Equine Colic

Post-Operative Complications

<table>
<tr><th>Complication</th><th>Cause</th><th>Treatment</th></tr>
<tr><td>Fever</td><td>
Table 19.1 Common causes of fever following ventral midline celiotomy for treatment of colic with recommended initial diagnostic tests.
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<tr><th>Common causes of fever</th><th>Recommended initial diagnostic tests</th></tr>
<tr><td>Endotoxemia/SIRS</td><td>Physical examination; CBC</td></tr>
<tr><td>Diarrhea/colitis</td><td>Physical examination; abdominal sonographic examination; CBC</td></tr>
<tr><td>Peritonitis</td><td>Abdominal sonographic examination; abdominocentesis/ peritoneal fluid analysis</td></tr>
<tr><td>Thrombophlebitis</td><td>Remove IV catheter; physical examination; sonographic evaluation of affected vein</td></tr>
<tr><td>Bacterial pneumonia or pleuropneumonia</td><td>Auscultation of thorax with rebreathing examination; thoracic sonographic examination; TTW</td></tr>
<tr><td>Respiratory viral disease</td><td>Auscultation of thorax with rebreathing examination; nasal swabs for virus isolation</td></tr>
<tr><td>Incisional infection</td><td>Physical examination; sonographic evaluation of incision</td></tr>
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</td><td>Treat individual causes</td></tr>
<tr><td>Endotoxaemia/ Systemic Inflammatory Response Syndrome</td><td>Mucosal injury e.g. during surgery results in an increase in LPS absorption.</td><td>- Administration of endotoxin binding agents such a polymyxin B IV
- IV fluid therapy
- NSAIDs. E.g. Flunixin meglumine</td></tr>
<tr><td>Adhesion Formation</td><td>The combination of trauma to normal mesothelial surfaces, ischemia reperfusion injury, disrupted fibrinolytic activity, and presence of peritoneal inflammation likely contribute to the development of adhesions,</td><td>Laparoscopy can be used for diagnosis and
treatment of postoperative intraperitoneal adhesions.</td></tr>
<tr><td>Diarrhoea</td><td>Horses with sand and feed impactions of the large colon and those with colonic volvulus seem to be at higher
risk for the development of postoperative diarrhoea.</td><td>- Supportive therapy to stabilize hemodynamic parameters
- Antibiotics</td></tr>
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Recurrent Colic	Postoperative colic is the most commonly reported complication in horses undergoing celiotomy for treatment of gastrointestinal disease	Use of NSAIDs, α-2 agonists, IV lidocaine, and opioid analgesics.
Post-Operative Ileus	Fluid sequestration and loss of motility within the duodenum and jejunum with subsequent gastric fluid accumulation accompanied by a need to decompress the stomach every few hours via nasogastric intubation. Risk factors include prolonged surgical and Anaesthetic time, presence of small intestinal lesions, and high admission PCV, intestinal ischemia, distention, peritonitis, electrolyte imbalances, endotoxemia, traumatic handling of the intestine, resection and anastomosis, and general anaesthesia	<u>Supportive care:</u> Gastric decompression IV fluids and colloids, Electrolyte support, acid-base monitoring, anti-inflammatory therapy, and antimicrobials when indicated. Partial parenteral nutrition
Septic Peritonitis	Anastomosis leakage, nonviable intestine, salmonellosis, and severe incisional infection or pre-existing septic peritonitis.	Re-laparotomy once the patient is hemodynamically stabilized.
Incisional Infection	Dehiscence, infection, and herniation	Acute dehiscence requires general anaesthesia, lavage, and debridement of the dehisced incision, and the body wall should be repaired with 18-gauge stainless steel wire in an interrupted vertical mattress pattern with stents Treatment for incisional infection should consist of establishing ventral drainage which often requires removal of selected skin staples or sutures. Antimicrobials can be used depending on severity of infection