



CASE IN POINT

Cystic Transitional Cell Carcinoma and Intestinal Sarcoma

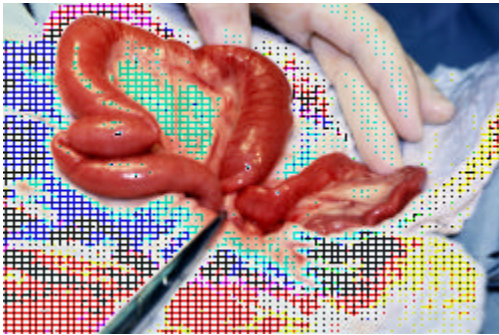
PRESENTATION: 8 ½ year old FS Sheltie presented for chronic hematuria.

HISTORY: Hematuria began 4 months prior. Urinalysis and culture revealed a *Streptococcus* infection. Appropriate antibiotics were administered, however the hematuria and infection did not resolve. Abdominal ultrasound was suggestive of a bladder mass.

PHYSICAL EXAMINATION: There was a palpable caudal abdominal mass and a grade II/VI systolic heart murmur detected.

DIAGNOSIS: Bloodwork revealed mild chronic anemia, inflammatory leukogram, hypoproteinemia and hypothyroidism. Thoracic radiographs revealed a slightly consolidated lung but no evidence of metastatic nodules.

TREATMENT: Exploratory laparotomy revealed a 6 cm section of the distal jejunum with enlargement and serosal erythema (pictured below) which was excised by resection and anastomosis. Cystotomy revealed a trigonal mass which was excised by resection and anastomosis of the bladder and urethra including reimplantation of the ureters more cranially (neoureterocystostomy). Hepatic and splenic biopsies were obtained. A urethral catheter was placed and maintained for 48 hours postoperatively. Intravenous Baytril and oral soloxine was initiated.



OUTCOME: In this patient, the intestinal tumor was not suspected or palpable preoperatively but may have contributed to the anemia and hypoproteinemia. Histopathologic diagnosis revealed completely excised leiomyosarcoma or malignant schwannoma of the jejunum and transitional cell carcinoma (TCC) of the bladder with no evidence of metastasis to the liver or spleen. Hematuria resolved within

weeks postoperatively, however stranguria and incontinence began. Piroxicam (Feldine, 0.3 mg/kg PO QOD - QD) and misoprostol (Cytotec, 1.5 mcg/kg PO TID) were initiated as postoperative chemotherapy for TCC and the patient enjoyed a quality life for 8 months postoperatively until stranguria recurred severely.

DISCUSSION: Aggressive surgical resection of trigonal TCC sometimes requires reimplantation of the ureters and can result in postoperative incontinence since surgical manipulation of the trigone and urethra is at the level of innervation. In some cases, the tumor has ascended the ureters and even aggressive resection is incomplete. Debulking surgery and chemotherapy combined may allow significant survival increases compared with surgery alone. Postoperative administration of doxorubicin and cyclophosphamide combined can result in an 8 ½ month survival, compared to 2 month survival for patients treated surgically alone. Piroxicam can provide a 6 month postoperative survival.