

Common emergency presentations in puppies and kittens

Íde Gillespie, Ava Firth, Laura Playforth, Amanda Boag

Introduction: Paediatric patients represent a distinct patient population with a unique physiology. This study describes the most common canine and feline paediatric presentations encountered in an emergency setting and the associated mortality.

Materials and Methods: The medical records of all canine and feline patients presented to a national emergency out-of-hours provider between May 2012 and January 2014 were searched. Patients ≤ 6 months of age were included and were subdivided into ≤ 3 months and ≤ 6 months groups. Species, presenting complaint (VeNOM code) and survival were recorded and the survival rates for the most common 5 presentations in each group were documented. Chi squared was used to evaluate differences in survival rates.

Results: 3,266 patients were included representing 2.7% of the total caseload ($n=125,583$). In puppies ≤ 3 months ($n=567$), survival rate was 64%. The most common presenting complaints (PC) were vomiting (17%), diarrhoea (8%), collapse (7%), lethargy (7%) and trauma (7%). Collapsed puppies had the lowest survival rate at 26%. 1744 puppies were ≤ 6 months with a survival rate of 83%. The most common PC were vomiting (18%), diarrhoea (9%), trauma (7%), lameness/gait abnormality (6%) and lethargy (5%). In kittens ≤ 3 months ($n=249$) the survival rate was 28%; the most common PC were collapse (23%), trauma (17%), lethargy (11%), dyspnoea (6%) and seizures (4%). Seizuring and collapsed kittens had the poorest prognosis with survival rates of 10% and 12% respectively. Finally in kittens ≤ 6 months ($n=676$), survival rate was 66% and the most common PC were trauma (15%), collapse (12%), lethargy (11%), lameness/gait abnormality (8%) and vomiting (5%). Kittens had a significantly higher mortality rate than puppies ($p<0.0001$)

Conclusions: There is a distinct difference in the types of emergency presentations encountered in both species. Gastrointestinal signs were most frequently seen in puppies whereas kittens most often presented post-trauma or in a collapsed state. Puppies have a significantly higher survival rate in comparison to kittens. Survival for both species appears to increase with age with kittens ≤ 3 months of age having the poorest prognosis.

Clinical Relevance: This data represents the first large scale report of the clinical problems seen in puppies and kittens presenting as emergencies and should be used to inform undergraduate and post-graduate training and client education. Furthermore survival rates for some presenting complaints are poor; whilst the causes for this remain unclear, this study

prompts further questions and provides a benchmark against which future improvements in care can be evaluated.