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Avaneesh Kumar Singh

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

Mahesh Kumar

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

Corresponding Author:**Avaneesh Kumar Singh**

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

Fetal mummification in Barbari doe and its management by a surgical approach

Avaneesh Kumar Singh, Mahesh Kumar, Ashutosh Basera, Jitendra Agrawal and Atul Saxena

Abstract

A Barbari doe was presented in the clinic with the history of complete gestation but further parturition was not progressing. Animal was straining and vaginal discharge was also present. Per-vaginal examination revealed incomplete cervical dilation. Fetus was felt on abdominal palpation. Per-vaginal delivery was not possible. Therefore, caesarean operation was performed. In this case, one fully developed dead fetus along with mummified fetus was delivered. Doe recovered uneventfully within seven days of follow-up treatment.

Keywords: Doe, dystocia, mummification, fetus, caesarean

Introduction

Fetal mummification is associated with a persistent corpus luteum is observed mainly in cattle and rarely in goats ^[13] but the corpus luteum of pregnancy usually persists, preventing any outward signs of labour ^[5]. Due to fetal death, mechanism of parturition does not initiate and CL persists. Subsequent absorption of the amniotic and allantoic fluids results in mummification of fetus ^[10]. Mummified fetus may be delivered along with normal fetuses ^[7] but rarely they may abort ^[2]. Primiparous are more susceptible than pluriparous animals ^[1]. The present case report also describes the successful delivery of twin fetuses one fully developed dead fetus and another mummified fetus in Barbari doe delivered by caesarean section.

Case history and Clinical Observations

A primiparous Barbari doe having body weight 50kg in her full term pregnancy was presented to Veterinary Clinical Complex DUVASU, Mathura with the complaint of straining and vaginal discharge since 24 hours but parturition was not progressing. There was no history of rupture of water bag. The doe was anorectic, dull and depressed. Animal was previously examined by a paravet also. Per-vaginal examination revealed only one finger dilation of cervix. Fetus was unable to palpate per-vaginally. Although, abdominal palpation revealed the presence of fetus. USG examination revealed that fetal fluid was inadequate and only hyper echic images of fetal vertebrae were visible. As in this case, per-vaginal delivery was not possible because of incomplete cervical dilation. Along with this fetal fluid was also very less, therefore, it was decided to go for the caesarean section.

Treatment

Firstly doe was restrained in right lateral recumbency and the incision site (ventro lateral oblique incision) was shaved, disinfected and prepared for an aseptic caesarean operation. Incision site was desensitized with a line infiltration of 2% lignocaine hydrochloride. A seven centimeter long incision was made. Subsequently, skin, fascia, parietal peritoneum, muscles and visceral peritoneum were incised. Then an incision was made on the greater curvature of left uterine horn. Thereafter a completely developed dead male fetus was delivered (Figure.1). On further examination of incised uterus, a small sized firm fetus was present in left side of uterine horn. This second one was mummified fetus (Figure.2). The incision on uterus was sutured by lamberts followed by cushing suture pattern using vicryl No.2. Peritoneum and muscle layers were sutured in continuous suture pattern using vicryl No.2. Skin was sutured in horizontal mattress pattern with nylus No.2. In whole procedure all sanitary conditions were

followed. Post operatively, 5% DNS (500ml) with Inj. Multivitamine @ 2ml I/V, Inj. Enrofloxacin @ 5mg/kg body wt. I/M, Inj. Flunixin Meglumine @ 1.1mg/kg body wt. I/M, Inj. Pheniramine Maleate @ 2ml I/M were prescribed. Treatment was continued for next 5 days. Skin suture were removed after complete healing in 10 days.

Discussion

Dystocia remains the major parturient problem with incidence varying from 8 to 50% in both sheep and goats [11]. Fetal mummification and maceration are important gestational disorders of farm animals in which the exact etiology and time of fetal death are unknown [3]. In the present case, one fetus was completely developed and another fetus was mummified and this condition may occur in twins and/or triplets pregnancy when one of the embryos has died [10]. Fetal mummification in doe is associated with four major conditions viz., Toxoplasmosis, Chlamydothyla, border disease and Coxiella burnetti infection [4]. Other potential causes for fetal mummification may include mechanical factors, such as compression and/or torsion of the umbilical cord [8], uterine torsion [9], defective placentation [6], genetic anomalies [12], abnormal hormonal profiles and chromosomal abnormalities [14]. Tutt (1991) reported that the foetal mummification is rare in goat but appears to be more common in twin pregnancy which was in agreement with the present case.



Fig 1: Completely developed dead male fetus of Barbari doe



Fig 2: Mummified fetus of Barbari doe

Conclusion

The present case reports the successful surgical managements of fetal mummification of Barbari Doe, in which one was completely developed dead fetus and another was mummified fetus.

References

1. Bisla A, Kumar B, Kurhe R, Behera H, Ngou AA, Shah I *et al.* Dystocia due to fetal mummification in a non-descript goat: A case study. *Journal of Experimental Biology and Agricultural Sciences.* 2018; 6(3):613-616.
2. Dadarwal D, Duggal GP, Gupta AK, Purohit GN, Pareek PK. A rare case of abortion of mummified fetus in a goat. *The Veterinary Practitioner.* 2000; 1:139-140.
3. Dutt R, Dalal J, Singh G, Gahalot SC. Management of fetal mummification/maceration through left flank cesarean section in cows – study of four cases. *Advances in Animal and Veterinary Sciences.* 2018; 6:12-16.
4. Edmondson MA, Roberts JF, Baird AN, Bychawski S, Pugh DG. Theriogenology of sheep and goats. In: Pugh DG, Baird AN, editors. *Sheep and Goat Medicine, End 2, Maryland Heights (MO): Elsevier Saunders* 2012, 150-230.
5. Gunasekar M, Gopikrishnan D, Sarath T, Umamageswari J, Arunmozhi N, Sureshkumar R *et al.* Dystocia due to papyraceous foetal mummy co-twin with a live kid in a non-descript doe. *Haryana Veterinarian.* 2018; 57(2):251-252.
6. Irons PC. Hysterotomy by a colpotomy approach for treatment of fetal mummification in a cow. *Journal of South African Veterinary Association.* 1999; 70:127-129.
7. Kirkbride CA. Diagnosis in 1784 ovine abortions and still births. *Journal of Veterinary Diagnostic Investigation.* 1993; 5:398-402.
8. Mahajan M, Sharma A. Haematic mummification due to umbilical cord torsion in a cow: a case report. *Indian Veterinary Journal.* 2002; 79:1186-1187.
9. Moore AA, Richardson GF. Uterine torsion and fetal mummification in a cow. *The Canadian Veterinary Journal.* 1995; 36:705-706.
10. Noakes DE, Parkinson TJ, England GW. *Veterinary Reproduction and Obstetrics.* Edn 9, Elsevier Ltd. London, 2009, 139-368.
11. Purohit GN. Proceedings National Seminar on Innovations and Recent Advances in Small Ruminants Production. Avikanagar, Jaipur, India. 2006, 227-231.
12. Roberts SJ. The enigma of fetal mummification. *Journal of American Veterinary Medical Association.* 1962; 140(7):691-698.
13. Roberts SJ. *Veterinary obstetrics and genital diseases.* Edn 2, CBS Publishers and Distributors New Delhi, 1971, 170.
14. Roberts SJ. *Veterinary obstetrics and genital diseases.* Edn 2, CBS Publishers and Distributors, 1986.
15. Tutt CLC. Post-partum mummification of a co-twin fetus in a Cameroon Dwarf doe. *Veterinary Record.* 1991; 40:229-231.