

DYSTOCIA DUE TO CONJOINED HEADS IN A PRIMIPAROUS BUFFALO

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ABSTRACT

Present report records a rare case of conjoined heads causing dystocia and its clinical management in a primiparous buffalo.

Key words: Conjoined Heads, Fetal monster, Dystocia, Buffalo

INTRODUCTION

Embryonic duplications are malformations due to abnormal duplication of the germinal area giving rise to fetus, whose body structures are partially but not completely duplicated. Variety of structural and functional defects/ malformations of the new born calves have been well documented (Roberts, 1971; Arthur *et al.*, 1989). Double monsters are commonest in ruminants and swine. Varying degrees of conjunction occur but anterior duplication is often seen. The present case also reports a dystocia due to fused heads at the cranial region.

CASE HISTORY AND OBSERVATIONS

A full term primiparous non-descript buffalo of seven years of age was brought to the Veterinary Dispensary, Ventrpragada, Krishna (Dist), Andhra Pradesh with a history of difficulty in parturition. The water bags have been ruptured approximately six hours before and the animal was said to be straining for over ten hours. Earlier attempts to deliver the fetus at the farmers' door step were unsuccessful. Temperature, respiration and pulse rate of the animal were recorded and found to be within the normal range at the time of examination. After proper restraining of the animal gynaeco clinical examination was conducted and revealed fully dilated cervix with dry birth passage and live fetus with double head in longitudinal anterior presentation, dorso ilial position with ventral deviation of heads in foot nape posture. The case was diagnosed as dystocia due to conjoined heads.

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TREATMENT AND DISCUSSION

The perineum was completely washed with aseptic potassium permanganate solution. Following epidural anaesthesia (12 ml, 2% Lignocaine HC1) and after thorough lubrication of the birth passage with approximately 3 litres of liquid paraffin an attempt was made to correct the fetal postural defects. After thorough obstetrical mutation and repositioning of the fetus in normal presentation, position and posture, forced traction was applied to relive the fetus with fused heads. The fetus was delivered alive, but died soon after the birth. The fetal membranes were shed normally within six hours.

Careful examination of the dead fetus externally revealed that it was a female calf with conjoined heads (Fig.). Monster was characterized by fusion of heads at the cranial portion with three eyes and two nostrils, two fore limbs, two hind limbs and one tail with partial duplication of the spine. Whereas, all the other body parts were found to be single. Such a condition is described as "Diprosopus triophthalmus distomus diotus". The monster head could be a result of duplication of first brachial arch.

The blastocyst contains a portion of embryonic disc, which divides into two parts immediately before gastrulation. During this stage of embryonic development, there may be some sharing of extra embryonic membranes between the fetuses (Khasatiya *et al.*, 2008). In the event of asymmetrical division of the primitive streak such kind of conjoined twins may develop into cephalopagus, thoracopagus, abdominopagus or pygopagus (Noden and Lahunta, 1985). Conjoined twins arise from a single ovum and are monozygotic in nature (Roberts, 1971). Duplication of body parts can occur at both cranial and caudal ends with the middle area remaining single and this occurs

in about 1 in 1, 00,000 bovine births (Hancock, 1954 and Arthur, 1956), but very rare in sheep, pigs, dogs, cats and horses. Dystocia due to dicephalus monsters/duplication were reported earlier by Chandrahasan *et al.* (2003) in crossbred cow and and Khasatiya *et al.* (2008) in Dongi cow.

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Calf with conjoined heads

ANNOUNCEMENT
XXVII ANNUAL CONVENTION OF ISSAR - 2011
27-29 SEPTEMBER 2011

Venue : College of Veterinary Science,
Central Agricultural University,
Selesia, Aizwal, Mizoram 796 014

Theme : Reproductive Bio-Technologies for Augumenting Fertility
and Conservation of Animal Species with special reference
North Eastern Hill Region

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