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### Abstract

A young bitch of 4 year of fifth parity was presented to District Veterinary Polyclinic, Akola with eversion of the uterus through the vulvar lips in morning. The dog had a history of recent parturition (30 hr. earlier) with alive eight pups without any incident. The protruding uterus was washed with antiseptic solution, reduction of prolapse mass by means of ice pac and then slight push with hand then repositioned the uterine mass inside pelvic cavity and one stay suture was placed on vulval lip with nylon to avoid recurrence of prolapse. After it, bitch was healthy with no evidence of recurrence. One month later, the owner reported that the bitch was normal with no recurrence of clinical signs.

Keywords: Bitch, haematology, uterine prolapse

### Introduction

Uterine prolapse is a relatively uncommon complication of parturition, occurring rarely in dogs <sup>[1, 2, 7, 12, 13]</sup>. It occurs immediately or up to 48 hrs after delivery of the last neonate <sup>[4, 11]</sup> and to facilitate management before accumulation of contamination and mucosal trauma, should be regarded as an emergency condition. Uterine prolapse is an eversion of the organ, which turns inside out as it passes through the cervix into the vagina. The prolapse can be complete, with both horns protruding from the vulva, or limited to the uterine body and one horn.

### **Materials and Methods**

A 4 year old bitch weighing 12 kg was presented to District Veterinary Polyclinic, Akola, having history of uterine prolapse in the morning. The bitch had given a birth to eight pups 30 hr. before the consultation without any incident, which were all alive and were of normal size. On clinical examination, the animal was depressed and had rectal temperature of 101.4<sup>0</sup> F with pale conjunctival mucosa. The pulse and respiratory rate were slightly increased. The prolapse was complete, with both horns protruding from the vulva (Fig. 1). The exposed tissue was congested and contaminated with dirt. Blood was collected in EDTA vial for complete blood count.

After sedation with xylazine @ 1 ml IM was induced. The bitch was positioned in lateral recumbency. Uterine mass washed with 1% potassium permagnate solution to remove contamination. Ice pack was applied over the potruted mass to reduce size. Body of uterus as well horns were clean and pushed into pelvic cavity and reposioned uterus slowely with fingers. Then, one stay suture applied to vulval lips with nylon to avoid further recurrence of uterine mass to allow vulvar discharge and normal urination. This stay suture was left in place for 5 days to prevent opening of the vulvar lips, which did not allow recurrence of the prolapse (Fig. 2). There was no rupture to internal organ. The bitch recovered unevenfully. Postoperative treatment included the use of an pain killer (Meloxicam @ 1.2 ml IM), intravenous fluid therapy, Calcium Sandoz 10 ml IV, D5 @ 300 ml, RL @ 200 ml, antibiotic (Intacef @ 0.5 g IM).

## **Result and Discussion**

The day after which uterus was repositioned, bitch was alert, urinated normally and with slight lochial discharge. After one month, there was no recurrence of the prolapse. Uterine prolapse is relatively uncommon <sup>[4, 11, 3]</sup> reported that uterine prolapse has accounting for 0.6% of the maternal causes of dystocia. Haematological value showed decrease in Hb, TEC, PCV and increase in TLC count. Neutrophilia and lymphopenia was observed with shift to left (Table 1).

Prolapse of the uterus is a straight forward diagnosis made by observation. The etiology of uterine prolapse is unknown in bitches. It is thought to occur as a result of decreased myometrial tone that may allow the uterus to fold in and permit part of the wall to move towards the pelvic inlet <sup>[9]</sup>.

The exposed uterus has to be palpated to rule out the possible presence within it of any abdominal contents such as the urinary bladder or abdominal viscera <sup>[8]</sup>. The treatment for uterine prolapse depends upon the severity of damage to the uterus and may include hysterectomy. The prognosis following treatment for a uterine prolapse is guarded depending on the timing of veterinary intervention, as well as the recognition and treatment of secondary complications. Clinical signs include straining, restlessness, pain and protrusion of a mass from the vulva <sup>[4]</sup> and may progress to signs associated with shock or toxemia <sup>[11]</sup>. In present case, there was no toxemia but showed restlessness, straining and protrusion of uterus with both horn.

Dystocia and increased straining, which may be caused by prolonged whelping, incomplete placental separation, pain or discomfort after parturition, probably lead to uterine prolapsed <sup>[1, 2, 7]</sup>. In humans, many risks factors have been suggested and some of them are relevant in veterinary medicine, such as obesity, an oversized fetus and a prolonged labour <sup>[10]</sup>. In the present case, no direct causative factor was identified but may associated with straining after parturition.

