

A retrospective study on common health problem in ruminants

ABSTRACT

The reason for performing post-mortem examination is to uncover the possible cause(s) of death in animals. Retrospective study based on post-mortem records was previously highlighted as useful for general surveillance of animal health conditions and diseases. This article describes a retrospective study involving carcasses of ruminants that were presented to the Post-Mortem Laboratory, Faculty of Veterinary Medicine, Universiti Putra Malaysia. Twelve year post-mortem records of ruminant cases between January 2006 and December 2017 were gathered. A total of 802 ruminant cases were analyzed, comprising of 491 goat, 118 cattle, 95 cervine, 75 sheep, and 23 gaur cases. Failure of the circulatory system (32.6%) was recorded to be the most significant ($p < 0.05$) body system affected, followed by the respiratory (23.2%) and alimentary systems (15.1%). Septicaemia (63.8%, $n=229$), bacterial pneumonia (51.2%, $n=203$), and gastrointestinal parasitism (51.2%, $n=136$) were significantly ($p < 0.05$) the most frequently reported cases for the respective systems. Pulmonary congestion and oedema were the histopathological lesions most frequently reported in cases of septicaemia. In cases of bacterial pneumonia, bacterial colonies and inflammatory cells were commonly observed. Parasites were often observed microscopically following gastrointestinal parasitism. The significance of the findings was further discussed. *E. coli*, *Pasteurella* spp., and *K. pneumoniae* were important species/genus contributing to septicaemia and/or bacterial pneumonia in ruminants. Data collected from this study would be a valuable resource for the formulation of more effective preventive measures or strategies against these commonly reported diseases. The results presented in this study are valuable in formulating preventive strategies against these common health problems.

Keyword: Retrospective study; Post-mortem; Ruminants; Health problems