Short communication

DOI: 10.48165/ijar.2024.45.01.18

The Indian Journal of Animal Reproduction

The official journal of the Indian Society
for Study of Animal Reproduction

Year 2024, Volume-45, Issue-1 (June)

ACS Publisher
www.acspublisher.com

ISSN 0970-2997 ***(Print)***

ISSN 2583-7583 ***(Online)***

Co-twinning With Fetal Mummification in a Non-Descript Doe

Neha Chaudhary, Arun Kumar, Garima Singh, Mohit Kumar, Vikas Sachan*

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

ABSTRACT

The cause of dystocia in the present case was a dead fetus in dorso-transverse position. The dam was managed with antibiosis, intra-uterine therapy and uterine ecbolic drug successfully.

Key words: Doe, Dystocia, Dorso-transverse presentation, Mummification, Twin

How to cite: Chaudhary, N., Kumar, A., Singh, G., Kumar, M., & Sachan, V. (2024). Co-twinning With Fetal Mummification in a Non-Descript Doe.
The Indian Journal of Animal Reproduction, 45(1), 73–75. 10.48165/ijar.2024.45.01.18

INTRODUCTION

In sheep and goats, the incidences of dystocia are recorded between 8-50% and appear to be more in dams having single male fetus (Purohit, 2006). Primiparous are more susceptible than pluriparous animals to dystocia. Abnormal disposition of the fetus or some fetal pathology may lead to dystocia. Fetal mummification is a rare obstetrical disorder in the doe which occurs as a result of fetal death in the middle to last trimester of the gestation i.e. often after ossification whereby the resorption of the fetus cannot take place (Khasatiya *et al.*, 2011; Chaudhari and Dabas, 2018). Goats and sheep seem to present a higher prevalence of fetal mummification than cows. The present case report about dystocia in doe is due to presentational defect of fetus co-twin with a mummified fetus.

CASE HISTORY AND OBSERVATIONS

A non-descript doe in her 3rd parity with a gestation of approximately 4 months was presented at TVCC, DUVASU, Mathura. In her first parity, only one kid was born and in the second parity two kids were born out of them one was emphysematous. There was a history of pain for the last 5 hours, frequent defecation and urination, with blood-tinged vaginal fluid while straining.

TREATMENT AND DISCUSSION

On per-vaginal examination, a fetus was palpated easily in the uterus as cervix was dilated properly. The fetus was

*Corresponding author.
E-mail address: vikas.vet23@gmail.com (Vikas Sachan)
Received 23-05-2023; Accepted 17-03-2024;

dead and found to be in dorso-transverse presentation with cephalo-iliac left position. To reduce the size of the fetus, abdominal evisceration was performed and a dead fetus was tracted out per-vaginally with proper lubrication. This fetus was normal in shape and size. On further exploration, one more dead fetus was palpated in the uterus. It was also taken out with mild traction. This second fetus was smaller in size and mummified (Fig.1). Placenta was expelled on its own. The doe was administered with antibiotic (injection enrofloxacin @ 0.03-0.1 mg/kg IM), uterine ecbolic (injection oxytocin @ 3mL IM) and intrauterine bolus (tetracycline @ 1gm). The doe was in normal physiological condition after dystocia management.

Fig. 1: Normal dead fetus co-twin with mummified fetus (CRL 22.5 cm)

