <li>Performs basic postop procedures (eg, VAC changes)</li> <li>Manages basic postop considerations (eg, fluid status, electrolyte abnormalities, wound care, drains, tubes)</li> </ul>



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<p><b>Framework:</b> The learner can use the tools but may not know exactly what, where, or how to do it.</p> <p>The attending gives active help throughout the case to maintain forward progression.</p>		<p>precautionary measures to prevent iatrogenic injury</p> <ul style="list-style-type: none"> <li>Performs the basic steps of entering and systematically exploring the abdomen</li> <li>Closes the surgical incision, including fascia and skin</li> <li>Handles tissue inconsistently, intermittently causing tissue trauma; requires redirection to maintain the optimal tissue plane</li> <li>Provides a basic description of the operative plan but omits some steps; maintains the plane of dissection if identified but cannot independently enter it; frequently deviates from the correct plane</li> <li>Usually proceeds to the next step of the procedure but sometimes requires direction</li> <li>Controls bleeding only with direction</li> </ul>	<ul style="list-style-type: none"> <li>Initiates evaluation for basic postop complications (eg, fever, pain, wound issues)</li> </ul>
<p><b>3</b></p> <p><b>Indirect Supervision</b></p> <p>Can do a basic operation but will not recognize abnormalities and does not understand the nuances of an advanced case</p>	<ul style="list-style-type: none"> <li>Manages an otherwise healthy patient presenting with common causes of acute abdominal pain (eg, diverticulitis, perforated appendicitis, free air from other perforation)</li> <li>Develops and implements a plan for resuscitation and operative intervention if needed</li> <li>Obtains informed consent for an operation, if indicated and goal concordant, with cultural humility; addresses best- and worst-case scenarios for the short, medium, and long term but does not always ensure patient/caregiver comprehension by using applicable language services and audio/visual aids</li> </ul>	<ul style="list-style-type: none"> <li>Explores the abdomen and identifies causative pathology</li> <li>Makes straightforward intraoperative decisions, such as need for bowel resection, repair of perforation, or irrigation and drainage in common scenarios, but requires coaching in less common scenarios</li> <li>Demonstrates careful instrument and tissue handling, resulting in minimal tissue trauma, though dissection techniques may be inefficient and result in excess maneuvers; demonstrates difficulty with inflamed fields or altered anatomy</li> </ul>	<ul style="list-style-type: none"> <li>Communicates customized postop instructions and updates to a patient/caregiver(s) using a variety of methods to ensure understanding; discusses unexpected findings or changes to the intended plan with cultural humility</li> <li>Documents all components of a patient's course with few if any errors or omissions</li> <li>Coordinates discharge of a patient with complex care needs, such as wound management, home TPN, and IV line or feeding tube maintenance</li> <li>Performs postop procedures, including decompression of abdominal compartment syndrome, delayed</li> </ul>



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<p><b>Framework:</b> The learner can perform the operation in straightforward circumstances.</p> <p>The attending gives passive help. This help may be given while scrubbed for more complex cases or during a check-in for more routine cases.</p>	<ul style="list-style-type: none"> <li>Discusses recommendations with the consulting team and verifies understanding using closed-loop communication</li> <li>Communicates respectfully and efficiently with all team members regarding the urgency of the patient's condition and the plan of care</li> </ul>	<ul style="list-style-type: none"> <li>Identifies most potential errors at the relevant portion of the procedure and takes steps to avoid them</li> <li>Identifies when delayed closure of the abdomen is indicated due to difficulty in closing</li> </ul>	<p>abdominal wall closure, and bedside control of bleeding</p> <ul style="list-style-type: none"> <li>Identifies and manages all postop complications</li> </ul>
<p><b>4</b></p> <p><b>Practice Ready</b></p> <p>Can manage more complex operations and take care of most cases</p> <p><b>Framework:</b> The learner can treat all acute abdomen presentations and has a strong understanding of surgical options and techniques for less common scenarios.</p>	<ul style="list-style-type: none"> <li>Manages a patient with acute abdominal pain/peritonitis and complex comorbidities or atypical presentation (eg, frozen abdomen, carcinomatosis, mesenteric ischemia, internal hernia, comorbid medical disease impacting management)</li> <li>Initiates resuscitation and develops a management plan inclusive of an operation and based on the urgency and complexity of the patient's presentation, seeking input from other health care team members as needed</li> <li>Communicates the urgency of the plan and the priority of interventions to all team members, including the attending physician and the OR and anesthesia teams</li> </ul>	<ul style="list-style-type: none"> <li>Collaborates with the OR team to promote safe care</li> <li>Performs an efficient exploration of the abdomen and identifies causative pathology</li> <li>Identifies tissue planes that have not been previously dissected but needs help to manage variable anatomy or identify tissue planes in a reoperative field to prevent iatrogenic injury</li> <li>Develops an operative plan and performs operative interventions to address causative pathology</li> <li>Functions as teaching assistant for a straightforward case</li> <li>Identifies causative pathology and executes intraoperative decisions in a complex situation (eg, need for bowel</li> </ul>	<ul style="list-style-type: none"> <li>Communicates with a patient/caregiver(s) using methods such as teach-back to ensure they understand perioperative care</li> <li>Conveys information regarding prognosis and need for further therapy with cultural humility; determines if a patient/caregiver(s) can carry out the resultant plan within the context of their lives (transportation, living situation, insurance, access to a pharmacy)</li> <li>Reviews and provides feedback about documentation in the medical record</li> <li>Identifies specific needs and coordinates care for a patient according to their socioeconomic context, including navigating challenges (eg, transportation,</li> </ul>



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The attending is available at the request of the learner but is not routinely needed for common presentations, though input may be needed for more complex presentations.	<ul style="list-style-type: none"><li>• Synthesizes available information and identifies additional tests needed, expressing to other health care providers the urgency and priority of testing in a respectful way</li><li>• Obtains informed consent for an operation, if indicated and goal concordant, with cultural humility; addresses best- and worst-case scenarios for the short, medium, and long term and ensures patient/caregiver comprehension by using applicable language services and audio/visual aids</li></ul>	<p>resection, repair of perforation, irrigation and drainage, damage control)</p> <ul style="list-style-type: none"><li>• Modifies and prioritizes surgical interventions based on operative findings and patient condition, including need for a second-look procedure</li><li>• Devises and implements a plan when deviation from the initial operative plan is required</li><li>• Devises a plan that includes minimizing potential postop complications</li></ul>	<p>living situation stability/safety, insurance, pharmacy access)</p> <ul style="list-style-type: none"><li>• Determines the postop care level and guides postop resuscitation and management (use of pressors, advanced ventilator strategies, blood and blood components, antibiotics, nutrition)</li><li>• Develops a postop plan to minimize anticipated complications and treat them if they develop</li></ul>