

MANAGING PARAPHIMOSIS IN A DOG WITH OXYTOCIN TREATMENT: A CASE REPORT

Puli Vishnu Vardhan Reddy¹, Akhter Rasool^{2*}, Vikas¹ and Ankit Negi¹

Department of Veterinary Surgery and Radiology

College of Veterinary Science and Animal Husbandry

Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go

Anusandhan Sansthan

Mathura - 281 001, Uttar Pradesh, India.

ABSTRACT

One year old male Labrador Retriever dog, was presented with the history of inability to retract the penis back into preputial sheath since 24 hours after a mounting attempt. Massage therapy, application of magnesium sulfate and ice pack failed to reduce penile oedema. Topical application of oxytocin around bulbous gland is successfully reduced oedema, thereby aided in easy repositioning. Purse-string sutures were applied around the tip of the preputial sheath and post reduction therapy followed. Animal had an uneventful recovery.

Keywords: canine, paraphimosis, penile oedema, oxytocin, purse string suture

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INTRODUCTION

Paraphimosis is a rare but potentially serious condition in canines, characterized by the inability to retract the penis into the preputial sheath (Ettinger, 2017). This condition is distressing not only due to the intense pain caused by the inflammation, but

also due to adverse impacts like blood stasis, thrombosis of the corpus spongiosum, and necrosis (Somerville and Anderson, 2001). Oxytocin receptors are expressed in the penis and mediates an estrogen-dependent smooth muscle contractility (Vignozzi *et al.*, 2004).

CASE HISTORY AND DIAGNOSIS

One year old male Labrador Retriever dog (20 Kgs), was presented to Teaching Veterinary Clinical Complex, Mathura with the history of inability to retract the penis back into preputial sheath since 24 hours after an attempt to mount an adult mongrel

¹M.V.Sc Student

²M.V.Sc Student, Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science and Animal Husbandry DUVASU, Mathura, India, *Corresponding author Email id: mirakhter1312@gmail.com

bitch following sexual excitement (Fig. 1). Physical examination revealed hyperaemic, oedematous, and non-retractile protruding penis with constricting band at its base preventing its retraction in to the sheath. The condition was diagnosed as paraphimosis.

TREATMENT AND DISCUSSION

After appropriate restraining of animal, the penis was gently cleansed using a 0.1 % povidone-iodine solution diluted in 0.9 % normal saline. Initially mild massage, ice pack and hyperosmolar magnesium sulfate was applied around the penis in an attempt to relieve the oedema. However, this procedure did not yield a significant reduction in penile edema and prevented its retraction in to the sheath. Consequently, 1 ml of oxytocin (Pitocin, Pfizer) was topically administered around the bulbus gland which helped in reducing the oedema and successful repositioning of penis. Purse-string suture was skillfully applied to the tip of the preputial sheath to maintain the penis in its correct anatomical position. Post reduction, Tab Amoxicillin plus Clavulanic acid 375 mg PO BID for 5 days and Tab Meloxicam 2.5 mg 2 tablets PO SID for 3 days were advised. An Elizabethan collar was placed around the dog's neck to prevent interference with the surgical site. Suture was removed on fifth day and the dog exhibited an uneventful recovery, with no recurrence during the follow-up period (Fig. 2).

Occurrence of paraphimosis is mostly reported in young dogs less than 1 year of age and sexual arousal initiates paraphimosis in

dogs (Fossum, 2002). The oxytocin receptor gene and protein are localised in the smooth muscle compartment, particularly in the corpus cavernosum of the penis, and they mediated the contractility of the penile tissue (Vignozzi *et al.*, 2004). Thus, oxytocin therapy in paraphimosis condition found to be beneficial in treating penile oedema.

SUMMARY

The topical administration of oxytocin can serve as an alternative therapeutic approach to reduce oedema and facilitate the repositioning of the penis in case of paraphimosis in dogs.

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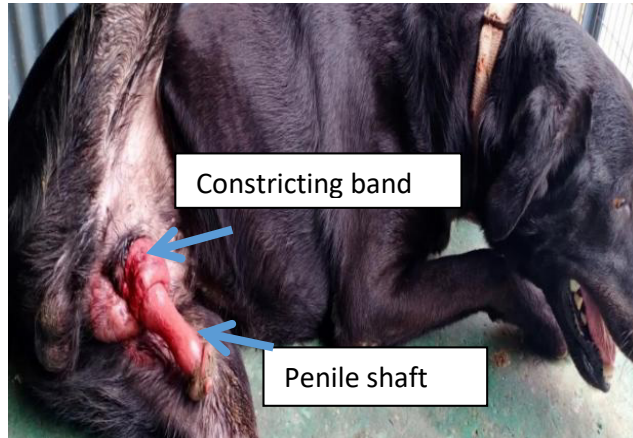


Fig. 1. Protruded penis with constricting band.



Fig. 2. Clinical progress after ten days.