

2010 Quick Tips – Surgery

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Acute Abdomen – Medical vs. Surgical Treatment

“Acute abdomen” is the sudden onset of clinical signs referable to the abdominal cavity. The underlying cause of acute abdomen in small animals is quite varied and may include abnormalities of the GI tract, hepatobiliary system, spleen, pancreas, urogenital tract, peritoneum, or body wall. It is important to differentiate early on those conditions that can be treated medically from those that will require surgical intervention. Initial assessment of patients with acute abdomen should include abdominal radiographs, CBC, chemistry panel, and urinalysis. FAST (focused assessment with sonography for trauma) or complete abdominal ultrasound is valuable for further evaluation, and abdominocentesis should be performed when peritoneal effusion is present. Some clear indications for emergent exploratory surgery include the presence of a penetrating abdominal injury, intra-cellular bacteria seen within peritoneal fluid, the presence of pneumoperitoneum or volvulus, identification of esophageal or gastric intussusception, a neutrophil count >25k/uL in peritoneal fluid, or a blood-to-peritoneal fluid glucose difference greater than 20mg/dL. All patients with devitalized tissue, septic peritonitis, torsion/volvulus, closed pyometra, or complete intestinal obstruction are candidates for emergent surgery following correction of electrolyte & hydration abnormalities. Patients that deteriorate despite aggressive medical management should also have surgery if obstruction, perforation, strangulation, necrosis, or sepsis is suspected but not confirmed. Some patients with acute abdomen can be managed medically in the short term but will need surgery for definitive treatment, including those with uroabdomen, non-septic bile peritonitis, some ruptured splenic/hepatic masses, open pyometra, and partial intestinal obstruction. Serial physical exam, radiography, and laboratory evaluation can help to distinguish these underlying causes from others that may not require surgery.

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