

DIAGNOSIS AND SURGICAL MANAGEMENT OF URETHROLITH IN A DOG

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Diseases of the urethra frequently result in partial or complete obstruction of the flow of urine in dogs. This obstruction results in uremia within 2 to 3 days and death within 3-6 days (Kalhr, 1983). Ischial arch and posterior of os-penis are common sites of lodging the urethral calculi (Burk and Ackerman, 1996). Both these sites are difficult to visualise ultrasonographically (Kundu and Ghosh, 2006). The lumen of urethra remains collapsed except at the time of micturition. This is the reason along with os-penis for poor ultrasonographic visualisation of urethra. The calculi from urinary bladder may also get lodged in the urethra during voiding out. These urethroliths causes obstruction of urine and inflammation of urethra. Cystotomy is a common surgical procedure in small animal veterinary practice, typically performed to remove cystic calculi (Cornell, 2000).

HISTORY AND CLINICAL EXAMINATION

A Pomeranian dog of 8 years of age was brought to the TVCC, LUVAS, Hisar with the history of urine incontinence, anorexia and straining for micturition since two days. A polyethylene catheter (no. 6) was attempted to pass through external urethral orifice but it does not go beyond after 7-8 c.m.. The values of blood urea(85mg/dl) and serum creatinine (2.7 mg/dl) were also found to be increased.

DIAGNOSTIC IMAGING

The abdominal radiograph revealed one cystolith and a urethrolith behind the os penis. Through 2D and 3D ultrasonography a urethrolith was observed in the prostatic urethra. The lobes of prostate were also visible clearly and appeared normal.

SURGICAL PROCEDURE

After the confirmation of calculi in the urethra efforts were done to push them back in to the bladder through retrograde urohydropropulsion. But due to larger size they remain lodged into the urethra.

To remove the calculus from urethra cystotomy was done under xylazine (@ 1mg/kg) – ketamine (@ 5 mg/kg) i.m. anaesthesia and following standard surgical method. Due to azotemia the doses were kept towards lower side. Post operatively inj. Amikacin 1ml i.m., inj. Biotax 500

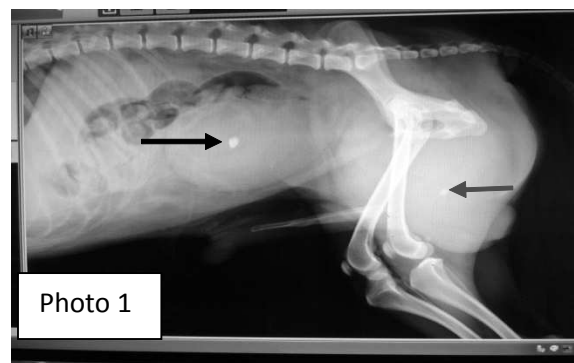


Photo 1. Radiograph showing cystolith (black arrow) and urethrolith (red arrow).

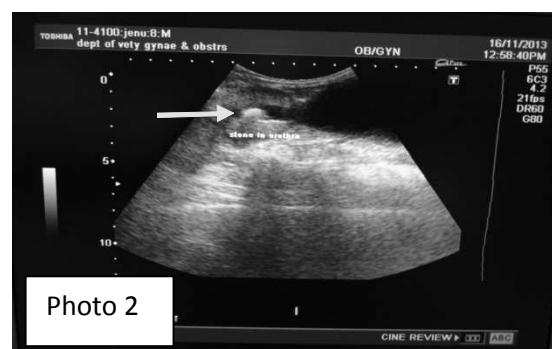


Photo 2. 2D USD showing calculus in the prostatic urethra (Yellow arrow).

mg i.m., inj. Trineurosol 1ml i.m. for 5 days and inj. Melonex 1.5 ml i.m. for 3 days were given. The suture line at both sites was cleaned with povidone iodine soaked gauze and examined for infection daily. The catheter and skin sutures were removed on 12th day after surgery.

The dog made uneventful recovery within 12 days and normal urination was restored.

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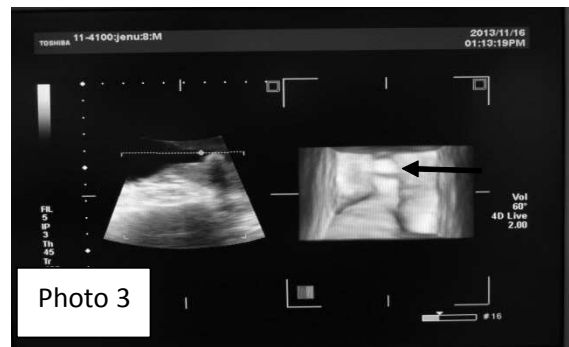


Fig.3. 3D USD showing calculus in the prostatic urethra (Black arrow).

