Vet.Med.J.,Giza. Vol.54, No.1. (2006):57-60.

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

Received: 17. 10. 2005

Accepted: 31. 10. 2005

SUMMARY

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

INTRODUCTION

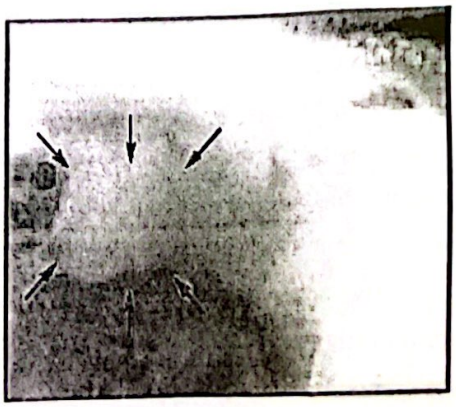
Cancer of the uninary tract in dogs can affect the kidneys, ureters, uninary bladder, prostate, or urethra. In the urinary system, the bladder is affected with cancer most commonly. Compared to cancer in other locations in the body, bladder cancer is unusual, comprising 1-2% of all cancers int he dog.

Case report:

A 11-year-old, male pointer was referred for subcutancous 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 necdle 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 he abdominal revealed a large mass of mixed echogenicity with displaced of the urinary blodder (figure2) and hydroncphrosis. ventrodorsal radiography of the thorax didn't reveal the metastasis. Venous blood was submitted for haemotological 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 andmaintained with halothane. A ventral midine 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 examintion of bladder biopsy revealed Haemangiosarcoma of the urinary bladder and renalmetastasis (Figure 4).



Post operative care:

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

DISCUSSION

Bladder tumours account for approximately 1% of all canine cancer[4]. 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 body[2] . In dogs, HSA most frequently involves the spleen, right atrium, and cutaneous and subcutaneous tissue[2]. 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 surgery[3].

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).

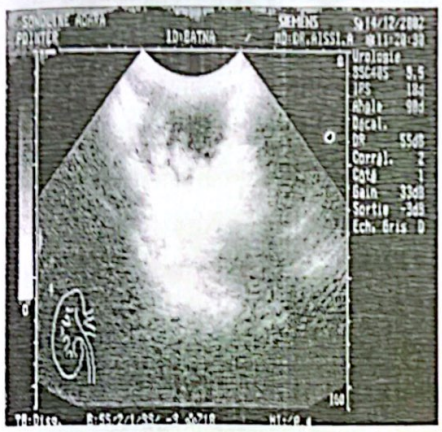


Figure 2: Ultrasonography examination Showing large masse in bladder wall.

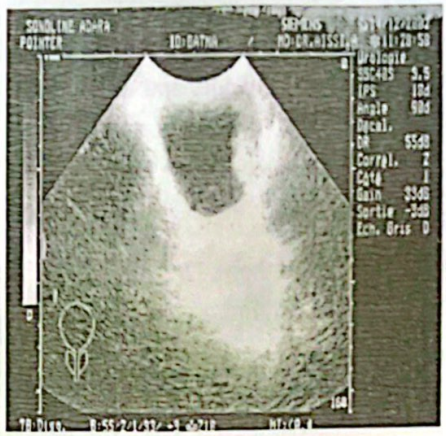


Figure 3: Bladder wall after surgery

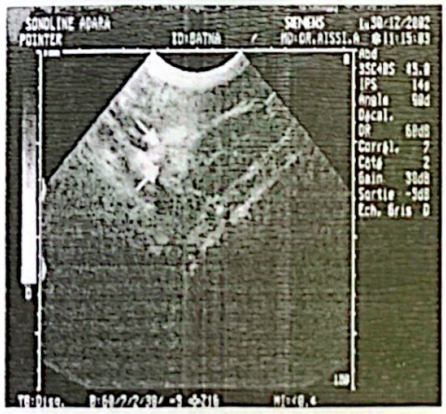


Figure 4: Renal metastasis (arrows).

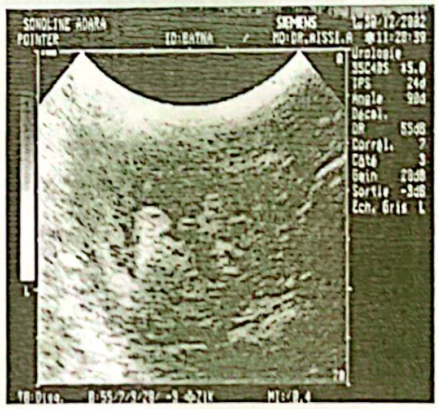


Figure 5: Bladder wall necrosis

Conclusion:

In conclusion, the present dog was diagnosed with HSA of the urinary bladder and this is a rare location for this type of tumour[5].

Acknowledgement:

The authors like to thank Dr. Slimani. C, Touri. S and veterinarians involved in the management and care of this case.

REFERENCES

Brown No. Patnaik AK., MacEwen EG. Canine hemangiosarcoma: retrospective analysis of 104 cases. J Am Vet Med Assoc 1985: 186:56-58.

Clifford CA, Mackin AJ. Henry CJ. Treatment of canine hemangiosarcoma: 2000 and beyond. J Vet intern Med 2000: 14:479-485.

Davies JV. Read HM. Urethral tumours in dogs, J Small Anim Pract 1990; 31:131-136.

Engel JD, Kuzel TM, Moceanu MC, Oefelein MG, Schaefer A.J. Angiosarcoma of the bladder, a review. Urology 1998: 52. 778-784

Phillips BS. Bladder tumors in dogs and cats. Compend Contin Educ Pract Vet. 1999; 21: 540-547, 564.

Srebemik N, Appleby EC. Breed prevalence and sites of haemangioma and haemangiosarcoma in dogs. Vet Rec 1991; 129; 408-409.