DYSTOCIA DUE TO CONJOINED TWIN MONSTER IN A COW

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ABSTRACT

A case of dystocia due to a conjoined twin monster in a 4 ½ year old crossbred cow with normal gestation and prolonged labour was reported. Obstetrical examination revealed a 'Dicephalic, distomus, tetraopthalmus, dibrachius, quadrapus and dicaudatus' monster. Cesarean section was resorted to deliver the dead monster. The anatomical structure of a rare case of conjoined twin monster is described and discussed.

Key Words: Dystocia, Conjoined twin monster, Cow.

INTRODUCTION

Twinning can range from incompletely bilateral forms that are subnormal such as cyclopic monster, through various grades of supernormal forms such as two headed types, double monsters and conjoined twins, culminating in completely separate monozygotic or duplicate twins. Abnormal duplication of germinal area in fetus will give rise to congenital fetal abnormalities with partial duplication of body structures. Such embryonic duplications are rare and occur about once in 100000 bovine births (Roberts, 1971). Dystocia due to conjoined twin monsters, though rare, was reported earlier in goats (Pandit *et al.*, 1994), in buffalo (Urankar *et al.*, 1994; Bugalia *et al.*, 2001) and in cow (Honnappagol *et al.*, 2005).

CASE HISTORY AND OBSERVATION

A 4 ½ year old cross bred cow in its second pregnancy with normal gestation had prolonged labour pain for 12 hours. Rupture of fetal bags occurred 10 hours before and two fetal limbs were seen at the vulva without any progress further. Obstetrical examination after proper lubrication revealed that the fetus was in posterior longitudinal presentation with two hind limbs protruding from the vulva. Repulsion and deeper exploration revealed the presence of a third hind limb attached in an abnormal position, duplication of tail and a dicephalic condition.

TREATMENT AND DISCUSSION

Attempts to relieve dystocia by mutation were unsuccessful to deliver the fetus and hence cesarean section was resorted. Following paravertebral nerve block and local infiltration anesthesia, laparohysterotomy was performed under sterile conditions. A 35 cm long incision was made on left lower flank and the dead monster calf was delivered through the uterine incision by applying obstetrical hooks on one orbit each of both heads. The uterine incision was closed with Cushing sutures followed by Lembert sutures using No.2 chromic catgut. The laparotomy incision was closed as per the standard technique and supportive treatments were carried out with normal saline, calcium borogluconate, oxytocin, ketoprofen, chlorpheneramine maleate and ceftiofur. Antibiotic therapy with ceftiofur was recommended for 5 days.

The conjoined twin monster was nearly complete and had separate head and neck (Dicephalic). Eyes and ears were normal and the two bodies were fused with each other in a face to face position, starting from a broad thorax region with two distinct sternums, progressing backwards up to the lower pelvic region

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(Ischiopagus). The fused pelvic region had two separate tails (Dicaudatus). The monster had two forelimbs (Dibrachius) and four hindlimbs (Quadrapus) of which two hind limbs were fused as one with duplication of tarsus up to digits.This fused limb was seen attached in an abnormally dorsal position. As per Roberts (1971) the condition could be classified as "Dicephalic, distomus, tetraopthalmus, dibrachius, quadrapus and dicaudatus monster" (Fig).

Conjoined twins are non inherited teratologic defects. According to Noden and Lahunta (1984), conjoined twins are monozygotic and monstrosities arise due to incomplete division of embryo into components usually at the primitive streak development state. Duplication of cranial part of fetus is more common than that of caudal parts and also duplication can occur at both cranial and caudal ends with the middle area of the monster remaining single (Roberts,1971). The present case seemed to be a non inherited teratogenic defect of development with nearly complete duplication of cranial and caudal parts.

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Fig. Monster Fetus