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SHORT COMMUNICATION

Successful Management of Paraphimosis in a German Shepherd Dog

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ABSTRACT

A 3 year old German shepherd dog was presented with a history of inability of penis to retract into prepuce after coitus, dysuria, and anorexia with abducted hind limbs. The protruded penis was dry, oedematous and congested with dark purple patches. Manual conservative treatment using hygroscopic agents was failed to reduce the size of the penis. Hence it was treated by aspiration of blood that was blocked in cavernous spaces of penis, replaced it in preputial sheath after preputiotomy and closed with purse string sutures. By prompt post operative measures and antibiotic treatment, the dog recovered well.

HIGHLIGHTS:

- Studied a case of paraphimosis in a german shepherd dog.
- Surgical intervention is the best managemental practice for paraphimosis in dogs.

Keywords: German shepherd, paraphimosis, preputiotomy, aspiration

The condition in which penis is unable to retract fully into preputial sheath is called paraphimosis (Hayden, 2012) and was observed mostly in young dogs of less than one year age (Pavletic, 2005) with a total incidence of 7% (Papazoglou, 2002). Many conservative methods like packing penis with cool packs or gauze dipped in 50% dextrose or sugar; using lubricants to replace penis were in practice and were successful in early cases only (Fossum, 2013). In mild cases, technique of cranial advancement of prepuce is being practiced popularly (Pavletic, 2005). But, surgical interventions ranging from a simple preputiotomy to penile amputation were inevitable in protracted cases (Boothe, 2006). The time of presenting the case to clinic and the condition of penis will determine the type of treatment to be followed. In the present paper, paraphimosis in a dog and its successful management using a novel technique was described.

A three year old German shepherd dog weighing about 30 kg was reported to have been suffering from inappetance, dysuria and non retractile swollen penis for about 30 hours consequent to successful aggressive coitus. As the animal was walking with abducted hind limbs and resisting examination of penis due to severe pain, it was anaesthetized with xylazine and ketamine @ 1 mg and 5 mg/ kg BW respectively after preanesthetization with atropine sulphate @ 0.04mg/kg body weight. On observation, the penis was dry, engorged, and oedematous with few dark purple areas on pars longa glandis and bulbus glandis (Fig. 1).

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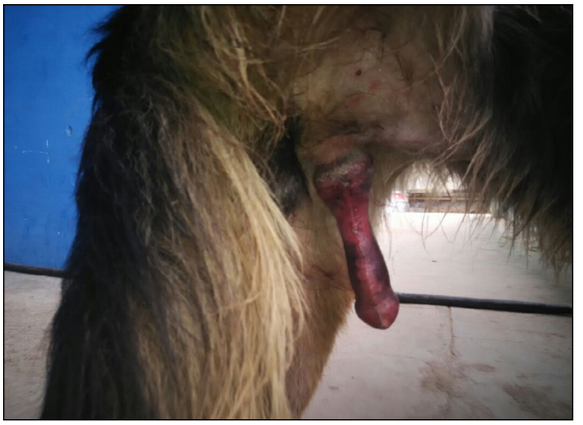

Fig. 1: Photograph showing paraphimosis with tightly closed preputial orifice

Under maintenance of above said anaesthesia, the dog was placed in supine position. To reduce the size of the penis, it was soaked in the hypertonic salt solution for 30 minutes and preputiotomy was performed by making a 2 cm linear incision on ventral aspect of preputial orifice. As it was not successful for repositioning the penis into the preputial sheath, the blood accumulated in the cavernous spaces was aspirated by making punctures at various sites on the penis using 20 G hypodermic needle which reduced the size of the penis to half (Fig. 2).

