

VAGINAL RUPTURE AND PROTRUSION OF UROGENITAL ORGANS IN A POST PARTURIENT BUFFALO

Vidya Sagar Pentyala^{1,*} and V. Karuna Sri²

ABSTRACT

A case of protrusion of urinary bladder and partially involuted uterus through ruptured vagina in a post parturient buffalo and its successful correction is described.

Keywords: buffalo, vaginal rupture, protrusion, urogenital organs

INTRODUCTION

Prolapse of the urinary bladder through ruptured vaginal floor occurs frequently during the act of parturition. It is more frequently seen in sows and to some extent in cows and mares. In all species rupture of the vagina generally occurs near the vulvo vaginal border, often in conjunction with uterine torsion (Roberts, 1971), and associated with 2.2% of dystocias (Sloss, 1974) and with prolapse of vagina (O'Connor, 1980). Reports of occurrence of this condition in buffaloes are scanty. The present paper puts on record a case of protruded partially involuted uterus and urinary bladder through a rupture in the vaginal floor in a graded Murrah buffalo.

CASE HISTORY AND CLINICAL OBSERVATIONS

A 5 year old, Graded Murrah buffalo was presented to the Veterinary Poly Clinic, Gudivada, A.P, with a history of prolapsed genitalia after 24 h of parturition. On physical examination the animal was found recumbent and straining severely. Vaginal exploration revealed protrusion of distended urinary bladder and partially involuted uterus through the rent in the floor of vagina along with prolapsed cervix (Figure 1). The animal had the history of recurrent prolapse during gestation and continued to occur even after parturition.

TREATMENT AND DISCUSSION

The animal was treated, to prevent the shock immediately by administering the IV fluids i.e. 5 Lt of DNS and Dexamethsone 20 mg TD and IM administration of Triflu promazine hydrochloride (Inj. Siquil) 0.05 mg/kg bwt. To control straining, caudal epidural anaesthesia was achieved by injecting 10 ml of 2% Lignocaine hydrochloride.

The prolapsed mass was thoroughly washed with potassium permanganate lotion. The urine was evacuated by needle puncture for easy

¹Veterinary Poly Clinic, Gudivada, Department of Teaching Veterinary Clinical Complex,

²N.T.R. College of Veterinary Science, Gannavaram, Andhra Pradesh, India

*E-mail: doctorpentyala@gmail.com

repositioning and the bladder, uterus were pushed into the abdominal cavity. Antiseptics were instilled into the peritoneal cavity. Rent was closed blindly to some extent with simple continuous suturing using chromic catgut No.2. Prolapsed cervix and vagina were repositioned by gentle manoeuvre and rope was applied. Per rectal examination confirmed the repositioning of the uterus and bladder. The animal started normal micturition on next day.

Post operatively the animal was administered with Inj. Streptopenicillin 5 g/day, Inj. Melonex 0.5 mg/ kg bwt IM and Metronidazole 300 ml/day IV for a period of 7 days. The animal was recovered uneventfully and discharged on 7th day.

In the present case, excessive foetal movements and improper handling of recurrent prolapsed mass during gestation could predispose spontaneous vaginal rupture at parturition as suggested by Roberts, 1971 and Kasrija *et al.*, 2009. The resultant inflammatory reaction due to recurrent prolapse during gestation and its manipulation might have weakened the vaginal wall, rendering it more prone to rupture. Prognosis

was guarded in cases which timely surgical correction under strict asepsis compared with delayed cases. Peritonitis, bladder necrosis and adhesions affecting the urinary outflow are possible complications usually observed with the prolapsed bladder through vaginal rupture. Very few reports of bladder prolapse through ruptured vaginal floor in buffaloes are available.

REFERENCES

- Kasrija, R. 2009. A rare case of complete postpartum cervico-uterine eversion through vaginal fistula in a buffalo. *Indian J. Anim. Reprod.*, **30**(2): 77-78.
- O' Connor, J.J. 1980. *Dollar's Veterinary Surgery, General, Operative and Regional* Baillière. Tindall.
- Roberts, S.J. 1971. *Veterinary Obstrectics and Genital Diseases*, 2nd ed. CBS Publishers and Distributors Pvt. Ltd. New Delhi, India.
- Sloss, V. 1974. A Clinical study of dystocia in cattle. *Aust. Vet. J.*, **50**: 290-293.



