A SUCCESSFUL TREATMENT OF DYSTOCIA DUE TO INCOMPLETE DILATATION OF CERVIX IN COW BY MISOPROSTOL

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Incomplete dilatation of the cervix is a common cause of dystocia in cattle (Noakes *et al*., 2002). Cervical priming refers to dilatation and softening of the cervix in the first stage of labor and is a gradual process (Jackson, 2004). Incomplete dilatation in multiparous cows may be associated with uterine inertia caused by hypocalcaemia; in these animals, the response to calcium therapy is rapid. Misoprostol an analogue of prostaglandin E1 is widely used to ripen the cervix and/or initiate labor at term in human and it is more widely used to control postpartum bleeding (Fiala *et al.*, 2007; Weeks *et al.*, 2007). PGE1 has never been used in bovine obstetrics to dilate the incompletely dilated cervix causing dystocia. This report describes probably the first successful use of misoprostol (PGE1) for the treatment of incomplete dilatation of cervix in a local non-descript cow.

HISTORY AND CLINICAL SIGNS

An eight year old non-descript cow presented to the Teaching Veterinary Clinical Complex, SKUAST-J, R.S Pura, Jammu, was examined for dystocia. On clinical examination, the cow was at or near term, as denoted by mammary changes and ligamentous relaxation in the pelvis. The cow was in a standing position and restless due to abdominal discomfort, coupled with few feeble abdominal contractions but no progress was made. Vaginal examination indicated that the cervix was dilated about two fingers and the fetal membranes were intact.

TREATMENT AND DISCUSSION

The perineum and adjacent areas were washed with soap and water and disinfected with Povidone iodine. Hand covered with long plastic gloves lubricated with obstetrical cream was inserted in the birth canal, and 5 tablets (1 mg) of misoprostol (Cytotec, Searle Pharmaceuticals Ltd, UK) were inserted in the partially dilated cervical canal. Every 15 minutes the cervical canal was examined. After 45 minutes the cervix was completely dilated and the fetal parts were easily examined. The fetus was alive with anterior presentation, dorso-sacral position with downward deviation of the head between the forelimbs adjacent to the sternum with bilateral shoulder flexion. The abnormal posture was corrected by repelling the fetus and lifting the muzzle up into the pelvis. The forelimbs were located and manipulated and the gloved hand was advanced down the limb toward the carpal joint. The right limb was grasped and brought up into the carpal flexion position, and the foot was cupped in the hand and brought carefully up into the pelvis. A calving rope was placed around the fetlock. The same procedure was performed to bring the left limb in pelvis. Then traction was applied manually with two assistants on both the extended fore limbs. After delivery the uterus and the birth canal were checked for signs of damage and hemorrhage. The cow was treated with 60 IU of oxytocin as single injection and 20 Lakh IU procaine penicillin G with 2.2g of dihydrostreptomycin intramuscularly daily for 3 days. After one week the owner reported that the cow and the calf were doing well.

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