

Thoraco-sternopagus monster: a rare case of fetal dystocia in buffalo

J.K. PRASAD¹, SHIV PRASAD², AWADHESH KUMAR³ AND G.K. SINGH⁴

Department of Animal Reproduction, Gynaecology and Obstetrics,
College of Veterinary and Animal Sciences, G.B. Pant University of Agriculture and Technology,
Pantnagar-263 145 (Uttarakhand)

Received: January 2, 2005
Accepted: October 20, 2006

ABSTRACT

A rare case of dystocia due to the thoraco-sternopagus fetal monster in buffaloes was relieved by laparohysterotomy. Postmortem examination of fetus revealed an enlarged liver with two gall bladders.

Key words: Dystocia, thoraco-sternopagus, conjoined twin monster

Diplopagus is a conjoined twins in which the components or component parts are symmetrical. Conjoined twins arise from a single ovum and are monozygotic. They occurred about once in 100,000 bovine births (Roberts, 1971). They are most common in cattle but are seen rarely in sheep, goat, dogs, pigs and cats and are exceedingly rare in horses.

A full term pregnant buffalo aged about 10 years was presented at college clinics with history of straining since last 24 hr but unable to deliver the calf. There was no previous history of dystocia, however, animal was of 4th parity. Clinical examination revealed an edematous and swollen vulva and no fetal part was visible from outside. The rectal temperature was 100.8°F with slightly congested mucus membranes. Per-vaginal examination revealed fully dilated birth canal with two fetal heads and four limbs palpated in the birth canal. No fetal movements were observed at the time of examination and hence fetus was dead.

Forced extraction was applied to deliver the fetus but proved futile. Finally case was subjected to cesarean section. A conjoined twin monster (Fig 1) was delivered by left flank laparohysterotomy. The component parts of both the fetuses were symmetrical (Diplopagus) with a

single umbilicus. Both the fetuses were female having two heads, four forelimbs, three hind limbs and two tails with single anus. Fetuses were joined at the thorax and abdominal region (thoraco-stenopagus). The weight of twins was 82 kgs.

On postmortem examination, peritoneal cavity of the fetus drained about 30 liters of ascitic fluid. Fetuses had a single common enlarged liver with two gall bladders (Fig 2), however, lungs and heart were separate for each fetus and both right and left kidney of the individual



Fig 1. Conjoined twin monster (thoraco-sternopagus) of buffalo.

¹Assoc. Professor, ²Professor, ³Assoc. Professor, Vety. Extension & ⁴Professor & Head, Vety. Anatomy

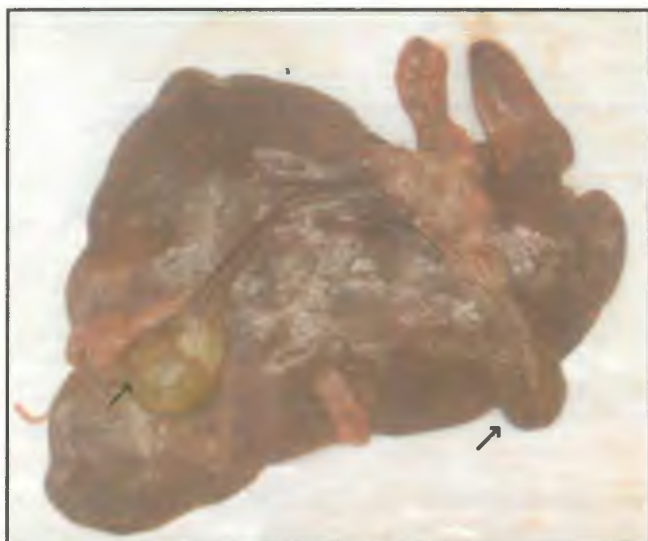


Fig 2. Single common enlarged liver with two gall bladders (indicated by arrow mark).



Fig 3. Fused both right and left kidney of the individual fetuses.

fetuses were fused (Fig 3).

Dystocia due to Dicephalus thoraco-sternopagus siamese monster (Sahu and Pandit, 1999) and conjoined twin monster (Selvaraju *et al.*, 2002) was reported as a rare case in buffaloes. Thoraco-sternopagus twin arises due to embryonic duplication of germinal area giving rise two fetuses whose body structures are partially but not completely duplicated (Roberts, 1971). Normal per-vaginum delivery of such types of conjoined twin is difficult due to its enlarged and abnormal size, hence cesarean section is the only choice of obstetrical operation.

REFERENCES

- Roberts, S.J. (1971). *Veterinary Obstetrics and Genital Diseases*. 2nd Edn., CBS Publishers, New Delhi.
- Sahu, S. B. and Pandit, R. K. (1999). Dicephalus thoraco-sternopagus Siamese monster in a buffalo- a case report. *Indian Vet. J.*, 76: 745-746.
- Selvaraju, M., Kathiresan, D. and Veerapandian, C. (2002). Dystocia due to conjoined twin monster in a buffalo - a case report. *Indian Vet. J.*, 79: 721-722.