

# SUCCESSFUL MANAGEMENT OF UNUSUAL UTERINE PROLAPSE IN A FEMALE DOG: A CASE REPORT

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Uterine Prolapse is a very rarely encountered problem in female dogs. In the present case a three years old mongrel female dog in its second parity was presented at Veterinary Clinical Complex, Nagpur, with eversion of complete uterus. The dog had a history of recent whelping (24 hr. earlier) with six live puppies without any complication. Management of the protruding uterus was performed by cleaning the mass with antiseptic solution, reduction of mass and then repositioning inside the pelvic cavity with proper suture on vulval lips with nylon thread to avoid recurrence of prolapse. After treatment female dog was found healthy with no evidence of recurrence. One month later, in follow up the owner reported that the female dog was absolute normal without any recurrence of clinical signs.

**Keywords:** Female dog, Management, Haematology, Uterine prolapsed.

Uterine prolapse is a relatively uncommon complication of whelping in female dogs. It occurs immediately or up to 48 hrs after delivery of last neonate and to facilitate management before accumulation of contamination and mucosal trauma case 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. Though cervico vaginal prolapse (Johnston *et al.* 2001) and vaginal prolapse (Williams *et al.* 2005) are often encountered in dogs near whelping an incidence of uterine or even partial uterine prolapse is rare in dogs with the incidence rate as low as 0.03%. In uterine prolapse one or both uterine horn either completely or partially exteriorized through extremely dilated cervix (Sathiamoorthy *et al.* 2013). The prognosis and severity of the condition is dependent upon the duration of the prolapse. The most preferred treatment of prolapsed uterine horn is surgery (Payan *et al.* 2012) but the choice of therapy is determined by the

fact whether the owner wants to retain the future breeding life of the dog or not (Agaoglu *et al.* 2012).

## Case history and Observations

A 3 years old mongrel female dog weighing 12 kg was presented at Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur, with the history of uterine prolapse in the morning. The female dog had given birth to six puppies with in 24 hr. before the consultation without any incident, which were all alive along with normal birth size. On clinical examination, the female dog was found depressed and had rectal temperature of 101.4<sup>0</sup> F with pale conjunctival mucosa. The pulse and respiratory rate was slightly increased. It was a case of complete uterine prolapse 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. Haematological value showed decrease in Hb, TEC, PCV and increase in TLC count. Neutrophilia and lymphopenia were observed with shift to left (Table-1).

**Table-1: HAEMATOLOGICAL FINDINGS AT THE TIME OF CASE PRESENTATION IN FEMALE DOG**

Sr. No.	Parameters	Observed Value	Reference interval
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Haematological values			
1.	Hb(g/dL)	07.50	12-18
2.	PCV (%)	18.00	37-55
3.	TEC (10 <sup>6</sup> /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
Haematological values related 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

### Treatment

The female dog was sedated with Inj. Xylazine @ 1 mg/kg body weight by I/M route. The female dog was positioned in lateral recumbence. Uterine mass washed with 1% potassium permanganate solution to remove contamination. After cleaning, the prolapsed mass was applied with saturated sugar solution likewise ice pack was also applied over it in order to reduce its edematous swelling. After the edema was reduced to the extent that organ can be reposed, it was again cleaned with cold water and used Lignocaine jelly 2% and Betadine ointment to reduce the pain and chances of infection after repositioned. Then by applying bilateral pressure with the help of palm and

figures the prolapsed mass was reposed very carefully and slowly inside the pelvic cavity. Then, one stay suture applied to vulval lips with nylon to avoid further recurrence of uterine mass to allow vulvar discharge and normal urination (Fig.-2). 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. There was no any rupture occurred in the internal organ. The female dog recovered uneventfully. Post operative treatment included the use of Inj. Meloxicam @ 0.5 ml/10 kg body weight I/M), Inj. Calcium Gluconate @ 0.2 ml/Kg body weight slow I/V, Inj. Ceftriaxone @ 25 mg /kg body, I/M..



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**Fig-1. Before treatment**

**Fig-2. After treatment**

## Results and Discussion

The day after which uterus was repositioned; female dog was found alert with normal urination along with slight lochial discharge. Owner reported that the female dog was sounds healthy and consuming food normally after 5 days of the treatment. After one month, there was no recurrence of the prolapsed mass. Prolapse of uterus is a straight forward diagnosis made by observation. The etiology of uterine prolapse is unknown in female dogs. 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. The deficiency of calcium, phosphorus and increased intra-abdominal pressure during parturition along with excessive relaxation of pelvic ligaments and vaginal muscles are also considered to be the cause of the prolapsed masses. The exposed uterus has to be palpated to rule out the possible presence of any abdominal contents such as the urinary bladder or abdominal viscera. In present case, there was no toxaemia but showed restlessness, straining and protrusion of uterus with both horns.

## Conclusions

In the present case, no direct causative factor was identified but may associate with straining after whelping. 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. Uterine prolapse can be treated by medical (rarely successful) or by surgical management. The goal of treatment must be to prevent infection. In present case, organ was cleaned with antiseptic and pushed it in pelvic cavity.

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