



E-ISSN: 2320-7078

P-ISSN: 2349-6800

[www.entomoljournal.com](http://www.entomoljournal.com)

JEZS 2020; 8(3): 847-848

© 2020 JEZS

Received: 01-03-2020

Accepted: 03-04-2020

**Brijesh Kumar Yadav**

Department of Veterinary  
Gynaecology and Obstetrics, College  
of Veterinary Science and Animal  
Husbandry, U.P. Pandit Deen Dayal  
Upadhyaya Pashu Chikitsa Vigyan  
Vishwavidyalaya Evam Go  
Anusandhan Sansthan, Mathura,  
Uttar Pradesh, India

**Ashutosh Basera**

Department of Veterinary  
Gynaecology and Obstetrics, College  
of Veterinary Science and Animal  
Husbandry, U.P. Pandit Deen Dayal  
Upadhyaya Pashu Chikitsa Vigyan  
Vishwavidyalaya Evam Go  
Anusandhan Sansthan, Mathura,  
Uttar Pradesh, India

**Abhinav Singh**

Department of Veterinary  
Gynaecology and Obstetrics, College  
of Veterinary Science and Animal  
Husbandry, U.P. Pandit Deen Dayal  
Upadhyaya Pashu Chikitsa Vigyan  
Vishwavidyalaya Evam Go  
Anusandhan Sansthan, Mathura,  
Uttar Pradesh, India

**Jitendra Agrawal**

Department of Veterinary  
Gynaecology and Obstetrics, College  
of Veterinary Science and Animal  
Husbandry, U.P. Pandit Deen Dayal  
Upadhyaya Pashu Chikitsa Vigyan  
Vishwavidyalaya Evam Go  
Anusandhan Sansthan, Mathura,  
Uttar Pradesh, India

**Atul Saxena**

Department of Veterinary  
Gynaecology and Obstetrics, College  
of Veterinary Science and Animal  
Husbandry, U.P. Pandit Deen Dayal  
Upadhyaya Pashu Chikitsa Vigyan  
Vishwavidyalaya Evam Go  
Anusandhan Sansthan, Mathura,  
Uttar Pradesh, India

**Corresponding Author:****Brijesh Kumar Yadav**

Department of Veterinary  
Gynaecology and Obstetrics, College  
of Veterinary Science and Animal  
Husbandry, U.P. Pandit Deen Dayal  
Upadhyaya Pashu Chikitsa Vigyan  
Vishwavidyalaya Evam Go  
Anusandhan Sansthan, Mathura,  
Uttar Pradesh, India

## Surgical management of dystocia due to unilateral uterine torsion in Gaddi pregnant bitch

**Brijesh Kumar Yadav, Ashutosh Basera, Abhinav Singh, Jitendra Agrawal and Atul Saxena**

### Abstract

This paper reports a case of unilateral uterine torsion in a Gaddi pregnant bitch. Gestation period was complete. X-ray examination confirmed the presence of four fetuses. Per-vaginal delivery was not possible, therefore, surgically fetuses were recovered. After laparotomy, unilateral twisting of uterus was seen. After correction, remaining fetuses were removed. Animal recovered uneventfully within seven days of follow-up advice and treatment.

**Keywords:** Uterine torsion, pregnant bitch, fetus, ovariohysterectomy

### Introduction

Twisting of the uterus on its own longitudinal axis is termed as uterine torsion<sup>[1]</sup>. Twisting of uterine horn can be either clockwise or anti-clockwise or around the other horn or both horns may twist simultaneously<sup>[13]</sup>. Various causes of uterine torsion include jumping, running or rolling behaviour during excessive play, premature uterine contraction in late pregnancy, foetal physical activities, partial abortion, hereditary weakness or variations in length and mobility of the proper ovarian and uterine ligaments<sup>[12]</sup> and the use of oxytocin<sup>[9]</sup>. In female dog, uterine torsion is an uncommon and can be life threatening condition<sup>[5,7]</sup>. Uterine torsions result in a quickly deteriorating shock-like state associated with severe abdominal pain<sup>[3]</sup>. Higher occurrence in the gravid<sup>[1]</sup> and unilateral torsion is more likely<sup>[4]</sup>. The present case reports the successful management of dystocia due to unilateral uterine torsion in Gaddi pregnant bitch.

### Case history and clinical observations

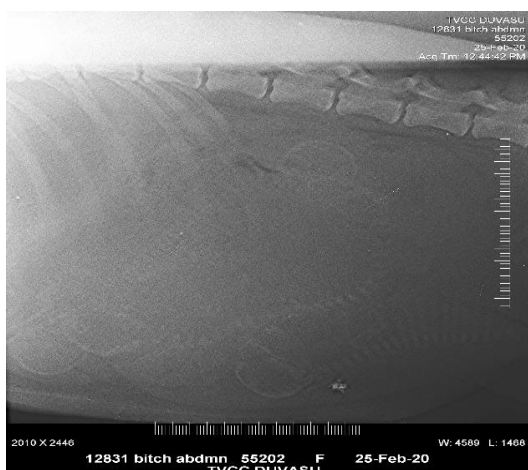
A Gaddi bitch was presented to Veterinary Clinical Complex, DUVASU, Mathura with the history of 63 days gestation period and parturition was not progressing. According to the owner, animal was straining since 30 hours. Vaginal discharge was reddish in colour and was coming out since last 24 hours. Appetite of the animal was reduced. On physical examination, general condition of the animal was good and animal was looking alert and active. Abdominal enlargement was well appreciated. There was swelling of vulva also. On per-vaginal examination, fetus was not approachable. Clinically, vaginal discharge was also present. Although birth canal was sufficiently dilated even then no fetus came towards the vagina. On X-ray examination (figure 1), four fetuses were visible.

