

SURGICAL REMOVAL OF UROLITH BY PRESCROTAL URETHROTOMY IN A BULL: A CASE REPORT

Madan Pal, Sandeep Saharan, Dinesh, Sandeep Potliya, Kailash Kumar, Sarvan Kumar

Teaching Veterinary Clinical Complex

Lala Lajpat Rai University of Veterinary and Animal Sciences, Hissar, Haryana- 125004

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Email - drmadanlega @gmail.com

Urolithiasis is a major disease of domestic animals all over the world. Uroliths occur in either sex, but obstructive urolithiasis is primarily a problem of male due to anatomical conformation of their urinary tract (Larson, 1996). Various factors influences the formation of stone in the urinary tract like diet, age, sex, breed, genetic makeup, season, soil, water, hormone levels, mineral and infection (Kalim *et al.*, 2011). Once the calculi are formed in urinary tract, they may be lodged in any part of the urinary tract, thus leading to the retention of urine causes bladder distention, abdominal pain and eventual urethral perforation or bladder rupture with death from uremia or septicemia (Gasthuys *et al.*, 1993). Urolithiasis is seen most often during winter and during severe weather conditions with limited water intake, especially when the water has a high mineral content. In male ruminants the urethral diameter becomes progressively smaller from the ischial arch toward the tip of the penis. The calculi most commonly lodge in the urethra at the distal sigmoid flexure where there is pronounced narrowing of the urethral diameter (Wolfe and Moll, 1998).

CASE HISTORY AND CLINICAL OBSERVATION

A buffalo bull of 3.5 year was admitted to TVCC, Lala Lajpat Rai University of veterinary and Animal Sciences, Hisar, with the history of suffering from retention of urine since 7 days. Animal was anorectic and passing scanty hard faeces since 7 days.

On clinical examination animal was found dull and depressed. The subcutaneous swelling along the prepuce and ventral abdomen was seen due to rupture of urethra.



Fig 1- A 5cm longitudinal incision given prescrotal and urethra was exteriorized and stone was removed.



Fig 2- Urethra is closed in simple interrupted manner

TREATMENT

Animal was sedated with 0.5 ml of xylazine i.v. Animal was restrained in right lateral recumbency and operation site was infiltrated with 5 ml of 2% lignocaine hydrochloride. Site was properly scrubbed with chlorhexidine solution and 5 cm long incision was given immediately anterior to the scrotum (prescrotal) and exteriorized the urethra. The polyethylene catheter was passed in the rear side upto ischial urethra to ensure presence of any stones and then other end of the catheter was passed toward the external urethral orifice. The obstruction site was identified due to striking of polyethylene catheter to calculi. A small incision was given over the stone and removed. Then the urethra is sutured with chromic catgut no.1 in simple continuous manner in two layers and subcutaneous tissue and skin was closed with non absorbable suture material in horizontal fashion. The catheter was sutured with preputial sheath to prevent its dislodgement and kept for one week. Multiple stab incisions were given lateral to the penile urethra for drainage of urine collected in the subcutaneous tissue. Antiseptic dressing was done with povidone iodine and wisperc spray, followed by treatment 5 days containing Nimuslide 10 ml, Cefotaxime 3 gm , Avil 10 ml and lasix 7 ml and catheter was removed after one week and skin sutures were removed after 2 weeks. Animal recovered uneventfully after two weeks and was passing urine properly and there was no swelling at the penile uerthra.

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