

Oral presentations

Treatment protocols and management of retained fetal membranes in cattle by rural practitioners in Belgium

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Retained foetal membranes (RFM) is a common and economically important postpartum disorder in cows and a frequent cause of antibiotic (AB) use. To rationalize AB use, practitioners should consider clinical studies as well as national regulations. Scientific opinion leaders currently discourage intrauterine (IU) AB use and recommend systemic AB treatment of cows with RFM when clinical illness appears. Remarkably, ceftiofur is often mentioned in literature for systemic treatment, although this is in conflict with national AB regulations. We aimed to assess the therapeutic approaches of RFM by Belgian rural veterinarians in light of scientific literature and national guidelines. A digital survey was sent to Belgian cattle vets; 149 questionnaires (Wallonia: 78; Flanders: 71) were completed. Questions addressed socio-demographic data, case definition, therapeutic approach and treatment options for RFM.

Results show that vets commonly use AB for RFM treatment, both in cows with (dairy: 98%; beef: 99.3%) and without fever (dairy: 64.4%; beef: 78.5%). AB are often applied via the IU route, alone or in combination with a systemic treatment, in cows with or without fever. β -lactams are by far the most frequently used AB class for systemic treatment. In conclusion, there is room for improvement considering AB treatment habits of RFM. Particularly, the benefit of AB therapy in clinically healthy cows and of IU applied AB is doubtful. As for the molecule choice, practical routines are in line with national AB guidelines. The fact that beef cows with RFM are treated more commonly than dairy cows may be explained by the fear of complications in an incised uterus.

Evaluation of the accuracy of a commercial heart rate monitoring system to detect RR-waves interval in Warmblood horses

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Heart rate (HR) is used in exercising horses for the evaluation and monitoring of exercise fitness. HR is usually acquired in the field using heart rate monitor (HRM) or telemetric electrocardiogram (ECG). While HRM is commonly available and easy to use for horse owners and veterinarians, ECG is a more expensive equipment requiring experience. More recently, interest of heart rate variability (HRV) is increasing for both research and clinical aims. Parameters of HRV in horses are usually calculated from the interbeat intervals (IBI) obtained by ECG. The aim of this study was to determine the accuracy of a commercial HRM to detect R-waves and obtain accurate IBI in both resting and exercising horses. Simultaneous ECG and HRM recordings of 4 eventing horses, 5 dressage horses and 4 leisure ponies were performed under normal conditions. The length of the recordings was minimum 45 minutes, including at least 5 minutes of rest, walk, trot, canter and show intensity. IBI from the HRM was exported and aberrant data was deleted. IBI from the ECG was corrected manually using the ECG software. Agreement and concordance of IBI and HRV-parameters between both systems was first determined. Effects of variables was consequently examined. A total of 29761 IBI were recorded, and 29562 (99,33%) of the HRM recordings were within the 95% confidence interval (-4; 3 ms) of the reference ECG-recordings, with a median of -1 ms. Discipline and HR showed effect on the results. The commercial HRM used in this study detected accurately IBI and could be of interest as easy-to-use device for obtaining HRV-parameters in resting and exercising Warmblood horses and ponies.