Ultrasound can be useful in foals, weanlings and ponies where rectal examination is impossible or limited, and in adult horses to examine the cranial region of the abdomen. Conditions that may be diagnosed include distended loops of small intestine, intussusceptions of the small intestine, caecocaecum and caecocolon (this appears classically as a doughnut). Peritoneal fluid is easily visualised, aiding its collection by abdominocentesis. The nature of the fluid can also be assessed by ultrasound and may confirm the presence of fibrinous peritonitis, a ruptured viscus, perforated ulcer or ruptured bladder. The presence of ileus may be identified when the lack of normal rhythmic contractions of bowel and passage of contents through the lumen cannot be visualised over a prolonged period. Loops of bowel which remain static and fixed in location may suggest the presence of adhesions. Abdominal masses may be detected or, if discovered on rectal examination, transrectal ultrasound may identify the nature of the mass. Visceral displacement may be appreciated, particularly entrapment of the large bowel over the nephrosplenic ligament.

The main disadvantages of ultrasound are that gas filled bowel and air filled lung prevent effective imaging beyond these structures and the restricted depth penetration results in the central core of the abdomen being inaccessible to this technique.

Endoscopy and laparoscopy

Alimentary endoscopy is more commonly used to evaluate suspected gastrointestinal ulceration in foals/adults than in acute colics, as it usually requires starvation of the patient for at least 24 hours to minimise the presence of gastric contents.

There are more indications for laparoscopy in chronic colics which have abnormal rectal findings than those in acute pain (Fischer and others 1986).

SUMMARY

A horse in abdominal pain demands a decision without necessarily a specific diagnosis. Diagnostic nuances can be discussed at leisure after the animal has made a recovery and not before it has taken its chance under the knife. Moore (1986) suggested that perhaps it is not ‘the decision for surgery’ that needs to be made but more whether ‘it would be prudent to transfer the animal to a facility where surgery could be performed rapidly, if needed?’ If the answer to that question is ‘Yes’, the case may be best served by a prompt referral to a surgical facility.

There are no easy answers to the problem of diagnosing the surgical colic. No predictive model will be 100 per cent accurate and clinicians, at whatever stage in the disease course, will always have to compile the diagnostic puzzle with their clinical instinct, using evidence from certain clinicopathological data and physical examination findings.

Ducharme and others (1983) and Pascoe and others (1983) stated that between 8 and 24 per cent of horses treated surgically in their experience die or are euthanased during surgery because of the advanced state of the disease. If one is unsure, the single most effective action is to explain the costs and send the patient to a facility where there may be greater experience in surgical cases, a well equipped surgical facility and a competent team. The surgical team will be in a much better position to eliminate cases that do not have a surgical abdominal lesion because of disease progression, ie, deterioration/resolution, and because of the availability of more sophisticated diagnostic tests. Referring veterinary surgeons will be given maximum support by the colic team in all circumstances. However, if there is unnecessary delay in sending a surgical lesion, this may be more difficult.

It is vital to get the patient to the premises before the entrapped intestine has become strangulated and the inevitable vascular compromise has developed. As soon as the intestines require any form of resection, the chances of the patient returning home alive are dramatically reduced. Time is thus especially important in small intestinal obstructions and the major responsibility for assessing and managing such cases has to depend on the first opinion clinician (Pearson 1986).

The absolute key to success in colic surgery is being able to make the decision to perform surgery as soon as possible. The owners must be warned early on in the course of the disease about the potential need for surgery. The diagnosis to make is not ‘what is the precise lesion?’ but a much more basic ‘might this animal need surgical intervention?’ If the answer is ‘Yes’ send it, please don’t sit on it.

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References and further reading


Correction

In Practice (1992) 14, 73-81

Use of drains in small animal surgery

The radiograph on page 79 was inverted and printed upside down. The error is regretted. The photographs, unless otherwise stated, were provided by Mr J. M. Williams and Dr R. A. S. White.