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The Pharma Innovation

ISSN (E): 2277-7695
ISSN (P): 2349-8242
Impact Factor (RJIF): 6.34
TPI 2025; 14(10): 04-06

www.thepharmajournal.com
Received: 07-07-2025
Accepted: 09-08-2025

PD Gopani
M. V. Sc. Scholar, Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Kamdhenu University, Navsari, Gujarat, India

SK Jhala
Assistant Professor, Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Kamdhenu University, Navsari, Gujarat, India

MK Pancholi
M. V. Sc. Scholar, Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Kamdhenu University, Navsari, Gujarat, India

SH Talekar
Associate Professor, Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Kamdhenu University, Navsari, Gujarat, India

VS Dabas
Professor and Head, Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Kamdhenu University, Navsari, Gujarat, India

Corresponding Author:
SK Jhala
Assistant Professor, Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Kamdhenu University, Navsari, Gujarat, India

Surgical Management of Penile Laceration in a German Shepherd Dog

PD Gopani, SK Jhala, MK Pancholi, SH Talekar and VS Dabas

Abstract
A 16-month-old German shepherd male dog weighing 27 kg was presented with history of bleeding from the prepucial opening following an unknown reason. Clinical examination revealed a lacerated wound on the ventral surface of the penis. The urethra was found intact on urinary catheterization. The wound was thoroughly irrigated with normal saline and sutured using a simple continuous pattern with 2-0 polyglactin 910 under general anaesthesia. Post-operatively, antibiotics, non-steroidal anti-inflammatory and styptics were administered for 5 days. The patient showed uneventful recovery with restoration of normal urination. This case highlights the importance of early evaluation, urethral assessment, and appropriate surgical intervention in canine penile lacerations.

Keywords: Penile laceration, German shepherd, urethral integrity, surgical management, wound healing

Introduction
Penile injuries in dogs are not very common, but when they occur, they are considered surgical emergencies because of the chances of heavy bleeding, infection, and damage to the urethra (Fossum, 2019) [5]. The penis of the dog has a rich blood supply, so even small cuts or wounds can cause a lot of blood loss. The main causes of such injuries include road accidents, bite wounds from other animals, entrapment, or accidental trauma during procedures like urinary catheterization or during mating (Boothe, 2000) [2]. Understanding if the urethra is intact is a crucial first step in assessing penile injuries in dogs. Urine can seep into the surrounding tissues if the urethra ruptures, leading to abnormal holes called fistulas, a temporary urethral narrowing called stricture and chronic difficulties urinating (Smeak, 1990) [7]. Surgery, such as partial penis removal combined with the scrotal urethrostomy, may be necessary in more severe or complex instances (Burrow *et al*., 2011) [3]. The successful conservative surgical treatment of a German Shepherd dog's penile laceration is described in this case study, which also highlights the clinical outcome, perioperative care and diagnostic technique. These findings are further correlated with recent research.

2. History and clinical observations
A 16-month-old intact German shepherd male dog, weighing 27 kg, was presented to the Veterinary Clinical Complex, Navsari with bleeding from the preputial orifice for 2 hours and unknown history of bite or trauma. Upon clinical examination, the dog was bright, alert and responsive, with normal heart rate, respiratory rate, and rectal temperature, indicating that hemodynamic stability was maintained despite the acute bleeding episode. Inspection of the genital region revealed active haemorrhage from the preputial opening, associated with a distinct laceration on the ventral aspect of the penile shaft (Fig. 1). The adjacent preputial tissues exhibited mild swelling without evidence of necrosis or gross contamination. To evaluate urethral integrity, a sterile urinary catheter was carefully introduced through the external urethral orifice. The catheter advanced smoothly without resistance, and normal urine flow was obtained, thereby confirming urethral patency and excluding urethral disruption (Fig. 2). This assessment was pivotal in directing the case toward conservative surgical repair of the penile laceration rather than necessitating more extensive reconstructive or diversion procedures.

3. Treatment and clinical outcome
The dog was premedicated with atropine sulphate to reduce salivary secretion. Anaesthesia was induced with combination of diazepam @ 0.5 mg/kg and ketamine @ 10 mg/kg

