



A Rare Case of Fetal Mummification in Labrador Bitch

Ankita Sharma

Department of Veterinary Gynaecology and Obstetrics, Khalsa College of Veterinary and Animal Sciences, Amritsar, INDIA

*Corresponding Author: as605128@gmail.com

How to cite this paper

Sharma, A. (2023). Static Magnetic Field Therapy-A Review. *International Journal of Livestock Research*, 13 (7), 1-12.

Received : Jul 20, 2023
Accepted : Aug 19, 2023
Published : Sept 30, 2023

Copyright © Sharma, 2023

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
<http://creativecommons.org/licenses/by/4.0/>



Abstract

Fetal mummification is defined as the resorption of fetal fluid within the uterus as the cervix remains closed due to the presence of the corpus luteum on the ovary. In canines' papyreous type of mummification occurs. Fetal mummification in canines is unusual. The present case was reported in a Labrador female dog where two fetuses were removed out of which one was mummified and the other was normally grown but dead. Both the fetuses were removed by caesarean section. The bitch was recovered following post-operative management.

Keywords: Bitch, Fetal Mummification, Labrador.

Introduction

Fetal Mummification is not so common condition in most of the domestic animals. It happens when the fetus dies and the fetal fluid is absorbed, leading to the contractions of the uterus and the fetal membranes adhering to the fetus (Kumar *et al.*, 2010; Noakes *et al.*, 2019; Sharma *et al.*, 2022). Fetal death after the first trimester of pregnancy and fully mature skin that is resistant to autolysis are predisposing factors for fetal mummification (Linde-Forsberg, 2010; Bindari and Shrestha, 2012; Ahuja *et al.*, 2017). Death of the fetus along with the presence of corpus luteum on the ovary can lead to resorption of fetal and placental fluids causing dehydration of the fetus and if the fetus and fetal contents are not expelled out from the uterus then it results in fetal mummification (Noakes *et al.*, 2019). In polytocous species like pigs fetal mummification is commonly seen (Kennedy and Miller, 2007) but it is very infrequent in other polytocous species like dogs (Roberts, 2004; Bindari and Shrestha, 2012; Reis *et al.*, 2017). If mummification occurs, it does not interfere with the survival of other viable fetuses; instead, the mummified fetus may be delivered with the normal fetus at full term (Arthur *et al.*, 2001).

Case History

A two-year-old Labrador female dog was presented in the Veterinary clinical complex of Khalsa College of Veterinary and Animal Sciences, Amritsar with a history of mating 70 days back. As per the owner, bitch was anorectic but no signs of impending whelping were visible. Rectal temperature was 103°F and the blood picture revealed marked leukocytosis with neutrophilia suggesting an infection. Abdominal radiographs revealed the presence of bony structures in the uterus. The ultrasonographic examination was carried out to check the viability of the fetus but the fetus showed no heartbeat. After stabilizing the bitch was put on cesarean section.

Treatment

After giving pre-anesthetic Atropine @ 0.04 mg/kg body weight S/C bitch was sedated using Xylazine @ 2 mg/kg body weight and Ketamine @ 10 mg/kg body weight. The uterus was approached with a mid-ventral incision just behind the umbilicus. After incising the muscle layers uterus was visible, one normally developed dead and one mummified fetus was removed gently by milking the uterus with a gloved hand with due care to minimize the spilling of uterine contents. The placental remnants were also removed.

After the removal of fetuses, the uterus and muscles were sutured using the Cushing pattern and Lockstitch suture pattern respectively with 2-0 Polyglactin 910 (Vicryl®; Ethicon). The skin was sutured with silk suture using a simple interrupted pattern.



Fig. 1: Mummified fetus with normal dead fetus

In perioperative time the female dog was given isotonic fluid normal saline (NS®; Beybee Pharmacy) @ 40 ml/kg body weight. Antibiotic therapy was done with ceftriaxone and tazobactam (Intacef-Tazo®; Intas Pharmaceuticals) @ 15 mg/kg body weight at a gap of 12 hours for 5 days post-operative and injection meloxicam @ 0.2 mg/kg body weight once in a day for 3 days post-surgery. Antiseptic dressing of the surgical site was done with povidone-iodine

(Betadine®; Win-Medicare Pvt. Ltd.) solution daily till the removal of skin sutures i.e., 14 days post-surgery.

