LAPAROSCOPIC COLOPEXY
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Recurrence of large colon volvulus and large colon displacement occurs in a small percentage of horses affected with the condition. For that reason, an open surgical approach to colopexy was developed. Unfortunately, the colon is often compromised at the time of ventral celiotomy precluding colopexy at that point in time and, prior to the development of a laparoscopic approach, an additional celiotomy with the attendant risks of incisional herniation was required.

Laparoscopic colopexy is performed as an elective procedure 4 to 6 weeks after colic surgery. Feed is withheld for 48 hours to allow reduction of fecal fill and facilitate colonic manipulation. A 25 cm long skin incision is made 10 cm to the left of the ventral midline beginning 20 cm cranial to the umbilicus and extending caudally. The abdomen is insufflated with CO₂ and the laparoscope is inserted on the midline at the umbilicus. An instrument cannula is placed 5 cm to the left of the ventral midline and 25 cm cranial to the umbilicus. A Babcock forceps is inserted and the lateral taenia of the left ventral colon is grasped. Two additional instrument cannulas are inserted caudal to the skin incision. Polypropylene suture (#2 armed with a modified 1/3 curved needle) is used to affix the colon to the abdominal wall. The suture needle is inserted into the abdomen at the cranial aspect of the left paramedian skin incision. An endolaparoscopic needle driver placed through a caudally placed instrument cannula is used to grasp the needle and draw the suture through the abdominal wall. The Babcock forceps is used to partially elevate the colon and allow the suture to be placed through the lateral taenia before the needle is directed back through the abdominal wall. The colon is elevated to the abdominal wall using the Babcock forceps and the suture is tied outside the abdomen before the needle is re-inserted into the abdomen. Approximately 15 cm of colon is brought into apposition with the abdominal wall with a continuous suture.

Postoperatively, horses are restricted to a stall for 30 days followed by 30 days of paddock rest. Clinical outcomes have been reasonably successful, though there is some risk of the colon ripping at the site of colopexy and subsequent demise of the horse due to fecal contamination of the abdomen. Conservative surgeons might reserve colopexy for non-athletic horses, opting for colon resection in athletes.