20.1% of 154 dogs undergoing laparoscopic ovariectomy developed a recorded complication. 11% developed wound healing complications most of which were minor and self limiting. The rate of superficial SSI was 3.2% with no cases of deep SSI recorded. No incisional herniation occurred in any laparoscopic cases.

STATEMENT (CONCLUSIONS)

Laparoscopic ovariectomy is associated with a decreased risk of postoperative complication and SSI compared to open ovariectomy. Laparoscopy should be considered the approach of choice when performing ovariectomy in dogs.

Incidence and risk factors for post-attenuation neurological signs in 50 cats with a single Congenital Portosystemic Shunt

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OBJECTIVES

To determine the incidence, outcome, and risk factors for post attenuation neurological signs (PANS) and seizures after attenuation of single congenital portosystemic shunts (CPSS) in cats.

METHODS

Medical records of cats treated at a single institution by surgical attenuation of a single CPSS between 2003

and 2017 were reviewed for signalment and preoperative and postoperative clinical outcomes, including the occurrence of PANS and seizure activity. Binary logistic regression was performed to investigate risk factors.

RESULTS

Fifty cats undergoing surgical CPSS attenuation were included (80% extrahepatic, 20% intrahepatic). Eleven (22%) of cats had complete attenuation, 39 (68%) had a partial attenuation. Thirty one (62%) cats suffered PANS, including 11 (22%) cats that experienced seizures. Of the 31 cats that suffered PANS, 5 (16.1%) did not survive to discharge.

There were no significant associations between PANS or seizures and the type of CPSS, degree of attenuation, age, the use of pre-operative anti-seizure medication or the presence of HE immediately before surgery. Osmolality at time point 3 (median 24 hours) was lower in cats with PANS and this was a significant risk factor (p = 0.049, odds ratio 0.855).

STATEMENT (CONCLUSIONS)

PANS is a significant complication and cause of mortality in cats treated surgically for CPSS. Peri-operative levetiracetam did not seem to protect against the development of PANS. Postoperative changes in osmolality were associated with the development of PANS. Further studies are required to determine the importance of this finding.

Thoracic dog bite wounds: a retrospective study of 123 dogs (2003–2016)

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OBJECTIVES

To compare clinical findings, investigate indications for thoracotomy and identify factors associated with outcome in dogs with thoracic dog bite wounds.

METHODS

Medical records of dogs with thoracic dog bite wounds presenting to a single institution were retrospectively reviewed. Data relating to clinical presentation, wound depth and management, radiographic findings and mortality were collected. Wound management was defined

as conservative, exploratory or requiring thoracotomy. Statistical analyses were performed using Chi-squared and Fisher's Exact Test.

RESULTS

123 dogs met inclusion criteria, (54% first opinion, 46% referral), median age was 48 months and median body-weight was 12.75 kg. Thirty dogs (24%) suffered penetrating wounds, 35 (29%) deep wounds, 44 (36%) full thickness skin wounds and 14 (11%) partial thickness skin wounds. Sixty-nine dogs (56%) suffered wounds elsewhere, most commonly to the cervical region ($n = 22$), abdomen ($n = 21$) and limbs ($n = 21$). Bacterial culture was positive in 50% of cases, frequently polymicrobial, and most commonly revealed *Staphylococcus*, *E.coli*, *Pasteurella* or *Enterococcus* species. The most common

radiographic lesions were pneumothorax ($n = 31$), rib fracture/avulsion ($n = 29$), pulmonary contusions ($n = 23$) and pleural effusion ($n = 13$). These radiographic lesions were all significantly associated with each other, presence of a penetrating wound and decision to perform thoracic exploration. Undergoing thoracic exploration was not significantly associated with mortality, however undergoing exploratory coeliotomy was. The most common cause of death was suspected sepsis/SIRS. The overall mortality rate was 18%.

STATEMENT (CONCLUSIONS)

Clinical application of the presented data may facilitate both specialist and general practitioners' decision regarding management of canine thoracic bite wounds.

Prevalence of pulmonary changes detected using computerised tomography in brachycephalic breeds compared to mesaticephalic breeds

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OBJECTIVES

The aims of this observational, analytical, retrospective study were to (i) obtain computed tomographic (CT) data on pulmonary alterations visible in extreme brachycephalic breeds, and (ii) compare the pulmonary alterations between brachycephalic and mesaticephalic breeds. It has been demonstrated that extreme brachycephalic dog breeds (English Bulldogs, French Bulldogs and Pugs) are at increased risk of developing aspiration pneumonia

but it is not known if they are more susceptible to pulmonary parenchymal changes detected on CT scan compared to weight matched mesaticephalic dogs. This study is important to help to further evaluate and understand components of brachycephalic airway syndrome (BAS), including lower airway changes.

METHODS

246 CT scans were analysed, with 213 brachycephalic dogs and 33 mesaticephalic dogs. CTs from dogs in the mesaticephalic control group were excluded if they had any current or historical clinical signs relating to respiratory disease.

RESULTS

87/213 (40%) of the brachycephalic group had pulmonary changes documented compared with 7/33 (21%) of the mesaticephalic group. 36/213 (16%) of the brachycephalic dogs had pulmonary changes consistent with pneumonia compared with 0/33 of the mesaticephalic dogs. 20/213 (9%) of the brachycephalic dogs had pulmonary consolidation compared to 1/33 (3%) of the mesaticephalic dogs. 63/213 (29%) of the brachycephalic dogs had atelectasis compared with 6/33 (18%) of the mesaticephalic dogs.

STATEMENT (CONCLUSIONS)

Individual variation was found among the brachycephalic breeds and further studies investigating the relationship between pulmonary changes, clinical disease and severity of brachycephalic airway syndrome are warranted.