

CASE IN POINT

Canine Cystic Transitional Cell Carcinoma

PRESENTATION: 13 year FS small mixed breed referred for pollakiuria for 8 weeks.

HISTORY: The patient was under treatment for pemphigus foliaceus and had developed pollakiuria characterized by 30 minute periods of squatting and attempting to urinate.

PHYSICAL EXAMINATION: No urinary tract abnormalities detected.

DIAGNOSIS: CBC revealed mild anemia, mild inflammatory leukogram, and decreased BUN, creatinine and protein. Abdominal ultrasound documented a 1-2cm sessile, irregularly margined mass lesion in the bladder apex and a similar lesion in the trigone. Positive contrast cystogram (shown below) revealed an irregular filling defect in the bladder trigone with normal kidneys and ureters.



TREATMENT: Ventral midline exploratory celiotomy revealed the bladder to be distended and partially obstructed at the trigone. In order to excise all grossly affected tissue, an anastomosis of the

urethra to the remaining bladder was necessary. A urethral catheter was maintained for 5 days postoperatively.

OUTCOME: Histopathologic diagnosis was transitional cell carcinoma with extension of the tumor into the urethral margin. Pollakiuria resolved postoperatively and the patient's chemistry profile 9 months postoperatively revealed mild liver enzyme and BUN elevations with no other abnormalities. There was no evidence of urinary incontinence despite the resection in the trigone region. The dog was euthanized 15 months postoperatively when her quality of life was poor.

DISCUSSION: Transitional cell carcinoma is a malignant tumor usually at an advanced stage by the time of diagnosis, therefore prognosis is guarded. It is highly metastatic to the lungs and local tissues such as the urethra, ureters, and sublumbar lymph nodes. Debulking surgery with chemotherapy is recommended. Combinations of cisplatin or carboplatin with piroxicam are effective but renal toxicity can occur. Piroxicam is palliative therapy and resulted in partial or complete remission of lesions. Misoprostol can be administered to replace the suppression of protective prostaglandins if GI side effects such as vomiting or melena occur.