

# DYSTOCIA DUE TO CONJOINED TWINS WITH SCHISTOSOMUS REFLEXUS IN CATTLE

C.V.Rajani<sup>1</sup> and K.S.Raghavan

Veterinary Dispensary, Othukkungal, Malappuram Dist.,  
Animal Husbandry Department, Govt. of Kerala.

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Conjoined twins arise from a single ovum and are monozygotic. They result from the incomplete subdivision of embryonic axis which occurs at a relatively later phase of development. During development, organs developed from different organ primordia and its splitting leads to duplication (Arey, 1965 & Shumway, 2001). According to Roberts (1971) its occurrence is rare. Duplication of the cranial part is more common than the caudal portion. Schistosomus reflexus is a common anomaly seen in cattle. It is an anomaly of the trunk with malformation of the thoracic and abdominal cavities and resulting in exposure of viscera (Roberts, 1971).

A case of dystocia in a crossbred cow was presented at Veterinary Dispensary, Othukkungal, Malappuram Dist, Kerala with a history that both the forelimbs of the calf were partially out since three hours and with no progression in parturition. This was the sixth calving and all the calves born earlier were normal. The general condition of the animal was fair and the ligaments were totally relaxed. The perineal region of the cow was thoroughly cleaned with one in thousand potassium permanganate solution. The birth passage was completely relaxed and after sufficient lubrication animal was examined

pervaginally and a dead calf with its head in the pelvic cavity in the normal posture was found.

Attempt was made for relieving the calf with controlled traction on the forelimbs with snares and head using a long obstetrical hook on the right inner eye canthus. The traction attempt was futile. Traction was continued after thorough lubrication with gingely oil and a dead monster calf was delivered pervaginum.

The anomalous female calf (Fig.) was a conjoined twin monster with schistosomus reflexus. The foetus had duplication of its hind part from the level of first lumbar vertebra. It has a single head, two forelimbs, four hind limbs and two tails. This type of conjoined twin is designated as Monocephalus tetrapus dibrachius. In the present case the partial duplication of embryonic axis resulted in twining of the hind quarters. This doubling of the lower trunks results when the caudally retreating primitive streak and knot produce a forking divergence (Arey, 1965). Hamilton *et al.*, (1962) reported that many of the developmental abnormalities couldn't be interpreted in terms of induced abnormalities.

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1. Assistant Professor, Department of Veterinary Anatomy & Histology, College of Veterinary & Animal Sciences, Pookot, Lakkidi, Waynad 673576



This conjoined female twins possessed only one set of digestive organs which was exposed due to non-union of ventral wall of abdomen. The twins possessed separate set of structures - tail, teat, vagina, vulva, kidneys and anus which were mesodermal and ectodermal in origin. The observation suggests that the duplication of embryonic mass involved only the mesodermal and ectodermal layers and not the entodermal layer. The congenital anomaly of the calf was accompanied with Schistosomus reflexus.

Roberts (1971) stated that foetal anomalies like conjoined twins and Schistosomus refluxus can cause dystocia in cattle.

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