Proceedings of the 18th Annual Meeting of the Italian Association of Equine Veterinarians
SIVE

Feb. 3-5, 2012 - Bologna, Italy

Next SIVE Meeting:

Feb. 1-3, 2013 – Arezzo, Italy

Reprinted in the IVIS website with the permission of the Italian Association of Equine Veterinarians – SIVE
http://www.ivis.org
TRANSABDOMINAL ULTRASONOGRAPHIC FINDINGS IN HORSES WITH CHRONIC OR RECURRENT COLIC AND/OR WEIGHTLOSS - A RETROSPECTIVE STUDY

I. Tosi, DVM1, G. Bolen, DVM, PhD, ECVDI2, L. Evrard, DVM2, A. Etienne, DVM2, V. Busoni, DVM, PhD, ECVDI2

1 Equine Clinic, Faculty of Veterinary Medicine, University of Liège, Liège, Belgium
2 Diagnostic Imaging Section, Faculty of Veterinary Medicine, University of Liège, Liège, Belgium

Work type: Original Research
Topic: Imaging

Purpose of the work. The aim of this retrospective study is to describe transabdominal ultrasonicographic (US) findings and their prevalence in horses admitted for chronic or recurrent colic or for weightloss.

Materials and used methods. The medical records of horses having undergone a complete transabdominal ultrasound examination were retrospectively reviewed over a 4 years period. Horses were included in the study if they were admitted with a history of chronic or recurrent colic or weight-loss and if the entire abdomen had been examined transabdominally in a non-emergency setting. Horses with diarrhoea without weight-loss were not included. In all horses the abdominal ultrasonography had been realised with a 3.5MHz convex transducer (Aloka SSD 3500) after clipping. A higher frequency transducer (5-7.5MHz) was also used to assess the gastrointestinal wall when thickening was seen or suspected. During abdominal ultrasound, the caudo-ventral thorax was assessed in all horses for presence of free fluid and a complete thoracic ultrasonography was realized if free-fluid was visible or if clinical symptoms suggested a concurrent respiratory disease.

Outcomes. Sixty-eight horses responded to the selection criteria (29 females, 30 geldings, 9 males; age range 7 m.o. - 26 y.o.). Twenty horses had been admitted for weightloss and 38/68 had a history of chronic or recurrent colic. Ten horses were referred for both colics and weight-loss. In 2/68 horses no abnormal finding was visible and in 2 an extraabdominal abnormality was detected ultrasonographically during the ultrasonographic examination. Thickening of the wall of the gastrointestinal tract was seen in 53% of the examined horses (23 large intestine, 9 small intestine, 4 stomach). The amount of visible free fluid was judged increased in 27/68 horses. Twenty-two horses had a motility subjectively judged abnormal. Twenty-two horses had visible fluid-filled small intestinal loops, of which 4 were judged to have an associated increased diameter and 17 had visible fluid in the large intestine. Thoracic ultrasonographic abnormalities were detected in 21% of horses.

Conclusions. The prevalence of abnormal ultrasound findings in this population was high suggesting that transabdominal ultrasonography is a useful diagnostic aid in horses with suspected non-acute abdominal disease. Gastrointestinal thickening is often seen. In the studied population, thoracic ultrasonography often added supplementary information. This indicates the usefulness of assessing at least a ventro-caudal thoracic window concurrently with the abdominal exam.

Bibliography
Freeman, S.L. (2002b) Ultrasonography of the equine abdomen: techniques and normal findings. In Practice 24, 204-211

Corresponding Address
Dott.ssa Irene Tosi - University of Liège, Department of Sport Medicine, Boulevard de Colonster 20, B42, Liège Belgium/4000, Belgium - Mobile 00320470839684 - E-mail irenetosi84@hotmail.it