likely to not survive to discharge respectively. There was no relationship between age and severity score (p = 0.3738) or mortality (p = 0.1104).

CONCLUSION
An injury based scoring system is a valuable tool due to its simplicity. It can be used to provide prognostic information for owners, which may help in determining the course of treatment. This study has shown that those with higher injury scores are at an increased risk of mortality. Cases with polytraumatic injuries or those in shock are at an even higher risk of mortality, highlighting the importance of stabilisation of patients in shock.

Preliminary findings from a prospective investigation of cats presenting with dyspnoea in general practice

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Dyspnoea is a life-threatening presenting sign: there have been no prospective studies of feline dyspnoea in general practice.

Cats presenting to our first-opinion practices with clinical signs of dyspnoea for the first time, between 1/6/2011 and 30/09/2015, were prospectively enrolled.

We collected signalment, historical and clinical data for each case at time of presentation including duration of dyspnoea, presence of cough, wheeze, weight loss, recent trauma, appetite and other relevant findings. Clinical details included: rectal temperature; heart/pulse rate; respiratory rate and other pertinent findings.

Each case was investigated and managed as deemed appropriate by the attending clinicians: tests were chosen based on relevance but test selection was influenced by client preference, finances and primary clinician experience.

Diagnoses were reviewed by the supervising clinicians (the authors) and categorised as: cardiac, respiratory, neoplastic, traumatic or miscellaneous, based upon objective and accepted clinical, radiographic, echocardiographic or (where appropriate) post-mortem criteria. Significantly incomplete records were excluded.

A total of 100 cats were enrolled in the study. Six records were excluded so data from 94 cases were available for analysis. 85 of 94 were DSH or DLH. All cats were neutered, 55 were male. A diagnosis was reached in 89/94 cases. The commonest diagnosis was cardiac disease in 56/94, usually accompanied by heart failure. Respiratory disease was diagnosed in 20/94 cases. In this category pyothorax (n=7) and asthma (n=5) were the commonest diagnoses. Five cats with a respiratory problem were suspected to have neoplastic origin for their presentation, but that was unconfirmed in these cases. Neoplasia was definitively diagnosed in 10/94 whilst trauma was diagnosed in 6/94 cats. Other disease was diagnosed in 7 cases. Of 11 cats with more than one diagnosis 6 had hyperthyroidism and cardiac disease / failure. Two cats had respiratory disease and confirmed neoplasia. One had asthma and a recent RTA, one had cardiac failure and bronchopneumonia, one had restrictive cardiomyopathy and a mass in the right lung.

This preliminary data is being subjected to rigorous statistical evaluation to determine if anamnesis and clinical signs in these cats at the time of presentation could aid decision making in general practice. That data will not be presented.

Causes of acute dyspnoea in 323 owned and stray cats presented to RSPCA hospitals

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INTRODUCTION
Acute-onset dyspnoea in cats is a common presentation in first opinion practice but little data exist regarding the prevalence of different causes. RSPCA hospitals see a large number of both owned and stray cats, which allows causes of acute dyspnoea in these populations to be identified and compared. Expounding causes and their association with ownership status, age, and nature of dyspnoea may help guide investigation and therapy in first opinion practice.

MATERIALS AND METHODS
A retrospective study of 323 cats – 156 owned and 167 stray - presented to RSPCA hospitals over a three-year period was performed. Cats were included if a definitive diagnosis had been reached, and these were grouped according to their primary aetiology: cardiac, traumatic, respiratory, infectious, neoplastic, and metabolic/endocrinological. Age, sex, and breathing pattern were recorded for each animal. The Chi-squared test was used to assess statistical differences in prevalence of causes between the owned and stray populations, and association of clinical variables with each cause in each group was analysed via multiple logistic regression analysis.

