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## **APPROACH TO ACUTE ABDOMEN IN EMERGENCY SURGERY**

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Acute abdomen represents one of the most critical and frequent conditions encountered in emergency surgery, requiring rapid assessment and timely intervention to prevent significant morbidity and mortality. It encompasses a wide spectrum of intra-abdominal pathologies that present with sudden abdominal pain, ranging from self-limiting conditions to life-threatening surgical emergencies such as perforation, bowel obstruction, and ischemia. The complexity of the acute abdomen lies in its diverse etiology and variable clinical presentation, necessitating a structured and systematic approach to diagnosis and management.

The initial evaluation is centered on rapid clinical assessment, prioritizing hemodynamic stability and identification of patients requiring urgent surgical intervention. A thorough history and focused physical examination remain fundamental, with particular attention to the onset, location, character, and progression of pain, as well as associated symptoms such as vomiting, fever, and altered bowel habits. Physical findings including guarding, rigidity, rebound tenderness, and absent bowel sounds are highly suggestive of peritonitis and often indicate the need for immediate surgical exploration. Simultaneously, vital signs and general patient condition must be assessed to detect shock or sepsis, which require prompt resuscitative measures.

Laboratory and imaging studies support diagnosis and management of acute abdomen. Basic tests such as complete blood count, inflammatory markers, electrolytes, and organ-specific enzymes help detect infection and metabolic disturbances. Imaging is guided by clinical suspicion, with ultrasound useful for hepatobiliary and gynecological conditions, while contrast-enhanced CT remains the gold standard for identifying obstruction, perforation, ischemia, and intra-abdominal collections.

From a surgical perspective, early decision-making is crucial in determining whether operative or conservative management is appropriate. Patients presenting with generalized peritonitis, perforated viscus, strangulated obstruction, or vascular compromise require urgent surgical intervention. The surgical approach may be either open or minimally invasive, depending on the patient's condition, the underlying pathology, and available expertise. Exploratory laparotomy remains the standard in unstable patients or when diagnosis is uncertain, allowing rapid access and control of intra-abdominal pathology. In contrast, laparoscopy has gained increasing importance in stable patients, offering both diagnostic and therapeutic advantages, including reduced postoperative pain, shorter hospital stay, and faster recovery.

Preoperative management focuses on aggressive resuscitation, including intravenous fluid replacement, correction of electrolyte imbalances, nasogastric decompression when indicated, and early administration of broad-spectrum antibiotics in suspected infection or sepsis. Adequate analgesia should be provided without delaying diagnosis. Continuous monitoring is essential to detect clinical deterioration and guide timely surgical intervention.

Postoperative care is equally important and includes close monitoring in a high-dependency or intensive care setting, especially in critically ill patients. Early recognition and management of complications such as sepsis, ileus, wound infection, and thromboembolic events are vital for improving outcomes. Multidisciplinary collaboration among surgeons, radiologists, anesthesiologists, and intensivists plays a key role in the comprehensive management of these patients.

In conclusion, the approach to acute abdomen in emergency surgery requires a rapid, systematic, and multidisciplinary strategy focused on early diagnosis, prompt resuscitation, and timely surgical intervention. A clear understanding of clinical assessment, appropriate use of diagnostic tools, and sound surgical judgment is essential to optimize patient outcomes and reduce the risk of complications.