Paraphimosis is defined as tightening of the foreskin so that it cannot be retracted over the glans penis, or when the protruded penis cannot be retracted into the preputial cavity. It generally occurs with sexual excitement as the penis becomes engorged with blood, and retraction of the penis into the prepuce becomes difficult. Failure of bulbar engorgement to regress, accompanied by trauma during coitus, may prohibit withdrawal of penis. The retracted prepuce then becomes lodged caudal to the bulbus glandis, creating a constricting band (Elkins, 1984). Prolonged paraphimosis can result in necrosis of the glans penis and obstruction of urethra. Although usually associated with coitus or sexual excitement, paraphimosis has been precipitated by fractures of the penis (Rao and Bharathi, 2004), balanoposthitis, inefficient preputial muscle (Chaffee and Knecht, 1975) and pseudohermaphroditism (Papazoglou, 2001).

Case History and Examination

A one year old male Great Dane dog weighing around 30 kgs was presented to Veterinary Clinics and Teaching Hospital (Faculty of Veterinary Sciences and Animal Husbandry, SKUAST, R.S. Pura –Jammu, India), with paraphimosis of eight-hour duration. The penis was engorged and congested and there were several dark haemorrhagic areas. An edematous preputial band was constricting the penis, preventing its retraction into sheath. After treatment, the inflammatory swelling subsided and animal was recovered uneventfully with no recurrence up to two months of follow-up.

Keywords: Paraphimosis; Dog; Magnesium sulphate

Fig. 1. Dog with paraphimosis.
Treatment and Management

To manipulate the penis, animal was deeply sedated with combination of atropine at 0.02mg/kg body wt, xylazine at 2mg/kg body wt, and ketamine at 5mg/kg body wt intramuscularly. The penis was gently cleaned with the help of potassium permanganate solution (1:10000). A hyperosmolar magnesium sulphate was applied to the edematous swelling of the penis and prepuce. Ice packs were also applied with pressure to reduce the edematous swelling so that the penis can be replaced back into the preputial sheath. Use of magnesium sulphate and ice combined with digital pressure facilitated return of the penis into the preputial sheath (Fig. 2). The bladder was evacuated using the PVC catheter before trying to retract the penis. The penis was kept in position by applying two interrupted sutures on the tip of the preputial sheath. The dog was administered cefotaxime 500 mg bid intramuscularly for five days, along with melonex injection 2ml bid for five days. The dog was also given 2ml dexamethasone intramuscularly on the first day as a strong anti-inflammatory agent. In addition, Avil 2ml was also injected intramuscularly for five days. The inflammation was subsided and sutures were removed on the 5th day.

Results and Discussion

The inflammatory swelling subsided and animal was recovered uneventfully with no recurrence up to two months of follow-up. The use of hyperosmolar magnesium sulphate solution in combination with ice packs facilitated return of the penis into the prepuce as observed by Elkins (1984). The antibiotic given in the present study was also effective as no secondary infection was observed.

References


Fig. 2. The same dog after treatment, showing return of the penis into the preputial sheath.