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## Management of vaginal prolapse in a non-descriptive dog in Jalukie-Nagaland: A case report

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### Abstract

Vaginal prolapse is a rare condition in bitch and it is most frequently observed during parturition and the oestrous phase of the cycle due to fluidy expansion of vaginal tissue, when the hormone oestrogen level is elevated. Vaginal prolapse can result in 360° protrusions of the vaginal tissue. It affects dogs of all ages; however younger and intact dogs are more susceptible. majority of prolapse cases have a positive outcome after retention suture, though the condition is likely to recur again. A dog weighing 13.5 kg, non-descriptive dog was brought to the Veterinary Clinical Complex with a history of vaginal protrusion and subsequently retention suture method called purse string suture was used along with a course of antibiotic yielded a positive result.

**Keywords:** Vaginal prolapse, purse string suture, antibiotic

### Introduction

When compared to other vaginal pathologies like vaginal tumours or urethral tumours that extend into the vagina and impede the canal, vaginal prolapse is a fairly uncommon problem among bitches (Manothaiudom and Johnston, 1991) [4]. Vaginal prolapse typically affects young bitch, ideally under the age of 2 to 3 years. It is most commonly seen among canine population, nearing parturition stage, when blood progesterone levels fall and serum oestrogen levels rises (Konig *et al.*, 2004; Rani *et al.*, 2004) [5, 6]. However, in diestrus, anestrus, and normal pregnancy stages, this condition is less common (Johnston *et al.*, 2001; Schaeffers-Okkens, 2001) [7, 8]. oedematous swelling of the vaginal mucosa may develop as a result of elevated serum oestrogen levels (Johnston *et al.*, 2001) [7]. This is accompanied by increased vaginal hyperaemia and oedema caused by the oestrogen stimulus during proestrus and estrus (Schaeffers-Okkens, 2001) [8]. Amplification of this high serum estrogenic response can result in excessive mucosal folding of the vaginal floor immediately cranial to the urethral orifice, resulting in vaginal mucosa protrusion from the vulva.

### History and Observation

A 9-month-old, non-descriptive dog, weighing 13.5 kg was presented to the Veterinary Clinical Complex, College of Veterinary Sciences & Animal Husbandry, CAU(I), Jalukie, Peren, Nagaland with a history of vaginal prolapse for the last three days without necrosis, as per the anamnesis the owner had no idea if the dog was mated recently. On further examination it was found that the other parameters appear to be normal.

There was intermittent straining, and vaginal smear revealed no specific cell structure. Attempts were made to push the mass inside the vagina, however it remained only for a few seconds and relapse occur back, thereafter after a thorough investigation, it was concluded that the lump was a vaginal mass, i.e., vaginal prolapse.

### Clinical management

First, a cytology smear was taken on a glass slide and examined under a phase contrast microscope, but no specific cell structure was revealed on microscopic examination. Before attempting to replace the prolapse mass, the animal was sedated with xylazine @ 2 mg/kg body weight intramuscularly, followed by a mild potassium permanganate solution (0.1% KMnO<sub>4</sub> solution) to clean the prolapsed mass and later Coldwater treatment was utilised to reduce the size of the mass.

Using lignocaine gel, the mass was lubricated and desensitised. To reposition the mass into the vagina, fingers through the ventral floor and the lateral sides were used to apply pressure. Following repositioning, a purse string suture was employed and an opening was left for urination. The patient was then advised for an antibiotic course, Ceftriaxone @ 20 mg/kg body weight I/M OD for 5 days, Avil tablets 10 mg p.o, BID for 3 days and Melonex Plus @ 0.5 mg/kg bodyweight I/M for 2 days. The owner was then advised to use Elizabethan collar, in order to prevent the bitch from licking the vaginal area. After two weeks, the sutures were removed, and the bitch gradually recovered.



**Fig 1 & 2:** Vaginal prolapse



**Fig 3:** Purse string suture



**Fig 4:** Recovery

### Discussion

Vaginal prolapse is most common during the proestrus or early estrous stages of the estrous cycle (Johnston, 1989) <sup>[9]</sup> and during or shortly after parturition (Schaefers-Okkens, 2001) <sup>[8]</sup>. Reports suggest that this condition may have some hereditary predisposition and is seen in pure bred dogs (Johnston, 1989) <sup>[9]</sup>. The protruded mass begins to regress in late estrus to early diestrus when serum oestrogen levels return to normal (Feldman and Nelson, 2004; Alan *et al.*, 2007) <sup>[10, 2]</sup>. In the present case, the recurrence of prolapsed mass does not occur following the end of the estrous period.

### References

1. <https://www.highstreetpeppingvetclinic.com/vaginal-prolapsehyperplasia.pml>
2. Alan M, Cetin Y, Sendag S, Eski F. True vaginal prolapse in a bitch. *Anim. Reprod. Sci.* 2007;100(3-4):411-414.
3. Ankit Kumar Ahuja, Shivkumar, Ashwani Kumar Singh, Shahbaz Singh Dhindsa. Management of True Vaginal Prolapse in Bitch. *International Journal of Environment, Agriculture and Biotechnology (IJEAB)*, 2007, 2(4).
4. Manothaiudom K, Johnston SD. Clinical approach to vaginal/vestibular masses in the bitch. *Vet. Clin. N. Am. Small; c1991.*
5. Konig GJ, Handler J, Arbeiter K. Rare case of a vaginal prolapse during the last third of pregnancy in a Golden Retriever bitch. *Kleintierpraxis.* 2004;49:299-305.
6. Rani RU, Kathiresan D, Sivaseelan S. Vaginal fold prolapses in a pregnant bitch and its surgical management. *Indian Vet. J.* 2004;81:1390-1391.
7. Johnston SD, Kustritz MVR, Olson PNS. *Canine and feline Theriogenology*, 1<sup>st</sup> edn. W.B. Saunders Co., London; c2001. p. 225-273.
8. Schaefers-Okkens AC. Vaginal oedema and vaginal fold prolapse in the bitch, including surgical management. In: *Recent advances in Small Animal Reproduction*; c2001.
9. Johnston SD. Vaginal prolapse. In: *Current Veterinary Therapy*, 10<sup>th</sup> edn., Kirk; c1989.
10. R.W. (Ed). W. B. Saunders Co., Philadelphia. 1302-1305.
11. Feldman EC, Nelson RW. *Canine and Feline Endocrinology and Reproduction*. W.B. Saunders, Philadelphia; c2004. p. 901-918.
12. [tp://dx.doi.org/10.22161/ijeab/2.4.25](http://dx.doi.org/10.22161/ijeab/2.4.25) ISSN: 2456-1878 page: 1660 & 1661