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ABSTRACTS

Diagnostic laparoscopy in the horse

FISCHER, A.T., LLOYD, K.C.K., CARLSON, G.P. and MADIGAN, J.E. (1986) *J. Am. vet. med. Ass.* **189**, 289-292

THIS paper describes laparoscopic findings in five clinically normal horses and in five with abdominal disease. The technique was performed bilaterally under sedation and local analgesia, through stab incisions in the paralumbar fossae. The rigid laparoscope was introduced through a cannula and carbon dioxide insufflation was used to aid visualisation. Abdominal palpation *per rectum* preceded laparoscopy to ensure that no adhesions or masses were present at the site of penetration.

Structures routinely encountered included parts of the liver, spleen, diaphragm, peri-renal fat, stomach, small and large intestine, mesenteric root, inguinal rings, ovaries, uterus and urinary bladder. Some manipulation of the viscera by biopsy instruments or *per rectum* was found to be helpful. The procedure resulted in significant increases in the protein concentration and leucocyte counts of peritoneal fluid samples taken at 24 h.

The five case reports include a suspected rectal rupture, an abscess involving the abdominal wall, a case with multiple abdominal adhesions, a metastasising ovarian teratoma and a gastric squamous cell carcinoma. In the first case, laparoscopy revealed a mesocolonic haematoma but no tearing of the colon itself. In the next three cases, the findings confirmed those of rectal examination although additional metastatic seeding of the ovarian tumour was evident and the neoplastic tissue was biopsied. The squamous cell carcinoma was suspected on laparoscopic findings and confirmed by gastric endoscopy.

Abstractor's comments. – Laparoscopy is an interesting addition to the range of diagnostic techniques available for investigation of equine abdominal disease. It can be undertaken in the conscious animal and a prolonged recovery period is not required. The ability to biopsy tissue under direct vision is of particular interest. However, with the exception of the suspected rectal rupture case, the contribution of laparoscopy to the diagnosis was not great. Rectal palpation, ultrasonography, paracentesis abdominis, and gastric endoscopy were of as much, or greater benefit and exploratory surgery was still required in one case. Another disadvantage, as the authors state, is that the findings may be negative even when lesions are present. The equipment is moderately expensive especially when compared with the requirements for rectal palpation and paracentesis.

J.M. HUNT

Shoeing principles for the management of navicular disease in horses

TURNER, T.A. *J. Am. vet. med. Ass.* **189**, 298-300

THIS paper reports on corrective shoeing of 36 horses diagnosed as having navicular disease. The paper does not recommend any one line of shoeing, rather that the foot should be trimmed and shod in such a manner as to maintain a straight hoof pastern axis with the horn at the heels and the toe parallel. It is also emphasised that the bearing surface of the foot should be at right angles to the long axis of the limb when considering medial and lateral balance. All the horses were shod with a neoprine wedge pad and the soles were packed with tar and oakham, silicone or soft acrylic. Follow up examinations made at between 12 and 54 months showed that 31 of the 36 horses were not lame when last evaluated. Corrective shoeing was most effective when performed within eight months of the first signs of lameness with a lower success rate for horses that had been lame for more than one year. The statistical significance of these results however may be open to question.

Abstractor's comments. – It is very refreshing to find a paper on corrective shoeing which recommends shoeing to establish normal hoof balance, rather than a standard technique for correcting all feet to standard angles. The information on diagnosis is a little brief, with minimum information on the radiological changes considered significant. This, however, is a useful peice of work, if only because it indicates that many cases diagnosed as navicular disease can continue to work for considerable periods of time with relatively conservative treatment.

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