A RARE CASE OF CONJOINED TWIN MONSTER (ISCHIOPAGUS) IN A SHE BUFFALO

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ABSTRACT

A case report of conjoined twin monster in a she buffalo was presented.

Key words : Dystocia, Conjoined Twin monster, She buffalo.

INTRODUCION

Conjoined twins are classified according to the most prominent site of attachment as craniopagus, thoracopagus, ischiopagus, omphalopagus and pygopagus (Spitz and Kiely, 2000) and dystocia is the most common sequelae of foetal monstrosities in bovines, but rare in buffaloes (Roberts, 1971). The definitive aetiological agents for the conjoined twins are unknown (Leipold *et al.*, 1972). However researchers have attributed that this might be either genetic or environmental factors or both (Arthur, 1956). This paper reports a rare case of conjoined twin monster in a she buffaloe.

CASE HISTORY AND OBSERVATION

A buffalo at full term in its third pregnancy was presented with the history of labour pains since 12 hrs and its water bags had ruptured 8-10 hrs before. Two foetal legs were protruding through the vulva without any progress and the animal was straining severely. Previous calvings of the animal were reported to be normal. On clinical examination, the animal appeared exhausted due to severe straining and was in recumbent position. Per-vaginal examination revealed that the foetus was in anterior-longitudinal presentation with sacro ileal position. The two forelimbs were protruding through the birth canal with a tail appearance. Repulsion and deeper exploration revealed a conjoined twin monster.

TREATMENT

Per vaginal delivery was not possible; therefore caesarean operation was performed and conjoined twins were removed. The twin was alive at birth and the smaller one died after 6 hours, followed by the other which died after 16 hours.

Gross Appearance of the Monster – The monster was a conjoined twin fused at the pelvic and perineal region (Fig. 1). The features were fully developed and it weighed 56 kg. It had two normal heads, two necks, two pairs of fore limbs, two pairs of hind limbs, two thorax, two trunks, seperate abdomen but pelvic and perineal regions were attached and had two tails. External genitalia were not visible. Only two teats with each foetus were present. Pelvic and perineal attachment was tried to separate surgically but the monster collapsed.

Internal organs – On post-mortem examination, the conjoined twin monster was found to be attached to the pelvic and perineal region. Both the calves had fully developed diaphragm, normal lungs, heart, kidneys and gall bladder, with extensively enlarged liver. The urogenital organs were absent. Small intestines of both

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foetus were found to be fused but the large intestine was common.

Congenital abnormalities might arise from the adverse factors affecting the foetus in early stage of development. A break in zona, old egg and delay in fertilization or ovulatory drugs that lead to hardening of zona pellucida, could all produce monozygotic twinning by physically separating the conception into two cell masses (Hall, 2001). Familial monozygotic twinning could be associated with an inherited abnormality of the zona pellucida or some other mechanism, leading to failure of early blastosytes to stay together. Present abnormality might be resulted from genetic or environmental cause. Conjoined twins are always genetically identical and share the same sex. Surgical separations of the twins is not commonly performed because majority of them are still-births. The present case appears to be a non-inherited teratogenic defect of development since there was no history of monster birth in the previous two calvings of the dam.

REFERENCES

Arthur, G.H., (1956). Conjoined and identical twins. Vet. Rec., **68:** 389.

Hall, J. G., (2001). Twins and twinning. In: Rimoin, D. L., Connor, J. M., and Pyeritz, eds. Emery and Rimoin's principles and practice of medical genetics, **1:** 501 – 13.

Leipold, H. E., S. M. Dannis and K. Huston., (1972). Embryonic duplication in cattle. Cornell Veterinarian., **62**:572-80.

Roberts, S.J., (1971). Physiology of the gestation period. In: Veterinary Obstetrics and Genital diseases, 2nd ed. CBS publishers and distributors, pp 88-98.

Spitz, L and K. M. Kiely., (2000). Experience in the management of conjoined twins and success rate for surgery of conjoined twins. JAVMA., **356**: 1765.

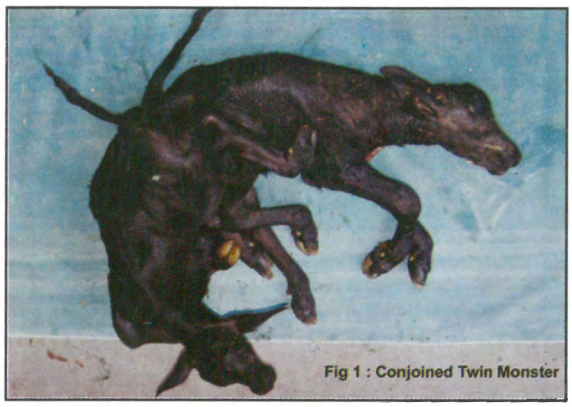

Fig 1 : Conjoined Twin Monster