Figure 1. photograph showing protrusion of uterus and urinary bladder through ruptured vagina.

EXTRACTION OF DICEPHALUS-DITHORACO-DISTERNOPAGUS- TETRABRACHIUS- TETRAPUS-DICAUDATUS MONSTER IN BUFFALO-FETOTOMY: A CASE REPORT

**Akhil Patel*, Atul Saxena, Sanjay Singh Yadav, Dushyant Yadav,
Jitendra Kumar Agrawal and Anuj Kumar**

ABSTRACT

A Successful delievery of dicephalus-dithoraco-disternopagus- tetrabrachius-tetrapus-dicaudatus monster through fetotomy was done.

Keywords: conjoint monster, congenital defect, dystocia, fetotomy, Murrah buffalo

INTRODUCTION

Dystocia due to conjoined twin monster is uncommon (Dhami *et al.*, 2000; Hannappagol *et al.*, 2005). These twins have been reported to result from a single ovum and are monozygotic (Bowen, 1966). Its occurrence is very low, one in 10,000 bovines at birth (Hancock, 1954; Arthur, 1956). A monster is a malformed fetus. Monstrosity is a disturbance of the development that involves sexual organs and causes great distortion of the individual (Vegad, 2007). Monstrosities are associated with either infectious disease or congenital defects (Arthur *et al.*, 2001) and may or may not interfere with birth. Abnormal duplication of the germinal area in the embryo will give rise to congenital fetal abnormalities with partial duplication of body structures. Duplication of the cranial portion of the fetus is more common than that of the caudal

portion (Robert, 2004). Fetotomy offers a good alternative to the caesarean for relieving a fetal monster causing dystocia (Vermunt, 2009). In the present study, a fetal monster was relieved by fetotomy.

CASE HISTORY AND CLINICAL EXAMINATION

A pluriparus she Murrah buffalo was presented to Teaching Veterinary Clinical Complex, Mathura University, with history of complete gestation, in second stage of parturition with two forelimbs, head and neck hanging from vulva. Buffalo was straining since last 16 hours but without any further progress. Veterinary aid provided locally did not facilitate vaginal delivery. Clinical examination revealed an increase in respiration and pulse rate with normal rectal temperature. Obstetrical examination revealed fully dilated cervix. Further examination confirmed presence of six more limbs and one extra head, neck and thorax. Fetus was in anterior longitudinal presentation and dorso-sacral position. On the basis of obstetrical examination it was diagnosed as a case of fetal monster.

Department of Obstetrics and Gynaecology, College of Veterinary Science and Animal Husbandry, U.P.Pt. Deen Dayal Upadhyay Pasu Chikitsa Vigyan Vishwavidyalaya evam Go Anusandhan Sansthan (DUVASU), Mathura, India, *E-mail: dr.akhil.patel87@gmail.com

TREATMENTS AND DISCUSSION

The animal was restrained in lateral recumbency following low epidural anaesthesia with 2% of lignocaine hydrochloride. Both fore limbs and trunk of fetus engaged in birth canal was amputated by Thygeson's fetotome at the level of maximum reach (i.e. lumber region) and taken out. Other head and forelimbs which were deviated downwardly and flexed were extended using obstetrical manouvours and applying long

handle eye hook. Force traction was applied on both extended fore limbs by obstetrical chain and on head by two long handle eye hook after proper lubrication and guarding the amputated portion leads to delivery of dead fetus.

The monster was having eight limbs (four each fore limbs & hind limbs), two thorax, two head and neck, common pelvis, two tails and two vaginal openings. It was two complete fetus joined from the pelvis. Such monster was named as dicephalus-dithoraco-disternopagus-tetrabrachius-



Figure 1. Amputated part of the fetal monster showing the site of amputation.



Figure 2. Reconstruction of the fetal monster showing detail of the appendages.

tetrapus-dicaudatus monster. (Figure 1 and Figure 2).

