Equine Colic

Intra-Operative Procedure

When surgery is required, in most instances, the horse is anesthetized and positioned in dorsal recumbency, and the surgical incision is made on the ventral midline. Once the peritoneal cavity is entered, portions of the intestine should be examined to determine the definitive cause of the colic. Correction may involve repositioning a displaced portion of intestine, removing an obstruction, or resecting devitalized intestine. When devitalized segments of intestine must be removed or an enterotomy performed, postoperative care may include antibiotics, IV fluids, polymyxin B, antibodies directed against endotoxin, and NSAIDs to combat endotoxemia. When a displaced segment of intestine is simply returned to its normal location, the postoperative care is much less intense. Each horse must be handled individually, and its treatment needs are based on the response to surgery and development of complications.



Figure 16.1 (a) A 20-35 cm incision is made through the skin and subcutaneous tissue beginning at the umbilicus and extending in a cranial direction. The scar is associated with a previous colic surgery. (b) The midline incision is extended through the linea alba using a fresh #10 scalpel blade. Forceps are used to elevate the body wall and guard the abdominal contents. It is important to not cut on but between the two arms of the forceps. (c) The peritoneum is penetrated and the peritoneal cavity opened using digital pressure. Note that there is an adhesive around the fenestration in the drape alleviating the need for towel clamps in the surgical field. There is also a plastic pocket associated with the drape to assist with keeping the intestine on the horse's ventral abdomen during surgery. Cranial is to the left. The surgeon is standing on the left side of the horse.

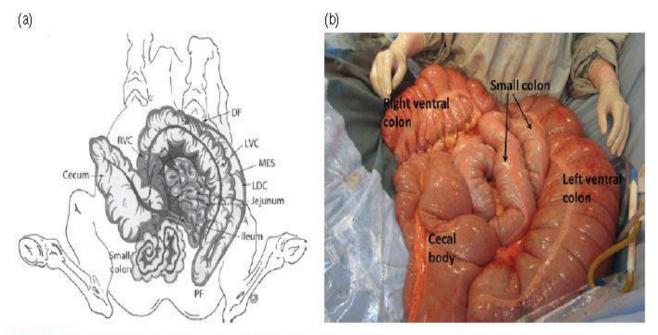


Figure 16.3 (a) Schematic illustration i dentifying portions of the gastrointestinal tract accessible from the ventral midline incision. C, cecum; RVC, right ventral colon; SF, sternal flexure; LVC, left ventral colon; PF, pelvic flexure; LDC, left dorsal colon; DF, diaphragmatic flexure; SC, small colon; MES, mesentery of the jejunum with arcuate vessels. (b) Photograph of exteriorized intestine. The surgeon is standing on the left side of the horse.

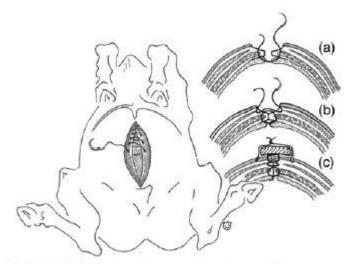


Figure 16.13 Body wall closure, three layers. (a) Linea closure placing bites 1.2–1.5 cm from the edge through the linea or external sheath of the rectus abdominis muscle in a simple continuous pattern using a #3 absorbable suture material. (b) Closure of the subcutaneous layer using a simple continuous pattern with 2–0 monofilament absorbable suture material. (c) Skin closure using wide stainless steel staples placed at least 1 cm apart and oversewn with a stent.



Figure 16.15 The surgical site should be covered during recovery from general anesthesia using an iodine-impregnated adhesive drape (a), stent bandage (b). An abdominal bandage can be used to decrease postoperative incisional complications (c).

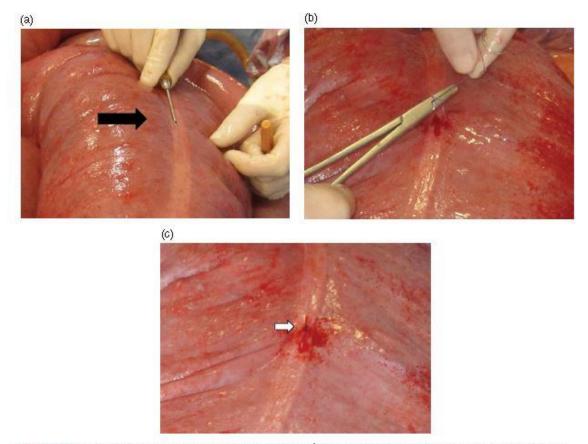


Figure 16.19 The large colon is decompressed using a 14-gauge 1 V_2 in, needle and suction. (a) The serosal layer is penetrated with the needle (black arrow) and tunneled in the submucosa before being passed through the mucosa and into the intestinal lumen. (b) The needle hole can be closed using 3-0 synthetic absorbable suture material in an interrupted (c, white arrow) or cruciate suture pattern.