Fetal mummification is a rare obstetrical disorder in various species that leads to fetal losses and tends to economic losses. Fetal mummification is characterized by the absorption of fetal and placental fluids along with placental involution. Unlike cattle and mare, mummified fetus in small ruminants are spontaneously aborted (Lefebvre, 2015). As the corpus luteum is maintained in mummification, the cervix is generally closed which prevents microbial invasion from the vagina or vestibule to the uterus (Lefebvre, 2015). But sometimes Toxoplasmosis, Chlamydophila, Border disease and Coxiella infection may be associated with mummification in small ruminants. The common causes of mummification include genetic or chromosomal abnormalities, abnormal hormonal concentrations, uterine torsion, defective placentation, compression or torsion of the umbilical cord (Mahajan and Sharma, 2002), infectious agents and various drugs. Dystocia due to single mummified fetus (Bisla *et al*., 2018) in goats is less common in comparison to twin pregnancies. Fetal mummification co-twin with one or more normal viable fetuses is uncommon in sheep and goats. A mummified fetus co-twin with a dead fetus (Bawaskar *et al*., 2018) or a live fetus (Hemalatha *et al*., 2018) has been reported. In the present case study, one mummified fetus and another completely developed dead fetus were delivered. A similar type of case was also reported by Ogbu *et al*. (2011). In cases of the closed cervix, the treatment should be initiated with a luteolytic agent like Cloprostenol and a cervical dilator like Valethamate bromide (Mane *et al*., 2010). In the present case, it was not needed as the cervix was properly open. Postural defects are common cause of dystocia in small ruminants, but in the present case, the fetus was lodged in the birth canal due to dorso-transverse presentation. Abdominal evisceration was performed to tract the dead fetus as presentational defect could not be corrected in the present case. The gestation was of about 120 days in present case and also the crown rump length (CRL) of mummified fetus was found 22.5 cm. Fetal age was reported to be more than 89 days when the crown-rump length is exceeding 13.65 cm (Sachan *et al*., 2017; Amer, 2008).

CONCLUSION

In this case study, the birth of a dead fetus co-twin with a mummified fetus is reported. The cause of dystocia was the presentation defect in the doe which was resolved by the evisceration technique.

CONFLICT OF INTEREST

None

REFERENCES

Amer, H.A. (2008). Determination of first pregnancy and foetal measurements in Egyptian Baladi goats (Capra hircus). *Vet. Ital.*, **44**(2), 429-437

Bawaskar, M.S., Sahatpure, S.K., Sheetal, S.K., Takle, V.U., and Bhardwaj, A. (2018). Mummified schistosomus reflexus co-twinned with normal goat foetus–a rare case report. *Int. J. Environ. Sc. Tech.,* **7**(4), 1479-1482

Bisla, A., Kumar, B., Kurhe, R., Behera, H., Ngou, A.A., Shah, I., and Khan, J.A. (2018). Dystocia due to fetal mummification in a non-descript goat: a case study. *J. Exp. Biol. Agric.,* **6**(3), 613-616

Chaudhari, C. & Dabas, Vijander S. (2018). Fetal Mummification and Its Management in a Jersey-Cross Cow. *Livest. Res. Int.,* **6**(1). 17-19.

Hemalatha, H., Murugavel, K., Kantharaj, S., Antoine, D., and Raju, M. S. (2018). Mummified fetus co-twin to a live kid in a goat. *Indian J. Anim. Reprod.,* **39**(2), 70-71

Khasatiya, C.T., Gangurde, H.B., and Chauhan, G.G. (2011). Vaginal delivery of mummified fetus in a crossbred cow. *Indian J. Anim. Reprod.,* **32**(2), 79-80

Kumar, S., Kumar, S., Sharma, U., and Pandey, A.K. (2020). Therapeutic management of a fetal mummification in non-descript pluriparous goat. *Int. J. Life Sci. Appl. Sci*., **2**(1), 8-8

Lefebvre, R.C. (2015). Fetal mummification in the major domestic species: current perspectives on causes and management. *Vet. Med. Res.,* **6:** 33-244

Mahajan, M., and Sharma, A. (2002). Haematic mummification due to umbilical cord torsion in a cow-a case report. *Indian Vet. J*., **79:** 1186-1187.

Mane, P.M., Chaudhary, R.J., Lokhande, A.T., and Sakhare, P.S. (2010). Foetal mummification in goat. *Asian J. Anim. Sci.,* **5**(1), 124-125

Ogbu, E.O., Omamegbe, J.O., Ukaha, R., Njoku, U.N., Nnakwe, K., and Nwoha, R.I.O. (2011). Dystocia and foetal mummification in a West African dwarf doe (A case report). *Nig. Vet. J.,* **32**(4)

Purohit, G.N. (2006). Dystocia in the sheep and goat–a review. *Ind. J. Small Rum.,* **12**(1), 1-12

Sachan, V., Kumar, B., and Saxena, A. (2017). Foetal Maceration in a Jamunapari Cross Bred Doe. *Indian Vet. J.,* **94**(06), 49-50