Urethral Obstruction

Urethral obstruction is a life-threatening form of feline lower urinary tract disease. Reported rates of re-obstruction range from 14.8% to 36%. The medical records of 87 cats with acute urethral obstructions and abdominal ultrasound (US) performed within the first 24 hours of hospitalization were reviewed. Only cats with no cystocentesis prior to US were included. The goals were to describe the post-obstruction urinary tract ultrasound findings and determine any associations with re-obstruction, clinicopathologic findings, and length of hospitalization.

The most common US findings of the bladder included echogenic urinary sediment and increased urinary echoes, bladder wall thickening, pericystic effusion, and hyperechoic pericystic fat. For the kidneys and ureters, the most common findings included pyelectasia, renomegaly, perirenal effusion, hyperechoic perirenal fat, and ureteral dilation. Urethral findings were not recorded as all cats had indwelling urethral catheters at the time of US. Cystolithiasis was found in 47.1 % of all cats. Perirenal effusion was associated with hyperkalemia. Eighty-two of 87 cats survived to discharge. A six-month follow-up was available for 61 medically treated cats and 21/61 (34.4%) had re-obstructed (13/21 within 14 days of discharge). None of the US findings were predictive for re-obstruction.

Commentary

Although radiographs are commonly performed in cats with urethral obstruction to evaluate for calculi and confirm position of a urinary catheter, the use of US may provide additional information in regard to the genitourinary tract that may aid management decisions. This study documents both anticipated abnormalities (eg, echogenic urine sediment) and some unexpected abnormalities (eg, intraluminal septa). Although medical management is effective in many cases, hospitalization and treatment for urethral obstruction can be relatively expensive, and clients may need to weigh the costs of surgical management (both financial and risks) if warranted vs the risk of re-obstruction and cost of recurrent in-hospital medical management. Although this study did not find an association between these abnormalities and an increased risk for re-obstruction, further prospective studies are needed to evaluate the use of ultrasonography in facilitating clinical management of cats with urethral obstructions and risks for re-obstruction.—*Tara J. Fetzer, DVM*

Source

Nevins JR, Mai W, Thomas E. Associations between ultrasound and clinical findings in 87 cats with urethral obstruction. *Vet Radiol Ultrasound*. 2015;56(4):439-447.

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