MANAGEMENT OF DYSTOCIA DUE TO CONJOINED TWINS IN GRADED MURRAH BUFFALOES: A REPORT OF TWO CASES

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ABSTRACT

In the present study, the two uncommon cases of foetal anomalies in buffaloes; one with complete duplication and other with only anterior duplication were reported.

Key words: Dystocia, Conjoined twins, caesarean section, buffaloes

INTRODUCTION

Fetal monstrosities are rare in nature and are gaining research interest due to their possible association with increasing pollution apart from genetics, viral, chemical and nutritional deficiency (Dindsa *et al*., 2019). They have been well documented in cattle but reports in buffalo are rare (Gangwar *et al*., 2015). The present study reports a rare case of iniodymic dicephalic tetra opthalmus tetra otus conjoined twin and other unusual case of sternopagus conjoined twin.

CASE HISTORY AND TREATMENT

Case1: A five-year-old graded Murrah she buffalo in its second parity was presented to Teaching Veterinary Clinical Complex (TVCC), Uchani, Karnal with the history of ruptured water bags and constant straining for the past 16 hours but was unable to deliver fetus. On presentation, the buffalo was exhausted, dehydrated with rectal temperature of 100 °F. Vaginal examination revealed a fetus in posterior presentation, dorso-sacral position. However, four hindlimbs could be palpated and hence the case was tentaviely diagnosed as dystocia due to twin fetuses. Buffalo was given supportive therapy compromising of antibiotics, NSAID's, fluid therapy, B-complex injections and rumenotorics. Thereafter, caesarean section was performed by mid line approach following a standard procedure and dead conjoined female twins (Fig.1) were relieved. The anomaly was classified as sternopagus conjoined twins (physically connected at sternum) asper the descriptions of (Dhindsa *et al*., 2019). Post mortem examination of the twin fetuses revealed that heart, lungs, kidneys, spleen and genital organs were duplicated, while liver with gall bladder was absent in one counterpart of the twins.

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Case 2: A full-term pleuriparous buffalo in its third parity was presented to TVCC, Uchani with complaint of dystocia. The buffalo was bright, active and had a history of ruptured water bags 3 hours before. On clinical examination, all physiological parameters were found within normal range. A live fetus with two fetal heads joined at the level of an anomalous medial exoccipital bone (single neck, four ears, four eyes) could be detected on vaginal examination. The anomaly was termed as iniodymic dicephalic tetra opthalmus, tetra otus conjoined twin (Pandey *et al*., 2017).

The fetus was pulled alive by mild traction on both forelimbs supported by two eye hooks which were fixed in lateral most eye socket of both heads, under epidural anesthesia (2% lignocaine hydrochloride). Supportive therapy and ecbolics were suggested for three days. Both the dams recovered uneventfully after delivery of fetuses.

DISCUSSION

Conjoined twins are monozygotic, resulting from incomplete division of fertilized embryo at very early stage of embryogenesis (Kumar *et al.*, 2018). These congenital anomalies may cause either premature death of conceptus, mummification, stillbirth, abortion or dystocia due to severe structural abnormalities at term leading to economic loss of the farmers (Noakes *et al*., 2009). Sternopagus conjoined twin was managed successfully by caesarean section in accordance with Singh *et al.* (2018) while the iniodymic dicephalus conjoined twin was delivered live per vaginum by mutation and forced traction of the fetus in contrast to previous reports (Bhoi, 2009) which recommend either cesarean section or fetotomy. Dead iniodymic dicephalic fetal monster had been recorded in cattle (Ganesan *et al*., 2019) and buffalo (Pandey *et al*., 2017) but reporting of live fetal monster is very rare. The present report justifies the timely intervention with surgical and non-surgical techniques depending upon the severity of duplication of the conjoined twin and body condition of the dam.

REFERENCES

Bhoi, D.B. (2009). Conjoined sternopagus twin monster: A cause of dystocia in Mehsani buffalo. *Vet. World,* **2** (8): 327.

Dhindsa, S.S., Baruti, M., Singh, N. and Singh, P. (2019). Non-surgical management of dystocia due to sternopagus twin monster in buffalo (*Bubalus bubalis*). *J. Entomol. Zool. Stud.*, **7**(1): 01-02.

Ganesan, A., Murugan, M., Lakhmikantan, U., Gupta, C., Vishnugurubaran, D., Sathiamoorthy, T. and Ramprabhu, R. (2019). Dicephalic iniodymus monauchenos monster in a primipara cross bred Jersey cow. *Hr. Vet*. **58**: 123-124.

Gangwar, C., Akhil, C., Singh, S.P. and Saxena, A. (2015). Dystocia Due to an Anterior Duplication Twin Monster in Buffalo. *Vet. Clin. Sci.,* **3** (3): 15-16.

Pravesh, K., Sadiya, B., Madhumeet, S., Akshay, S. (2018). Conjoined Sternophagus Twin Monster: A Cause of Dystocia in Murrah Graded Buffalo. *Dairy and Vet Sci J*., **8** (1): 555727.

Noakes, D.E., Parkinson, T.J. and England, G.C.W. (2009). Veterinary reproduction and obstetrics 9th ed. Saunders Elsevier. 143p.

Pandey, A.K., Kumar, P., Kumari, S., Singh, G., Kumar, S, Yadav, V., Kumar, L., Pareek, M. and Sharma, S. (2017). Dystocia due to iniodymous conjoined twin monster fetus in a buffalo and its removal by fetotomy. *Buffalo Bull.,* **36** (3): 565-567.Prasad, V.D., Kumar, P.R., Krishna, N.V.V.H and Sreenu, M. (2016). Dystocia due to conjoined twins: A report of two cases. *Inter. J. Vet. Sci. Ani. Husb*., **1** (3): 28-29.

Singh, N., Dhindsa, S.S., Sethi, G. and Kaur, A. (2018). Caesarean section in a buffalo to deliver dicephalus tetrabrachius tetrapus sternopagus dicaudatus conjoined twins. *J. Entomol. Zool. Stud*., **6** (6): 1285-1287.

Fig.1: Sternopagus conjoined twin