

Conjoined Sternopagus Twin monster : A cause of Dystocia in Mehsani Buffalo

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Dystocia due to conjoined twin monster is uncommon (Dhami *et al.*, 2000 and 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); besides the duplication of fetus more frequently at cranial part (Roberts, 1971). These duplications may arise during the primitive streak elongation or regression (Noden and Lahunta, 1984). Congenital defect present at birth signify the abnormality of structure or function and they may affect a single structure or function, part of system or its structure and function and/or an entire system.

Case history and clinical observations

A six year old mehsani buffalo in third parity having full term pregnancy was presented at the Teaching Veterinary Clinical Service Complex, SDAU, Sardarkrushinagar, with a history of labour since 24 hours. Veterinary aid provided locally did not facilitate vaginal delivery.

The animal was alert with normal muzzle and good body condition. The rectal temperature was recorded to be 102.9° F. Reddish discharge and fetal hind limbs protruded from vulva were noticed. Vaginal mucus membrane was congested and vulva was edematous. Per vaginal examination revealed the conjoined twin fetus in posterior longitudinal presentation and dorso-sacral position; which warranted the caesarian to relieve dystocia.

Surgical maneuver: Following local infiltration of lignocaine hydrochloride, 90 ml parallel to milk vein; caesarian section was performed in a left lateral recumbancy. A dead female conjoined twin monster was removed from laparohysterotomy site. The surgical wound was sutured in routine fashion using chromic catgut no. # 1 for uterus and peritoneum, and no. # 2 for two muscle layers. Antibiotic coverage and fluid therapy was followed for five days.

Results and Discussion

The fetus was conjoined from the thoracic region at the sternum and both the heads faced each other.

The fetus possessed two normal heads, with separate nostrils, eyes and ears. These confirmed the fetus to be of dicephalus, distomus, tetraopthalmus, tetraotus, tetrabrachius, tetrapus, and dicaudatus conjoined sternopagus twin monster. Chandrahasan *et al.* (2003) also reported similar monster, which survived up to 45 minutes of delivery, while Raju *et al.* (2000) placed on record a dicephalus biatlanticus monster in a buffalo.

On postmortem examination the conjoined twin monster was found to be attached at the sternum. A hypertrophied heart was present in the conjoined thorax including atrophied and congested lungs of one fetus whereas other pair was normal in another fetus. Diaphragm was fully developed in one fetus. The abdominal viscera like stomach, intestine, kidneys and gall bladder were present in both the fetuses, besides severely enlarged liver and spleen. Similar findings in a buffalo conjoined monster were reported by Shukla *et al.* (2007). Conjoined twins are non-inherited teratogenic defects (Shukla *et al.*, 2007). Since the buffalo had delivered two normal calves in last two calvings, the condition appears to be non-hereditary in origin and might have resulted due to abnormal duplication of germinal area giving rise to fetuses whose body structures are partially but not completely duplicated (Potter, 1961).

References

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