Dicephalus monsters have been reported in buffaloes (Chauhan and Verma, 1995; Raju *et al.*, 2000; Bugalia *et al.*, 2001; Srivastva *et al.*, 2008) cows (Rao, *et al.*, 2011; Patil *et al.*, 2004; Abrahan *et al.*, 2007) and goats (Pandit *et al.*, 1994). Thoracopagus sternopagus conjoint twin has been reported in a Marathwadi buffalo (Patil *et al.*, 2009) and dicephalus sternopagus tetrabrachius tetrapus dicaudatus Monster in a Murrah buffalo (Singh *et al.*, 2013). Majority of literature reviewed for this study revealed delivery of monster through C-section. The present case is perhaps the first of its kind that delivered adopting fetotomy technique in buffaloes. The technique is safer and less time consuming, it can be used successfully as an alternative to the caesarean operation which seems expensive.

REFERENCES

- Abrahan, J., S. Bihu, V.I. Raj and B. Lakshman. 2007. Dicephalic monstrosity in a heifer. *Indian J. Anim. Reprod.*, **28**(2): 109-111.
- Arthur, G.H. 1956. Conjoined and identical twins. *Vet. Rec.*, **68**: 389.
- Arthur, G.H., D.E. Noakes, H. Pearson and T.J. Parkinson. 2001. *Veterinary Reproduction and Obstetrics*, 8th ed. W.B. Saunders Co Ltd., London. 118p.
- Bowen, D.I. 1966. A double monster. *Vet. Rec.*, **78**: 19.
- Bugalia, N.S., R.K. Biswas and R.D. Sharma. 2001. Diplopagus sternopagus monster in an Indian water buffalo (*Bubalus bubalis*). *Indian J. Anim. Reprod.*, **22**(2): 102-104.
- Rao, K.S., P. Prahalad, K. Reddy and K. Raju. 2011. Dystocia due to dicephalus montomus monster in a crossbred cow. *Indian J. Anim. Reprod.*, **32**(1): 75.
- Chauhan, K.S. and H.K. Verma. 1995. A case of dystocia due to diplopagus monster in buffalo. *Indian J. Anim. Reprod.*, **16**(1): 75.
- Dhami, A.J. 2000. Dystocia due to holo acardius acephalic (asymmetrical conjoined twin) monster in a buffalo. *Indian J. Anim. Reprod.*, **21**: 162.
- Hancock, J. 1954. Monozygotic twins in cattle. *Advances in Genetics*, **6**: 141.
- Hannappagol, S.S. 2005. Thoraco abdominopygophagus fetal monster in a non-descript cow. *Indian Vet. J.*, **82**: 441.
- Pandit, R.K., S.K. Pandey and R.G. Aggarwal. 1994. A case of dystocia due to diplopagus monster in goat. *Indian J. Anim. Reprod.*, **15**(1): 82.
- Patil, A.D., N.M. Markandeya, V.B. Sarwade and S.D. Moregaonkar. 2004. Dicephalus monster in a non-descript cow-A Case report. *Indian J. Anim. Reprod.*, **25**(2): 161-162.
- Patil, A.D., D.S. Raghuvanshi, U.B. Kumbhar, K.S. Choudhari and M.G. Thorat. 2009. Thoracopagus sternopagus conjoint twin in a marathwadi buffalo calf. *Vet. Prac.*, **11**(2): 114.
- Raju, K.G.S., K.S. Rao, V.S.C. Reddy and G.P. Sharma. 2000. Dicephalus- biatlanticus monster in a buffalo. *Indian J. Anim. Reprod.*, **21**(1): 81.
- Robert, S.J. 2004. *Veterinary Obstetrics and Genital Diseases*, p. Indian reprints. CBS Publishers and distributors, Delhi-110032.
- Singh, G., A.K. Pandey, R. Dutt, S. Sunder, S. Kumar and S. Chander. 2013. Delivery of a dicephalus sternopagus tetrabrachius

tetrapus dicaudatus monster in a Murrah buffalo by caesarean section. *Buffalo Bull.*, **32**(4): 242.

Srivastava, S., A. Kumar, S.K. Maurya, A. Singh and V.K. Singh. 2008. A dicephalus monster in Murrah buffalo. *Buffalo Bull.*, **27**(3): 231-232.

Vegad, J.L. 2007. *Textbook of Veterinary General Pathology*, 2nd ed. International book distribution Company. 544p.

Vermunt, J. 2009. Fetotomy, p. 326-343. *In* Noakes, D.E., T.J. Parkinson and G.C.W. England (eds.) *Veterinary Reproduction and Obstetrics*. Saunders Elsevier, Oxford, Saunders Co. Ltd, London, United Kingdom.