RESULTS
In the owned population (n=156), cardiac was the most common cause (91 cats, 58%), followed by traumatic (30, 19%), neoplastic (22, 14%), respiratory (5, 3%), infectious (4, 3%), endocrinological (2, 1%), obstructive (2, 1%). In the stray population (n=167), traumatic was the most common (124 cats, 74%), followed by infectious (24, 14%), cardiac (17, 10%), neoplastic (2, 1%), with no other causes identified. Differences in prevalence were significant for cardiac, traumatic...
and infectious causes (p<0.001), with owned cats more likely to have a cardiac cause, and stray cats more likely to have traumatic or infectious causes.

Older cats (>10y) were positively associated with neoplastic cause (p<0.01). Younger cats (<3y) were positively associated with infectious cause (p<0.001). Breathing patterns did not allow cause identification in most cases, but did indicate the presence or absence of fluid or air in the pleural cavity (p<0.001). Sex showed no association to any cause.

DISCUSSION AND CONCLUSIONS

Causes of acute dyspnoea were markedly different in owned and stray populations in this study, and may be due to the divergent lifestyles, life expectancy, and propensity to disease and trauma in the different populations. The prevalence of different causes of acute dyspnoea in owned cats was manifestly different to previous referral population studies. Age of the cat and breathing pattern at presentation may assist clinicians in diagnosis and therapy.

An evaluation of the shock index in cats with hypoperfusion; a novel, pilot study

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INTRODUCTION

Identification of shock in cats can be challenging. The Shock Index (SI) has been evaluated in human and canine emergency medicine and found to be a useful index for identification of shock. It is calculated as the heart rate/systolic blood pressure. Studies in dogs have shown that a value of ≥0.9 maximises the sensitivity and specificity when combined with clinical signs for identifying shock. To the authors’ knowledge the SI has not been previously evaluated in cats.

OBJECTIVES

To define the SI value in cats, and compare this value between cats presenting with and without clinical signs of hypoperfusion.

METHODS

Cats presenting as emergencies between January 2014 and July 2015 were identified retrospectively. Cats with insufficient recorded data to identify hypoperfusion, or did not include heart rate and systolic blood pressure on presentation were excluded. Cats were divided into a hypoperfused and control group based on clinicopathological findings and clinician diagnosis. Age, body weight, heart rate and systolic blood pressure were analysed using Independent Sample T-tests. An independent Kruskal-Wallis test was used to compare the SI between the groups. The SI was calculated for each cat and a receiver operating characteristics curve was used to determine the area under the curve to identify the optimum cut off value for maximising sensitivity and specificity of the SI. This SI value was then applied prospectively to 10 cats presenting emergently between July and October 2015.

RESULTS

Sixty-three cats (16 hypoperfused and 47 controls) met the inclusion criteria. Age, body weight and heart rate did not differ between the groups. Systolic blood pressure was lower (<.001) and SI higher (<.001) in the hypoperfused group. The optimum SI for identifying hypoperfusion was identified as ≥1.6 with a sensitivity/specificity of 75% and 86% respectively. When this was applied to the prospective group 75% of cats presenting with clinical signs indicating hypoperfusion had a SI ≥1.6. Overall a SI ≥1.6 was associated with higher mortality.

CONCLUSIONS

The SI is a rapid, simple, ancillary tool and when combined with clinical findings can aid in identifying most cats presenting with hypoperfusion. A SI ≥1.6 is suggested as a cut off value for identification of hypoperfusion and warrants prospective investigation. In this population a SI ≥1.6 was associated with higher mortality.

Cytological analysis of abdominal fluid in canine gastric perforation: a retrospective case series

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INTRODUCTION

Identification of gastrointestinal perforation is important as urgent surgery is often indicated. Cytological evaluation of abdominal fluid can be used to rapidly identify the presence of a septic abdomen. Gastric rupture may not always be associated with bacterial contamination of the abdomen and therefore typical features of sepsis may not be prominent. Accurate and rapid diagnosis of gastrointestinal rupture is important in pursuing a successful outcome.

OBJECTIVE

To describe the cytological analysis of abdominal fluid from dogs with confirmed gastric perforation.

METHODS

Medical records of dogs with surgically confirmed gastric