

Perineal Urethrostomy in a Dog with a Severed Penis

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RINGKASAN

Satu laporan tentang kejayaan merawat seekor anjing yang zakarnya luka parah. Prinsip dan teknik perineal uretostomi pada anjing dibincangkan.

SUMMARY

The successful surgical management of a dog with a severed penis is reported. The principles and technique of perineal urethrostomy in the dog are discussed.

INTRODUCTION

Trauma to the canine penis is not a common problem except during sexual activity when injury may be inflicted by other dogs or irate owners (Wilson, 1975). Thus at this Veterinary Teaching Hospital, common surgical manipulations of the penis *per se* have been confined to excision of transmissible venereal tumor lesions and correction of paraphimosis. Bite wounds in hunting dogs inflicted by wild boars are presented occasionally. It is the objective of this paper to present a case of traumatic penile amputation in a dog.

HISTORY

A one-year-old male dog of mixed breed was presented with a history of having returned home the evening before with profuse bleeding from the prepuce. The owner had attempted to control the bleeding with pressure on the prepuce. A bitch in the neighbourhood had been noticed in oestrus.

RESULTS

The dog was depressed on presentation. The bleeding from the prepuce had stopped. Large blood clots filled the preputial cavity and the penis was not palpable. Examination under anaesthesia and surgical intervention were scheduled pending results of a complete blood count and blood urea nitrogen (BUN). The results revealed a hematocrit of 28% and a BUN of 32.6mg%.

Anaesthesia was induced with thiopentone sodium and maintained with oxygen and halothane. A lactated Ringer's intravenous drip was also set up. Examination of the preputial cavity with the aid of a vaginal speculum failed to locate any remnants of the penis. A ventral midline incision was made anterior to the scrotum and the preputial cavity exposed. Oedema and contusion of the surrounding soft tissue were evident. The preputial mucosa was torn at numerous sites and the stump of the penis was observed protruding 1 mm from the caudal reflection of the preputial mucosa. The end of the stump had a clean, perpendicular cut surface with the urethral orifice visible. The urethra was catheterised and 250 ml of urine aspirated.

An enlargement of the urethral orifice on the penile stump was made by spatulating the urethral mucosa and suturing it to the corpus spongiosum. The tears in the preputial mucosa were repaired and the skin incision closed with non-absorbable sutures. The dog was also castrated.

The following morning, it was noticed that whenever the dog made an effort to urinate, the inguinal region swelled and was warm. Urine seepage into the subcutaneous space had occurred and emergency surgery was indicated. It was decided to carry out a perineal urethrostomy rather than a scrotal urethrostomy because of the risk of poor healing associated with the trauma at the prepuce.

The dog was placed on dorsal recumbency to expose the stump of the penis for catheterization. Another 220 ml of urine was withdrawn. A 3 cm midline skin incision was made between the anus and the scrotum. The urethra was identified by palpating for the catheter. After separating the fibers of the bulbocavernosus muscle, the urethra was incised. The mucosa together with part of the corpus spongiosum were sutured to the skin with care taken to achieve good apposition with the skin. A scrotal ablation was also performed. An indwelling catheter was left in place. The dog was maintained on a systemic antibiotic. To prevent self-inflicted trauma to the urethrostomy site, an Elizabethan collar was used and a tranquilizer given for 7 days. The dog recovered uneventfully and when examined 8 weeks later did not show any evidence of stricture or urine scald.

DISCUSSION

Urethrostomy in dogs is not a commonly performed procedure because of the inherent dangers of stricture and urine burns (Brown, 1975; Yoshioka and Carb, 1982). In a survey of the surgical cases in 78 small animal practices in California in which a total of 10,088 operative procedures were performed, no urethrostomies in dogs were recorded (Vasseur *et al.*, 1981). It is impossible to draw any conclusion from the one case reported here, but from this experience and those reported in the literature, it would appear that urethrostomies in dogs can be rewarding if certain important guidelines are followed. These include minimal tension at the urethrostomy site, accurate apposition of urethral mucosa to skin margins and the use of collars to prevent licking and self-mutilation (Yoshioka and Carb, 1982; Smith and Schiller, 1978).

The use of an indwelling urinary catheter to maintain a patent urinary passage while the urethrostomy site heals is a valid consideration. However, care should be exercised in choosing the size of the catheter because overstretching of the urethral wall can produce stricture (Weaver and Schulte, 1962).

From the history and clinical examination of the penile stump, it is highly probable that the penis had been amputated with a sharp cutting edge. However, the question as to whether this was iatrogenic or accidental remains unanswered.

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