

HAEMANGIOSARCOMA OF THE URINARY BLADDER IN A DOG

AISSIA* AYACHI. A.** and BOUAKAZY****

*Surgery and Imaging Department; University of Batna; Algeria

**Bacteriology and Immunology Service; University of Batina; Algeria

***Histology Department; Batna Hospital; Algeria

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SUMMARY

Haemangiosarcoma of the urinary bladder is reported in a dog. The bladder mass was detected incidentally during physical and ultrasonography examination. Partial cystectomy with unilateral ureteroneocystostomy . We are performed to remove the tumour en bloc. Necrosis of the urinary bladder was diagnosed 6 days postoperatively.

INTRODUCTION

Cancer of the urinary tract in dogs can affect the kidneys, ureters, urinary bladder, prostate, or urethra. In the urinary system, the bladder is affected with cancer most commonly. Compared to cancer in other locations in the body, bladder cancer is unusual, comprising 1-2% of all cancers in the dog.

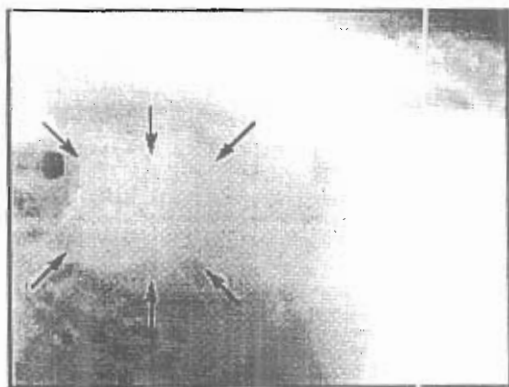
Case report:

A 11-year-old, male pointer was referred for sub-

cutaneous masse. The masse was soft and mobile, approximately 2 cm by 1cm in diameter, in the pelvic region. This masse was confirmed as lipomas on cytological examination of fine needle aspiration. The clinical examination finding a large masse, non painful, mid abdominal mass. Lateral and ventrodorsal radiographs of the abdomen revealed a large mass 7 cm by 4cm, the left caudal abdomen (figure 1).

The dog presented at the veterinary clinic again 9 day after initial examination with decreased appetite and activity level. Ultrasound examination of the abdominal revealed a large mass of mixed echogenicity with displaced of the urinary bladder (figure2) and hydronephrosis. ventrodorsal radiography of the thorax didn't reveal the metastasis. Venous blood was submitted for haematological and serum biochemical examination, coagulation profile. Haematological abnormalities included a regenerative anaemia (PCV 30%; RR 40 to 55%). Serum biochemical analysis was within the reference limits, including creatinine (1.2 mg/dL, RR

0.7 to 1.8 mg/dL) and BUN (20mg/dL., RR 7 to 32 mg/dL). Coagulation profile was normal . The dog was anaesthetised with rompun at dose of 2.2 mg by kilograms intra-muscularly. One to two minute later atropine sulphate also was given intramuscularly in a dose 0.05 mg/Kg. after general anaesthesia was induced with ketamine in a dose 15mg/kg and maintained with halothane. A ventral midline exploratory, and cystotomy was performed to examine bladder wall. A large mass approximately 10cm of diameter, was present in bladder the partial mass is removed (figure 3), fixed to 10% formalin, and submitted for histological examination. The dorsal partial cystectomy was closed in two layers. The mucosal layer of both incisions was closed with 4-0 polyglyconate in a simple continuous pattern. The serosal layer was closed with 3-0 polyglyconate the dorsal incision in a simple continuous pattern. The abdominal cavity was lavaged with 1 litres of warm isotonic saline and closed routinely and an indwelling urethral catheter inserted after 6 days post-operative, urinary wall bladder necrosis was diagnosed. (Figure 5). Histological examination of bladder biopsy revealed Haemangiosarcoma of the urinary bladder and renal metastasis (Figure 4).



Post operative care:

Administration of the morphine (15mg by mouth every 6h, and amoxicillin 20mg/Kg Bw/iv every 12h.

DISCUSSION

Bladder tumours account for approximately 1% of all canine cancer⁴. The majority of bladder tumors are epithelial, with transitional cell carcinoma (TCC), the most common, although sarcomas are occasionally reported. Primary HSA of the bladder is rare in dogs^{1,6}. HSA is a malignant tumour originating from vascular endothelial cells and can originate from any site in the body². In dogs, HSA most frequently involves the spleen, right atrium, and cutaneous and subcutaneous tissue². Visceral HSA has an aggressive biological behaviour with a high metastatic rate and poor survival time², the cause of urinary bladder necrosis in the present case is unknown.

Bladder necrosis has been reported following partial cystectomy for a rhabdomyosarcoma in a dog, although this became apparent within 48 hours of surgery³.

Figure 1: A lateral abdominal radiograph of 11-year-old Golden Retriever showing a large mass in the mid-to-caudal abdomen displacing the colon dorsally, bladder caudoventrally, and the intestines cranially (arrows).

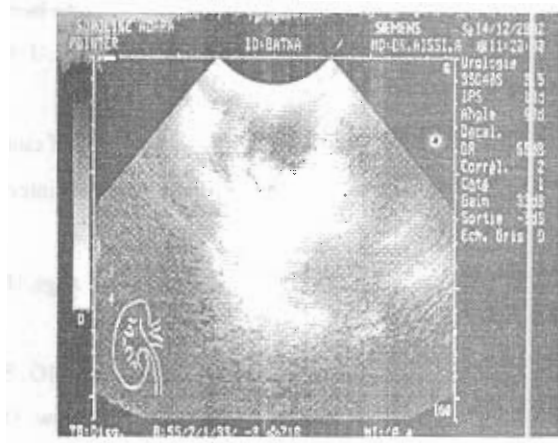


Figure 2: Ultrasonography examination showing large masse in bladder wall.

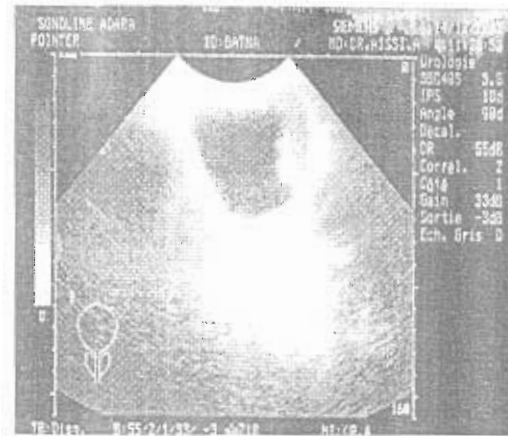


Figure 3: Bladder wall after surgery



Figure 4: Renal metastasis (arrows).



Figure 5: Bladder wall necrosis

Conclusion:

In conclusion, the present dog was diagnosed with HSA of the urinary bladder and this is a rare location for this type of tumour⁵.

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