Evaluation of the Colic in Horses: Decision for Referral

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KEYWORDS

• Horse • Colic • Diagnostic tests • Evaluation

KEY POINTS

- A thorough evaluation of the horse with colic allows early identification of cases that need referral for intensive medical or surgical intervention.
- Early referral improves the horse's prognosis and reduces client cost by allowing intervention while the horse is systemically stable.
- Evaluation should start with a detailed history, thorough physical examination, rectal examination, and passage of a nasogastric tube.
- More advanced diagnostics, including transabdominal ultrasonography, abdominocentesis, and point-of-care measurement of lactate and glucose, can aid in the decision for referral.

INTRODUCTION: NATURE OF THE PROBLEM

Colic is the most common emergency in equine practice with approximately 4 out of every 100 horses having an episode of colic each year.[1] Of the horses that are evaluated by a veterinarian in private practice, approximately 7% to 10% have a lesion that requires surgical correction.[2] Although this may be obvious with severe, acute strangulating obstructions, most colic cases are not quite as black and white. Early identification and referral of horses with a surgical lesion is critical to obtain a successful outcome. Early referral allows general anesthesia and surgery to occur while the horse is systemically stable and intestinal damage is mild, and this decreases postoperative morbidity and mortality and reduces client cost. Many owners would consider taking their horse to a referral hospital for evaluation of colic, and with the excellent success in treatment of geriatric horses with colic,[3] age should not be considered a negative factor in the decision to refer.

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The veterinary practitioner should thoroughly assess the horse on the first visit and appropriately analyze the findings and offer treatment options. This analysis includes obtaining the signalment of the patient, a thorough history, a complete physical examination including transrectal palpation and nasogastric intubation, and performance of appropriate diagnostic tests and procedures. Accumulation of this information will provide the tools to dictate whether referral to a center with surgical capabilities is appropriate. Referral is necessary not only for surgical intervention but also for advanced intensive medical management such as 24-hour monitoring, antiendotoxic therapies, advanced fluid therapy administration, trocarization, or for a second opinion before euthanasia.

PATIENT HISTORY AND SIGNALMENT

Although patient history in itself does not indicate the need for referral, a thorough history and consideration of patient signalment can provide key information toward identifying the specific cause of colic. This knowledge could lead to a more expedited referral in horses with surgical conditions and likely an improved outcome.

Use of a standardized colic history form is recommended to ensure important historical information is not omitted and to streamline the history-taking process. Important components of the history that should be included are the following:

- Duration, nature of onset, and severity of colic signs
- Current diet and recent dietary changes
- Appetite, water intake, and access to water
- Fecal and urine output and consistency
- Reproductive status
- Whether the horse has had prior colic episodes
- History of diarrhea, laminitis, or other medical conditions
- Medications administered
- Vaccination and deworming status and protocol
- Dental care
- Prior surgeries
- Presence of sand or dirt access
- Primary use of the horse
- Current housing and recent changes in management
- Whether other horses on the property have clinical signs of illness
- Whether the horse is a cribber or windsucker
- Locations the horse has lived and recent travel history

There are several specific historical findings that may lead the clinician to consider particular diagnoses. The characteristic signs the patient has demonstrated are one of the most useful components of the history to assist with diagnosis. Did the patient display acute, severe signs initially? If the onset of colic was not observed, is there physical evidence of severe signs of colic such as skin abrasions over prominent points over the head or hips (**Fig. 1**)? This acute onset of severe pain most commonly is associated with a strangulating obstruction. Once the intestine becomes devitalized, the signs of pain may also abate to some degree, making the determination of the need for surgery more difficult. Stoic, aged horses presenting this way with strangulating small intestinal obstructions may be misdiagnosed with duodenitis/proximal jejunitis until progression of disease ensues. Delays in surgical treatment may lead to a poorer prognosis from advanced systemic disease resulting from the presence of necrotic bowel.