Oral presentations

Comparison of the traditional human Auscultatory method versus Doppler and Oscillometric techniques for indirect blood pressure measurement: a pilot study in anaesthetised dogs

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OBJECTIVES

Korotkoff sounds describe the reverberation auscultated during the traditional human method of blood pressure assessment. The aim of this study was to identify whether Korotkoff sounds can be auscultated in dogs and to investigate if this technique is comparable to other indirect methods of blood pressure assessment.

METHODS

The Auscultatory method was used to obtain indirect systolic and diastolic pressure values in 30 anaesthetised dogs weighing between 3.8 and 37 kg. The medial tarsal artery was auscultated with a paediatric stethoscope over the medial tarsal artery with the blood pressure cuff positioned proximal to the tarsus. Measurements were compared to contemporaneous Doppler and Oscillometric values. All patients were under general anaesthesia for elective procedures and anaesthesia was not extended for the purpose of this study. Assessors were blinded to previous measurements.

RESULTS

Korotkoff sounds were audible in all dogs enrolled in this study. Good correlations were identified between the Auscultatory method and Doppler technique (r_s value = 0.92, $p < 0.0001$). Examination of Bland-Altman difference plots identified good agreement between the two methods. Poor correlation and agreement was identified between the Auscultatory method and Oscillometric technique ($r_s = 0.50$) and between Doppler and Oscillometric techniques ($r_s = 0.52$).

STATEMENT (CONCLUSIONS)

This pilot study suggests that the Auscultatory method is comparable to the Doppler technique for blood pressure measurement in anaesthetised dogs. Further studies are required to evaluate the clinical application in conscious patients and also in cats. This technique utilises cheaper equipment than current standard methods and may be of benefit in financially constrained settings.

Pain and analgesia in rabbits: where are we now?

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OBJECTIVES

Rabbits are a prey species that mask signs of pain making it difficult for veterinary professionals to assess it adequately. A previous survey carried out in 1996 showed that analgesia was rarely given to rabbits perioperatively. A survey-based approach was utilised to establish current practice amongst veterinary surgeons in recognising and alleviating pain in rabbits while at a veterinary clinic.

METHODS

An online questionnaire was developed and advertised at veterinary congresses, in veterinary journals and on media such as Facebook.

RESULTS

In total 350 questionnaires were used for analysis of which 87.7% were from UK veterinary surgeons. Most respondents (67.4%) reported treating 1–10 rabbits and performing (mean $\pm$ SD) 1.93 ($\pm$ 2.98) ovariohysterectomies and 2.34 ($\pm$ 3.16) castrations per month. Most respondents (64.3%) indicated they were only *fairly confident* in recognising pain in rabbits while 25.7% were *not very confident*. Decreased food intake, abnormal posture, reluctance to move and grinding teeth were considered the most reliable indicators to assess pain in rabbits. Overall, 94.3% of the respondents routinely administered NSAIDs for surgical procedures such as neutering, 71.4% opioids and 70.3% multimodal analgesia. Associations between levels of expertise and approach to analgesia will also be explored.

STATEMENT (CONCLUSIONS)

The responses to this survey indicate that the use of perioperative analgesia in rabbits has increased during the last 20 years, similarly to cats and dogs. They also suggest that pain assessment in rabbits is still considered challenging and more research and education is required.

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