Evaluation of radiographs for the detection of sublumbar lymphadenopathy in dogs

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OBJECTIVES

Identification of sublumbar lymph node involvement is important in dogs with anal sac adenocarcinoma or lymphoma and can influence treatment. The aim of this prospective study was to determine the efficacy of radiographs for the detection of sublumbar lymphadenopathy and to identify radiographic changes that may suggest nodal enlargement.

METHODS

Dogs with anal sac adenocarcinoma or lymphoma having abdominal ultrasound for staging were included.

21 dogs with normal sublumbar lymph nodes (<8 mm height on ultrasound) were retrospectively included as controls. All dogs had abdominal radiographs on the same date as ultrasound. Radiographs were reviewed by 3 blinded observers with varied experience.

RESULTS

16/22 cases with neoplasia had sublumbar lymph node enlargement (5/5 lymphoma, 11/17 anal sac adenocarcinoma). Interobserver agreement was substantial for the radiologist vs resident and fair for experienced observers vs general practitioner. Intraobserver agreement for the general practitioner, resident and radiologist was fair, moderate and almost perfect, respectively. Radiographic sensitivity and specificity for the general practitioner, resident and radiologist were 81%/70%, 94%/81% and 75%/100% respectively. Ventral displacement of the colon, loss of the ventral margin of the iliopsoas muscle and a soft tissue opacity in the caudal retroperitoneal space along with at least one sublumbar node measuring >17 mm on ultrasound, were significantly associated with radiographic identification.

STATEMENT (CONCLUSIONS)

Radiographic visualisation of sublumbar lymph nodes was associated with marked enlargement (>17 mm), which should raise suspicion for metastatic infiltration. However, lack of visualisation does not exclude mild-moderate lymphadenopathy and further imaging is warranted in these cases.

Association between ultrasonographic appearance of urine and urinalysis in dogs and cats

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OBJECTIVES

The aim of this study was to evaluate the association between the ultrasonographic appearance of urine and the results of the urinary sediment in dogs and cats.

METHODS

Any dog or cat undergoing an ultrasound guided cystocentesis, with or without urinary tract signs, was prospectively enrolled. A standardised protocol was used to record ultrasonographic bladder images, which were later reviewed in a blinded fashion by a single board-certified Veterinary Radiologist. The echogenicity of the urine was scored on a categorical manner as 'echoic' or 'anechoic'. The presence of haematuria, bacteriuria, pyuria and/or crystaluria was recorded based on standard laboratory assessment of the contemporaneously collected samples. Urine samples were classified as 'normal' or 'abnormal', depending on the presence of at least one of the previously mentioned findings.

RESULTS

One hundred ninety-four cases were included in the study (41 cats and 153 dogs). Urine was considered echoic in 52 cases of 194 samples (26%). Abnormal sediment was present in 52 of 194 samples (26%). Anechoic urine on ultrasound showed a moderately high negative predictive value for an abnormal sediment (78%), bacteriuria (82%), haematuria (96%) and crystaluria (96%).

Oral presentations

STATEMENT (CONCLUSIONS)

The presence of anechoic urine is more likely associated with a normal sediment, absence of bacteriuria, haematuria and crystalluria. This association can guide veterinary surgeons about the need for a cystocentesis

in specific clinical settings. This information can be especially valuable in asymptomatic animals with chronic history of urinary problems or for monitoring purposes.