



Dytocia Due to Monocephalus Tetrabrachius Tetrapus Fetal Monster in a Ewe

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ABSTRACT

A dystociac ewe presented with the history of continuous straining, off feed and vaginal discharge had a fetal monster-monocephalus tetrabrachius tetrapus, which was managed by cesarean operation.

Key words: Dystocia, Ewe, Monster, Tetrabrachius tetrapus.

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INTRODUCTION

Monsters fetii are common cause of dystocia in livestock (Shukla *et al.*, 2007) but are rarely presented in sheep (Ali, 2011). Monsters have altered appearance (Purohit, 2006) and usually have developmental abnormalities leading to great distortion (Vegad, 2007). They are usually associated either with infectious diseases or congenital defects (Arthur *et al.*, 2001) and may or may not interfere with birth (Gupta *et al.*, 2011). Abnormal duplication of germinal area in fetus will give rise to congenital fetal abnormalities with partial duplication of body structure. Also, dystocia due to fetal monsters are commonly relieved by caesarean section (Kumar *et al.*, 2013). The present report records a dystocia due to a monocephalus tetrabrachius tetrapus monster in ewe.

CASE HISTORY AND OBSERVATIONS

A two years old ewe in its first parity was presented to referral veterinary hospital with the history of straining. Prevaginal examination revealed two hind limbs in the birth canal. Traction at field level was applied but in vain. On per vaginam examination, hand could not be passed inside the birth canal, so it was decided to go for fetotomy using saw wire. After lubrication of the birth canal and removal of hindlimbs (Figure 1A), more set of limbs could be traced inside the cranial vagina. Clinically, the mucus membrane was pale, with increased heart and respiratory rates. It was diagnosed as conjoined fetal monster and cesarean operation was performed for the delivery of the

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same. After removal of complete fetus, the monster had single head, dysmorphism in main body and eight limbs.

TREATMENT AND DISCUSSION

For caesarean section, left lower flank approach under local anaesthesia (2% Lignocaine) was used and fluid line using, Normal Saline Solution (NSS) was maintained during the whole operation. An oblique incision was made downward and forward and uterus was exteriorized. A nick incision followed by extension with scissors was given at greater curvature of uterus. A monster fetus was delivered having monocephaly (two eyes and one nose) with four fore and hind limbs each including those removed by fetotomy. The uterus was closed with catgut No. 1 in a double layer inversion suture pattern. Muscles and skin were sutured in routine manner with catgut and braded silk, respectively. Fetal body was dysmorphic without differentiation of thorax, abdomen and pelvis (Figure 1B). After operation animal was stable. For post operative care, antibiotic ceftriaxone @1.0 gm intramuscular for four days and meloxicam @ 0.5mg/kg body weight intramuscularly for three days was suggested. Removal of skin sutures was suggested after one week. On follow up animal was stable with normal feed and water intake. For such type of monster cases, fetotomy should be discouraged and caesarean should be indicated at first instance to save time

and life of the dam. Dystocia encountered by fetal monsters have been reported to be more successfully relieved by caesarean section (Kumar et al., 2013). Fetal structural and functional abnormalities interfere with development of tissues, organs or entire body and can lead to fusion of the twins (Ray and Niswander, 2012)

Monocephalic conjoined twins are presented with duplication process cranially proceeding up to the head region (Aine, 2009). Conjoined twins may be caused by many factors and may be influenced by genetic and environmental conditions. The present case reports a monster of twin foetuses' with single head and duplicated limbs without differentiation in the body. Such type of monstrosities have been reported in the literature, arising from congenital duplication of germinal layer at embryonic stages (Kumar and Reddy, 2008) and often result in formation of monozygotic foetus with partial duplication of body structures. Moreover, malformations of this kind are less common in sheep, compared to cattle and buffaloes (Bugalia et al., 1990).

CONCLUSION

A conjoined fetal monster with terabrachius tetrapus and monocephaly was reported to be delivered by caesarean section in sheep.



A: fetotomy of exposed part



B: fetus delivered after cesarean section

Fig. 1: Monocephalus tetrabrachius tetrapus monster fetus delivered by cesarean operation

CONFLICT OF INTEREST

None

REFERENCES

- Ali, A. M. H. (2011). Causes and management of dystocia in small ruminants in Saudi Arabia. *J. Agri. Vet. Sci.* **4**(2): 95-108.
- Arthur, G. H., Noakes, D. E., Pearson, H. and Parkinson, T. J. (2001). *Veterinary Reproduction and Obstetrics*. Edn 8, Vol. I, W.B. Saunders Co. Ltd. London, England.; 544- 545.
- Bugalia, N. S., Chander, S., Chandolia, R. K., Verma, S. K., Singh, P. and Sharma, D. K. (1990). Monstrosities in buffaloes and cows. *Indian Vet. J.*, **67**: 1042-1043.
- Gupta, V. K., Sharma, P. and Shukla, S. N. (2011). Dicephalus monster in a Murrah buffalo. *Indian Vet. J.*, **88**(12):72-73.
- Kumar, V., Talekar, S. H., Ahmad, R.A., Mathew, D. D., Zama, M. M. S. (2013). Delayed cases of dystocia in small ruminants - etiology and surgical management. *Indian J. Vet. Sci.*, **1**: 47-54.
- Ray, H. J. and Niswander, L. (2012). Mechanisms of tissue fusion during development. *Development*, **139**(10): 1701-1711.
- Shukla, S.P., Garg, U. K., Pandey, A., Dwivedi, D. P. and Nema, S. P. (2007). Conjoined twin monster in a buffalo. *Indian Vet. J.*, **84**:630-631.
- Sievers, A. M. (2009). Monocephalus dipygus parapagus: a suspected case of complete caudal duplication in a British Blue kitten. *J. Feline Med. Surg.*, **11**: 330-331.
- Vegad, J. L. (2001). *Textbook of Veterinary General Pathology*. Edn. 2, Vol. I, International Book Distribution Company, Lucknow, UP, India, 544.