Uterine prolapse requires immediate attention and represents an obstetric emergency. To decrease the risk of uterine artery rupture or avulsion from the internal iliac leading to fatal haemorrhage, activity should be restricted until the prolapse is repaired <sup>[8]</sup>. Gross debris contaminating the prolapsed tissue should be removed by washing, preferably with a hypertonic solution. Topical application of osmotic agents has proven to be effective in reducing and preventing the oedema that rapidly accumulates within the prolapse tissue <sup>[8]</sup>.

Uterine prolapse can be treated by medical (rarely successful) or by surgical management. The goal of treatment is to prevent infection. The organ can be cleaned and replaced if the organ is vital and replaceable <sup>[7]</sup>. Failure to achieve complete reduction of the prolapse can result in continued straining and uterine necrosis <sup>[7]</sup>. An episiotomy can be performed to assist with manual reduction. Oxytocin (0.5–1.0 IU) can be administered to facilitate uterine involution, which will prevent recurrence <sup>[9]</sup>. In present case, organ was cleaned with antiseptic and pushed it in pelvic cavity.

The uterus may be attached to the abdominal wall to prevent further prolapse <sup>[7]</sup>. This may be reason for no recurrence after one month to present case.

Table 1: Haematological	Investigation
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Sr. No.	Parameters	Observed Value	Reference interval
	Hamatological values		
1.	Hb(g/dL)	07.50	12-18
2.	PCV (%)	18.00	37-55
3.	TEC (106/cu mm)	03.69	5.5-9.5
4.	MCV (fL)	48.78	60-70
5.	MCH (Pg)	20.32	19.5-24.5
6.	MCHC (%)	11.26	32-36
7.	TLC (10 <sup>3</sup> /cu mm)	09.65	6-17
	Haematologica	to leukocytes	
1.	Neutrophil (%)	83	60-77
2.	Lymphocyte (%)	12	12-30
3.	Monocyte (%)	02	3-10
4.	Eosinophil (%)	03	2-10
5.	Basophil (%)	00	Rare

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Fig 1: Prolapsed uterine mass



Fig 2: Retention sutures on the vulva after replacement of the prolapsed uterus.

### Conclusion

A young bitch of 4 year of fifth parity was presented to District Veterinary Polyclinic, Akola with eversion of the uterus through the vulvar lips was recovered with proper treatment.

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### References

- 1. Anderhust SR. Bicornuate uterine prolapse in a cat: a photographic essay. Vet Med Small Anim Clin. 1975; 70:681.
- 2. Bruinsma DL. Feline uterine prolapse (a case report). Vet Med Small Anim Clin. 1981; 76:60.
- 3. Ekstrand C, Linde-Forsberg C. Dystocia in the cat: A retrospective study of 155 cases Journal of Small Animal Practices. 1994; 35(9):459-464.
- 4. Feldman EC, Nelson RW. Periparturient diseases. In: Feldman EC, Nelson RW, editors. (eds). Canine and feline endocrinology and reproduction. 3rd ed. St Louis, MO: Saunders. 2004, 808.
- 5. Holt PE, Jones A. *In vitro* study of the significance of bladder neck position in incontinent bitches. Vet Rec. 2000; 146:437-439.
- 6. Hopper RM. Surgical correction of abnormalities of genital organs of cows: management of uterine prolapse.

In: Youngquist RS, Threlfall WR, editors. (eds). Current therapy in large animal theriogenology. 2nd ed. Philadelphia, PA: Saunders. 2007, 470-471.

- 7. Maxson FB, Krausnick KE. Dystocia with uterine prolapse in a Siamese cat. Vet Med Small Anim Clin.1969; 64:1065-1066.
- 8. Miesner DM, Anderson DE. Management of uterine and vaginal prolapse in the bovine. Vet Clin Food Anim. 2008; 24:409-419.
- 9. Murphy AM, Dobson H. Predisposition, subsequent fertility, and mortality of cows with uterine prolapse. Vet Rec. 2002; 151:733-735.
- 10. Schaffer JI, Wai CY, Boreham MK. Etiology of pelvic organ prolapse. Clin Obstet Gynecol. 2005; 48:639-647.
- Stone EA (V). Ovary and uterus. In: Slatter DH, editor. (ed). Textbook of small animal surgery. 3rd ed. Philadelphia, PA: Saunders. 1487.
- 12. Vaughan L, McGuckin S. Uterine prolapse in a cat. Vet Rec.1993; 132:568.
- Wallace LJ, Henry JD, Clifford JH. Manual reduction of uterine prolapse in a domestic cat. Vet Med Small Anim Clin. 1970; 65:595-596.