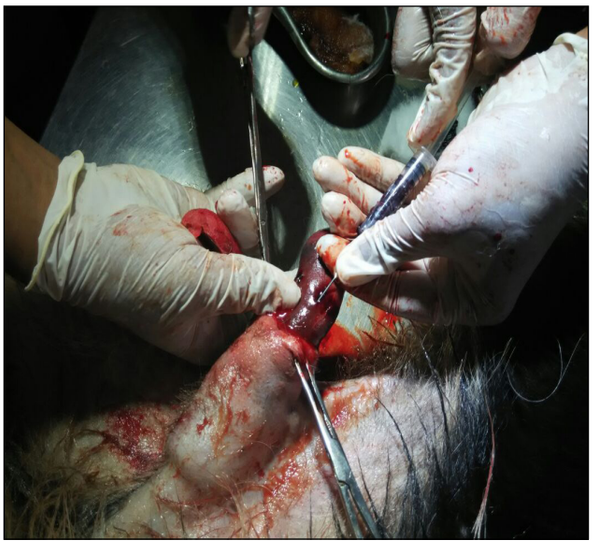

Fig. 2: Photograph showing aspiration of blood from cavernous spaces of penis

After application of liquid paraffin to the penis it was repositioned into the preputial sheath and retention was achieved by application of purse string sutures to the preputial orifice (Fig. 3).

Fig. 3: Photograph showing retension of penis by purse string sutures with indwelling catheter *in situ*

To counteract dysuria urethral catheterization was performed and fixed it to the preputial sheath. Post operatively the dog was administered with inj. Ceftriaxone @ 5 mg/kg BW, inj. Ketoprofen @ 2 mg/ kg BW, 0.5 ml of inj. Vitamin A, D & E and 1ml inj. chlorpheniramine maleate for 5 days besides daily flushing of the preputial cavity with povidone iodine solution. The purse string sutures and urethral catheter were removed on 5th post operative day (Fig. 4) and the dog recovered completely within 10 days.

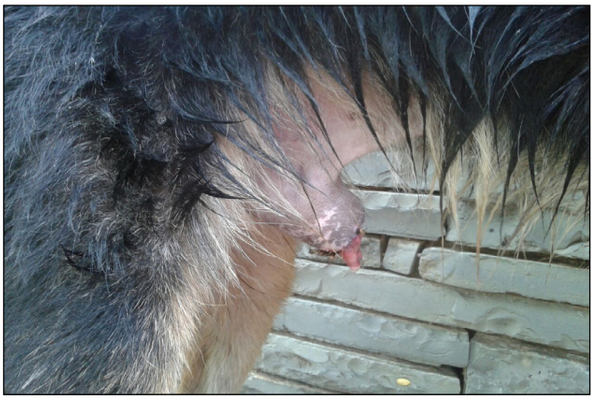

Fig. 4: Photograph showing reduced size of penis by 5th postoperative day

Paraphimosis may be congenital (Kumaresan *et al.,* 2014) or acquired (Rao and Bharathi, 2004) associated with copulation, masturbation, trauma, penile haematoma, foreign bodies, pseudohermaphroditism, neurologic deficits or constriction of preputial hairs (Fossum, 2013), tumours (Kumar *et al.,* 2012), ineffective preputial muscles (Chaffe and Knecht, 1975), infection and idiopathy (Papazoglou, 2001). Of these, most common factor was constriction of preputial orifice with hairs that entangle the penis (Ndiritu, 1979). In paraphimosis, upon erection and strangulation, the blood in cavernous spaces will be blocked due to compression of internal and external pudendal veins (Boothe, 2003) and may not arteries. Because of the mounting pressure inside, there is every chance of forming haematoma and oedema which leads to necrosis and infection (Hayden, 2012; Rao and Bharathi, 2004). In the present context vigorous sexual activity during coitus might be the etiological factor and a novel technique of aspirating stagnated blood in the cavernous spaces was adopted to reduce the size of penis which was usually practiced in horses for penile haematoma (Hayden, 2012).

CONCLUSION

Paraphimosis in dogs is an emergency condition to be addressed and by debulking the penis by aspiration of blocked venous blood in cavernous spaces could yield positive results in some dogs.

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