

CLINICAL ARTICLE

Therapeutic Management of Emphysematous Fetus and Fetal Maldisposition in A Buffalo

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ABSTRACT

A non-descript buffalo suffering with dystocia due to emphysematous fetus and fetal maldisposition and its successful management with laparohysterotomy has been discussed. Fetal emphysema is a frequent complication of protracted parturition in cattle and, irrespective of the primary cause of dystocia, it is often the immediate indication for a caesarean operation. Such cases should be assessed realistically before the operation is undertaken because fetal putrefaction can seriously influence maternal survival. Bacterial culture of such fetuses usually yields heavy growths of coliform, or coliform and clostridial organisms. The latter infection is associated with a high maternal mortality rate in the immediate postoperative period, probably because of endotoxaemic shock.

Keywords: *Buffaloes; Bubalus bubalis; Dystocia; Emphysematous fetus; Fetal maldisposition ;*

Fetal emphysema is a frequent complication of parturition and a primary cause of dystocia in farm animals (Arthur *et al.*, 2001). There is putrefaction characterized by formation of gases in the subcutaneous tissue within 24-72 h subsequent to the death of the fetus and the fetus becomes soft, decomposed and distended with gases (Sane *et al.*, 1994). Srinivas *et al.* (2007) reported that 40.84 percent of dystocia in graded Murrah buffalo are due to fetal cause, among which head deviations were 42.22 percent. Amongst different reasons, the deviation of head and neck of fetus in anterior presentation are most common (Roberts, 1971) and may be in any direction (Das *et al.*, 2009). The lateral deviation of head especially in a dead fetus becomes life threatening for the dam due to uterine contractions in inappropriately treated cases (Sane *et al.*, 1994). The present communication describes a case of dystocia due to lateral deviation of head, further complicated by fetal emphysema in a she buffalo.

Case history and clinical observation:

A non-descript buffalo in second lactation aged about 7 years was presented in the Referral Veterinary Polyclinic of the Indian Veterinary Research Institute, Izatnagar Bareilly (U.P.) with the history of dystocia

for the previous two days. The gestation length was 305 days. The buffalo had previously been treated by a local veterinary pharmacist for almost for 4 h and then the buffalo was referred to the clinics. The water bags had already ruptured one day before. On general examination buffalo appeared dull and depressed. Feed and water intake had reduced. Udder engorgement and relaxation of sacrosciatic ligament were evident. Per-vaginal examination revealed a dead foul smelling fetus with emphysema in anterior longitudinal presentation, dorso-sacral position with left lateral deviation of head and neck. The cervix was fully dilated. The uterine cavity was dry and was devoid of any lubrication. Alopecia and emphysema of the fetus were present. The case was diagnosed as dystocia due emphysematous fetus with left lateral deviation of head and neck.

Treatment:

As the fetus was emphysematous and foul smelling and the uterine mucus membrane was edematous, it was decided to perform laparohysterotomy. It was done with standard procedure as described by Robert, 1971 by giving oblique incision parallel to milk vein. A dead male emphysemated fetus (Figure 1) was removed out from the gravid horn. Following laparohysterotomy the buffalo was treated with injection Streptopenicillin 2.5

gm b.i.d for 5 days by I.M. route, inj. Ringer's lactate 5 liters as I.V. infusion for 3 days and injection Meloxicam 25 ml I.M for 5 days. Inj. Calcium borogluconate 450 ml (300 ml slow I.V. and 150 ml S.C.) was given only

once. Inj. Metronidazole was given 20 mg/kg body weight in divided doses for 5 days. The buffalo was discharged after 5 days with uneventful recovery.

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Figure 1. Emphysematous male fetus removed following laparohysterotomy.