intravenously, which provided rapid onset and adequate depth of anaesthesia. Following induction, endotracheal intubation was performed, and anaesthesia was maintained using isoflurane delivered in 100% oxygen via a rebreathing circuit to allow precise control over anaesthetic depth throughout the procedure. The surgical site, including the preputial and penile regions, was clipped and prepared aseptically using povidone-iodine scrub followed by sterile saline rinse. The lacerated wound on the ventral aspect of the penile shaft was carefully inspected and active bleeding was controlled by ligation of the bleeders. Copious irrigation of the wound was performed with warm sterile saline to remove clots and debris. Minimal surgical debridement was undertaken to preserve viable tissues and prevent excessive tissue loss, given the functional and cosmetic importance of the region. Definitive wound closure was achieved by simple interrupted suture pattern using 2-0 polyglactin 910 (Fig. 3). Haemostasis was rechecked prior to final closure. To protect the urethra and minimize strain on the surgical site, a sterile urinary catheter was introduced intraoperatively and secured in place. The catheter was maintained for 48 hours postoperatively to ensure uninterrupted urinary drainage and to facilitate healing by reducing local inflammation and mechanical stress. Post-operatively, antibiotics (Tab, Enrofloxacin @ 5mg/kg BW OD), non-steroidal anti-inflammatory (Carprofen @ 2 mg/kg PO, BD) and Ethamsylate @ 250 mg were given for 5 days besides daily dressing of the wound and flushing of prepucial cavity using diluted povidone iodine solution. An Elizabethan collar was applied throughout the recovery period to prevent self-mutilation by licking or biting, thereby reducing the risk of wound dehiscence or secondary infection.

In the immediate postoperative phase, mild preputial swelling was evident but resolved within 48 hours following administration of anti-inflammatory therapy. By postoperative day 3, the swelling had subsided, the wound margins appeared healthy and well apposed, and the sutures remained intact. Removal of the urinary catheter at this stage revealed normal urination without evidence of straining, haematuria, or periurethral leakage. By day 7, complete wound healing was observed, with no signs of infection, discharge, or dehiscence (Fig. 4). By day 10, the dog had resumed normal activity and micturition, and the surgical site demonstrated a satisfactory cosmetic outcome.

4. Discussion

The uneventful healing observed in this case and it's correlate with Anderson and Newton's (1998) [1] findings, which indicated favourable outcomes following conservative care of penile lacerations in dogs, provided urethral integrity was preserved. Boothe (2000) [2] emphasized confirmation of urethral patency as crucial step and found important for both diagnostic and therapeutic purposes. On the other hand, more severe injuries can call for drastic measures. Burrow *et al*. (2011) [3] reported partial penile amputation with scrotal urethrostomy in 18 cases. While this procedure was successful, there was a chance of postoperative sequelae such stomal haemorrhage and secondary infections. Although these advanced approaches were judged unnecessary in cases of minor cuts, Patel *et al*. (2022) [6] also reported positive results when applying thoracoabdominal staplers for partial penile amputation in cases of severe injuries. In order to restore urinary function, Della Maggiore *et al*. (2013) [4] recommended the use of coated nitinol catheters for recurring or complex urethral strictures. But in this instance, the trauma was limited to soft tissue and the urethra was unharmed, allowing a favourable outcome with just primary repair. All things considered, this case demonstrates that great functional and cosmetic results from superficial penile lacerations are linked to early identification, cautious evaluation of urethral continuity and conservative wound care.

5. Conclusion

It is concluded that conservative surgical repair, coupled with short-term urethral catheterization, was sufficient to restore both function and appearance in case of penile laceration in dog.

Fig 1: Penile laceration on ventral shaft of penis in dog

Fig 2: Urinary catheterization revealed intact urethra

Fig 3: Sutured wound

Fig 4: 12th post-operative day

References

1. Anderson DG, Newton CD. Surgery of the penis and prepuce. In: Newton CD, Nunamaker DM, editors. Textbook of Small Animal Orthopaedics and Surgery. Philadelphia: Lippincott Williams & Wilkins; 1998. p. 612–8.
2. Boothe HW. Managing traumatic urethral injuries. Vet Clin North Am Small Anim Pract. 2000;30(3):429–42. doi:10.1016/S0195-5616(00)50035-3.
3. Burrow RD, Gregory SP, Lorenz ND, Brearley MJ. Penile amputation and scrotal urethrostomy in 18 dogs. J Small Anim Pract. 2011;52(3):147–52. doi:10.1111/j.1748-5827.2011.01041.x.
4. Della Maggiore AM, Mayhew PD, Culp WTN, Holt DE. Treatment of a traumatic penile urethral stricture in a dog with a covered nitinol stent. J Am Vet Med Assoc. 2013;242(3):351–5. doi:10.2460/javma.242.3.351.
5. Fossum TW. Small animal surgery. 5th ed. St. Louis: Elsevier; 2019.
6. Patel N, Baines SJ, White RAS. Partial penile amputation using a thoracoabdominal stapler: Short-term outcomes in nine dogs. J Small Anim Pract. 2022;63(4):256–62. doi:10.1111/jsap.13492.
7. Smeak DD. Urethral surgery in small animals. Vet Clin North Am Small Anim Pract. 1990;20(2):401–22. doi:10.1016/S0195-5616(90)50038-1.