

## **DYSTOCIA DUE TO TWINNING AND TORSION IN A MURRAH BUFFALO (*BUBALUS BUBALIS*)**

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**Abstract:** Successful obstetrical management of dystocia due to twin pregnancy and uterine torsion in a Murrah buffalo was reported.

**Keywords:** Dystocia, Uterine torsion, Bilateral hock flexion, Traction, Twins.

### **Introduction**

In reproduction, the term twin refers to two individuals who have shared the same uterus and parity. Cattle and buffaloes are a uniparous species; however, occasionally some rare females give birth to twins or multiple offspring. Goswami and Nair (1968) estimated a twinning rate of 0.0578 percent by analyzing data collected from different forms in India on 10,363 calvings from 3096 Indian buffaloes extending over a period of 20 years. However, Tantawy and Ahmed (1957) and Asker and El Itriby (1957) reported a twinning rate of 0.63 and 0.2 percent respectively in Egyptian buffaloes. In Italian buffaloes the twinning rate was reported as 0.294 percent (Ferrara, 1960). Twinning percentage increased with the age of the dam and that the maximum incidence was found at about ninth or tenth year of age of the animal. Twin births tended to shorten the gestation period by about 20 days, the birth weight of each twin calf was less than that of calves born singly. Twinning in buffaloes increased the number of aborted calves as compared with single births. Twin gestation often predisposed the cattle to dystocia and the present case reports dystocia due to twinning and torsion in a Murrah buffalo.

### **Case History and Observations**

A case of Murrah buffalo was referred from the nearby veterinary hospital to the department of Veterinary Clinical Complex, CVSc, Proddatur with a complaint of dystocia. The breeding history was unknown and after examination and diagnosing it as uterine torsion the local veterinarian referred the case to college clinics. History revealed that the animal was dull since yesterday morning and straining to produce nothing. On clinical examination, all

physiological parameters were within normal range and the buffalo was standing with occasional straining. Per vaginal examination revealed uterine torsion of less than 90 degrees, a relaxed cervix and live fetus palpable at pelvic brim in posterior longitudinal presentation, left dorsoilial position and bilateral hock flexion posture.

### **Treatment and discussion**

Epidural anaesthesia (2% Lignocaine HCL) was induced after cleaning the perineal region. Lubricated hand passed per vaginally and fetal malposture was corrected and moderate traction applied to both hind limbs to remove live female fetus. Unaware of the second fetus, after few minutes hand passed pervaginally for routine checkup of uterus only to found another live fetus. The second fetus was in anterior longitudinal presentation, dorsal position and in normal posture. By the application of simple traction to both fore limbs and head directed into the birth canal the second live female fetus was delivered. The animal was administered 5% Dextrose saline, 2 liters i.v., inj. Calcium boro gluconate 500 ml, inj. Flunixin meglumine @ 1.2 mg/Kg body weight i.m., inj. Ceftriaxone sodium 3 G, inj. Chlorophenaramine maleate 50mg i.m. Same treatment repeated next day and advised the owner to repeat the antibiotic and anti-inflammatory treatment for another 4 days.



**Fig 1: Buffalo female live twins delivered pervaginally**

The animal had expelled one placenta same day night and another placenta removed manually after three days by local paravet. Both female calves were healthy as reported by farmer after one week.

Cattle are uniparous livestock species and females give birth to one offspring in most of the parturitions; but occasionally twins or multiple births do occur. When twins are born one after the another they seldom cause any difficulty owing to relatively small size of each fetus even when faulty conditions of posture presentation or position are present (Benesch and Wright, 2001). However, Noakes *et al.* (2009) declared that twin gestation in cattle often culminates in dystocia. In the present case also though fetuses were presented one after another dystocia resulted due to faulty posture. When only one fetus is presented instead of simultaneous presentation in twinning but cannot be born because of faulty disposition that is usually due to failure of normal extension of limbs or head because of insufficient uterine space. Simultaneous presentation would more probable with bicornual gestation however in this case fetus came one after another suggestive of unicornual pregnancy. Anderson *et al.* (1978) observed that dystocia is more likely with unicornual twinning. When fetuses occupy the same horn, uterine torsion and uterine inertia are more likely to occur (Noakes *et al.*, 2009). In uterine inertia defective uterine contractions caused either by over stretching of the uterus, excessive fetal load or by premature births. Excessive fetal weight is a predisposing factor for uterine torsion. The after births of bovine twines are likely to retain.

Twin gestation often predisposes the cattle to dystocia but the risks often balanced by smaller fetuses and a reduction in fetopelvic disproportion. Early presentation of the case, epidural anaesthesia, with relatively smaller size of the female live fetuses presented one after another helped to relieve the present case of dystocia.

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