Research Paper

URETHROTOMY IN A POMERANIAN—A CASE REPORT

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In the present case urethrotomy procedure is described for correction of the chronic urinary incontinence, patient stabilization considerations, general postoperative management, and risk of complications.

Keywords: Dog, Urethrotomy

INTRODUCTION

Urolithiasis is a common condition responsible for lower urinary tract disorder in dogs (Osborne et al., 1995). The formation of bladder stones is associated with precipitation and crystal formation of a variety of minerals (magnesium ammonium phosphate hexahydrate, calcium oxalate, urates, and others). Most stones are located in the urinary bladder or urethra and only a small percentage are lodged in the kidneys or ureters. Urinary stones can damage the lining of the urinary tract causing inflammation (Boothe, 2000). Small urinary stones may become lodged in the urethra, particularly in male dogs, causing an obstruction that requires urgent treatment (Osborne et al., 1995; Smeak, 2000; Waldron, 2003; Christopher, 2004; and Bray, 2006).

MATERIAL AND METHODS

A Pomeranian male dog aged about 12 years and weighing approximately 7.5 kg was brought at Jabalpur Pets Hospital for anuria from 24 hrs and having history of urinary incontinence since 1-2 years durations.

Catheterization was not possible due to urethroliths and radiography revealed urethral calculi just behind the os penis which obstruct the urination. The case is treated as emergency because of clinical signs.

The dog was premedicated with Atropine sulphate @ 0.04 mg/kg I/M and Xylazine HCL @ 1.5 mg/kg I/M. The general anaesthesia was maintained by Ketamine administration @ 8-10 mg/kg Intravenously. Dog was restrained on dorsal recumbancy and the surrounding area was prepared for aseptic surgery. A longitudinal incision was given at the mid of the urethra over the obstruction behind the os penis.

The urethral calculi were removed and catheterization by Ryles feeding tube No. 8 was
preformed (Figures 1 and 2). The suturing was done with the help of 2/0 vicryl. The entire area was applied with ofloxacin, ornidazole topical solution. The available subcutaneous tissue was approximated. Skin edges were approximated with cruciate black braided silk suture (Figure 3). The routine dressing with antibiotic coverage (Ceftriaxone @ 250 mg I/M, OD for 5 days) and fluid therapy was given for 5 days. The case recovered without any complication.

RESULTS AND DISCUSSION

The urethroliths removed contains oxalates crystals in operated case. Calcium Oxalate stones have become the most common type of stone seen in dogs with all ages, breeds and sex (Lulich et al., 1999). Some risk factors for calcium oxalate stone formation include, excessive dietary calcium, animal protein, and vitamin D consumption, medications that cause increase calcium elimination from urine (furosemide and prednisone) (Osborne et al., 1999). The observation of uroliths composed predominantly of ammonium urate in non-Dalmatian dogs (Osborne, 2003).

High dietary intake of minerals and protein in association with highly concentrated urine may contribute to increasing the saturation of salts in the urine, while some drugs may also trigger formation of urinary stones (Osborne et al., 1995), however the case treated was on vegetarian diet. Disease conditions such as bacterial infections in the urinary tract can also increase urine salt concentration (Smeak, 2000), long history of urinary incontinence was noticed in present case.

CONCLUSION

The surgical correction was done to remove or relieve an obstruction, with an uneventful recovery.
and postoperative observation of eight months
did not revealed recurrence of condition.

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