How useful is abdominal ultrasonography in dogs with diarrhoea?

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OBJECTIVES

To assess the utility of abdominal ultrasonography (AUS) in the management of dogs with diarrhoea.

METHODS

Retrospective, cross-sectional study of 269 dogs with diarrhoea as their main presenting sign. The ultrasonographic findings were subjectively scored based on their contribution to diagnosis or further work-up. Associations were tested between the signalment, history,

presenting signs, subsequent work-up and diagnosis and the results of AUS.

RESULTS

149 (55%) dogs had AUS. Dogs that had AUS were more likely to have signs of abdominal pain, melena or hypoalbuminaemia than dogs that did not.

Dogs that had AUS were more likely to have multiple other diagnostic tests than dogs that did not have AUS. Certain AUS findings were associated with specific further tests, including focal thickening of the intestinal wall or enlarged abdominal lymph nodes and ultrasound-guided FNA, and small intestinal foreign body and coeliotomy.

The most frequent result of AUS was no abnormalities affecting the intestine in 65 (44%) dogs. AUS had high utility in only 4 (3%) dogs – two with portosystemic shunt, one with linear foreign body and one with a perforated pyloric ulcer; in these dogs the results of AUS were considered diagnostic without further testing. AUS had moderate utility in 58 (39%) dogs, but in 79 (53%) dogs AUS had no utility and in 8 (5%) dogs AUS was considered counterproductive because results were falsely positive or falsely negative.

STATEMENT

In most dogs with diarrhoea, AUS findings are negative or non-specific and have no impact on case management.

Can computed tomography distinguish inflammatory and malignant neoplastic pleural effusions in dogs?

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OBJECTIVES

To characterise and compare the computed tomography (CT) signs in dogs with pleural effusions as a result of inflammatory or malignant neoplastic pleural disease.

METHODS

Case-control study of dogs with pleural effusion, pre- and post-contrast thoracic CT images and cytological or histopathological diagnosis of inflammatory or

malignant pleural effusion. Thoracic CT images were reviewed by a single board-certified radiologist blinded to diagnosis. Dogs with primary neoplasms affecting non-pleural thoracic structures were not included. Fisher's Exact and Mann-Whitney statistical analyses were utilized to compare study groups.

RESULTS

The study included 32 dogs with pleuritis (18 pyothorax; 14 chylothorax) and 20 with malignant pleural effusions (12 mesothelioma, 7 carcinoma; 1 lymphoma). Compared to dogs with pleuritis, dogs with malignant pleural effusions were significantly older (median 8.5 years (range 4–12.8) versus 4.9 years (range 1.3–13.0); $p=0.001$), more frequently had CT signs of pleural thickening (65% versus 34%; $p=0.046$), and tended to have thickening of the parietal pleura only (45% versus 3%; $p=0.002$) and had more marked pleural thickening (median 3mm (range 0–40) versus 0mm (range 0–38); $p=0.03$). CT signs of thoracic wall invasion were observed only in dogs with malignant pleural effusions. There were no significant differences in attenuation of pleural fluid or prevalence of mediastinal lymphadenopathy.

STATEMENT

Finding CT signs of marked parietal pleural thickening and thoracic wall invasion in dogs with pleural effusion supports diagnosis of pleural malignant neoplasia, and may help clinicians prioritise additional diagnostic testing.