### Treatment

As the per-vaginal delivery was not possible, therefore, it was decided to go for surgical approach. Weight of the animal was 33 kg. Anaesthetic doses were calculated as per weight of animal. Injection Atropin sulphate was used as pre-anaesthetic agent @ 0.03 mg/kg body weight I/M. Injection Xylazine was used for sedation @ 1 mg/kg body weight I/M. Injection ketamine was used for induction @ 5 mg/kg body weight I/M. Ketamine and diazepam (2:1) were used as maintenance dose. Three inches long incision was made just one finger behind the umbilicus. On laparotomy, initially it was difficult to lift the uterus and then a twist in one of the uterine horn was felt. However, it was taken out and twist was corrected. Two dead fetuses were taken out from the twisted horn (figure 2) and two live fetuses were recovered from another intact horn. In the present case, ovariohysterectomy was performed.

## Discussion

In the present case, gravid horn was twisted at caudal portion of uterine horn. Similar finding was also reported earlier [10, 14]. Site of torsion relative to major vascular supply, duration of torsion and extent of vascular compromise may be more relevant factors in progression and severity of clinical signs [2]. Severe torsion can cause obstruction of the blood supply to the uterus, with resultant thrombosis or rupture of uterine vessels, congestion, shock, fetal and/or maternal death [5]. In the present case study, X-ray examination revealed presence of four fetuses. Nonetheless, the diagnosis of the unilateral uterine torsion could not be accomplished based on these findings. In the present case, diagnosis was accomplished at the laprotomy. Ovario-hysterectomy without correction of torsion has been recommended to prevent systemic effects associated with release of bacteria, bacterial toxins and other cardiovascular depressant compounds present within a potentially devitalised hollow viscous organ [6]. Disorders associated with canine uterine torsion include dystocia, pyometra, septic shock, peritonitis, coagulopathy and death [1-8].



**Fig 1:** X-ray image of fetuses present inside uterus



**Fig 2:** Twisted (red coloured) and intact horn after laprotomy

## Conclusion

In the present case, condition of uterine torsion was diagnosed after laparotomy, therefore, in bitches, identification of uterine torsion condition is not favourable before surgical operation.

## References

1. Biddle D, Macintire DK. Obstetrical emergencies. *Clinical Technique in Small Animal Practice*. 2000;

- 15:88-93
2. Chamber BA, Laksito MA, Long F, Yates GD. Unilateral uterine torsion secondary to antinflammatory endometrial polyp in the bitch. *Australian Veterinary Journal*. 2011; 89:380-84
3. Darvelid AW, Linde-Forsberg C. Dystocia in the bitch, a retrospective study of 182 cases. *Journal of Small Animal Practice*. 1994; 35:402-407
4. Dogruer G, Kose AM, Urer CK, Dogruer A. Unilateral Uterine Torsion in a Pregnant Bitch. *Eurasian Journal of Veterinary Science*. 2018; 34(1):60-64
5. Johnston SD, Root-Kustritz MV, Olson PNS. Canine parturition: Eutocia and Dystocia. In: *Canine and Feline Theriogenology*. eds: S.D. Johnston, M.V. Root Kustritz, P.N.S. Olson, W.B. Saunders, Philadelphia, 2001, 105-128
6. Jutkowitz LA. Reproductive emergencies. *Veterinary Clinics of North America Small Animal Practice*. 2005; 35:397-420
7. Kumru IH, Seyrek-Intas K, Seyrek-Intas D, Tek HB, Wehrend A. Clinical case: unilateral en-bloc ovariocornuectomy as a treatment for uterine torsion in a bitch. *Revue De Medecine Veterinaire*. 2011; 162(2):76-78
8. Misumi K, Fujiki M, Miura N, Sakamoto H. Uterine horn torsion in two non-gravid bitches. *New England Journal of Medicine*. 2000; 41:468-471
9. Noakes DE. Maternal dystocia: causes and treatment. In: *Arthur's Veterinary Reproduction and Obstetrics*. eds.: Noakes DE, Parkinson TJ and England GCW. W.B. Saunders, Philadelphia, 2001, 229-244.
10. Raut BM, Raghuwanshi DS, Upadhye SV, Gahlod BM, Gawande AP, Sirsat PR *et al*. Uterine Torsion in a Bitch. *Veterinary World*. 2000; 7:212
11. Roberts SJ. *Veterinary Obstetrics and Genital Diseases (Theriogenology)*, 2 nd edn. CBS Publishers and Distributors, 1971, 184-86.
12. Stone EA. Ovary and uterus. In: *Textbook of Small Animal Surgery*, ed. D. Slatter W.B. Saunders, Philadelphia, 2003, 1487-1502
13. Stone EA, Cantrelcl G, Sharpn JH. Ovary and uterus. In: *Textbook of Small Animal Surgery*, 2nd edn., W. B. Saunders, Philadelphia. 1993, 1293-1308.
14. Umamageswari J, Sridevi P, Shafiuzama M, Gokulakrishnan M. Management of Unilateral Uterine Torsion in a Bitch. *Intas Polivet*. 2014; 15(2):259-260