Results and Discussion

Death of fetus can occur at any stage of pregnancy and can lead to resorption, abortion or retention of fetus which can become either mummified or macerated if bacterial contamination occurs (Mudasiret *et al.*, 2012). It is believed that fetuses fail to produce enough amount of ACTH and cortisol which were the first signals given to mothers for initiating the process of parturition ((Johnston *et al.*, 2001; Linde-Forsberg, 2010). Reports of Walett and Lindane (1994) recommended uterine inertia as the foremost cause of dystocia and retention of mummified fetuses in bitches.

Contribution by Authors

Equal contribution. The final manuscript was read by all others and consented to publication.

Conflict of Interests

There is no conflict of interest.

Publisher Disclaimer

IJLR remains neutral concerning jurisdictional claims in published institutional affiliation.

References

1. Ahuja, A.K., Singh, A.K., Kumar N., and Muddrangiah. (2017). Mummified fetus and Two live fetuses in Labrador Bitch. A Special Case. *International Journal of Current Microbiology and Applied Sciences*, 6(7), 1642-1644.
2. Arthur, G.H., Noakes, D.E., Pearson, H. and Parkinesen, T.J. (2001). *Veterinary Reproduction and Obstetrics*. W.B Saunders Company Limited. London. P137.
3. Bindari, Y.R. and Shrestha, S. (2012). Canine fetal mummification. *International Journal of Veterinary Science*, 1(1), 10-12.
4. Johnston, S.D., Kustriz, M.V.R. and Olson, P.N.S. (2001). Disorders of canine uterus and uterine tubes (oviducts). In: *Canine and feline theriogenology*; W.B. Saunders, USA, pp. 206-224.
5. Kennedy, P.C. and Miller, R.B. (2007). The female genital system. In Kennedy KVF, Palmer PC (Editors). *Pathology of Domestic Animals*. San Diego: Academic Press 4: 349-454.
6. Kumar.P., Vasishta, N., Sharma, A., Singh, M.M. and Barman, P. (2010). Treatment of bovine foetal mummification with Diethyl Stilbesterol (DES). *Indian Journal of Field Veterinarians*, 6(2), 39-40.
7. Linde-Forsberg, C. (2010). Abnormalities in pregnancy, parturition, and the periparturient period, in: Ettinger SJ and Feldmen J (editors), *Textbook of Veterinary Internal Medicine*. Elsevier Saunders, St Louis, Missouri, 7: 1890- 1901.
8. Mudasir, Q., Shah, K.A., Nyrah, Q. and Andrabi, A. 2012. Fetal Mummification in Bitch. *Vet. Scan*, 7(1): 97-99.
9. Noakes, D.E., Parkinson, T.J. and England, G.C.W. (2019). Vaginal wall and cervix through the vulva. In: *Veterinary reproduction and obstetrics*. 10th Edn Elsevier Company Ltd. London pp: 294.
10. Reis, M.O., Bobany, D.M., Muniz, I.M., Silva, M.E.M. and Luz, M.S. (2017). Fetal hematic mummification in a bitch: case report. *IOSR Journal of Agriculture and Veterinary Sciences*, 10(5), 22-24.
11. Roberts, S.J. (2004). *Vet. Obstetric and Genital Dis.*, 2nd edition. CBS Publishers and Distributors, India
12. Sharma, P., Kumar, P., Sharma, A., Negi, vijender, Kumar, H., Sood, P., & Sharma, A. (2022). A Rare Case of Haematic Fetal Mummification in An American Bully Dog. *International Journal of Livestock Research*, 12(12), 23-26.
13. Walett, D. and Lindane, F. (1994). Dystocia in bitch- a retrospective study of 182 cases. *Journal of Small Animal Practice*, 35(8): 402-407.
