The Indian Journal of Animal Reproduction; 28(1):82-83 ;June 2007

Case Report

Dystocia due to muscular hypertrophy of fetal neck in a buffaloes

M. HONPARKHE[1], S.S.DHINDSA[2], S. P. S. GHUMAN[3] AND AJEET KUMAR[4]

Deptt. of Animal Reproduction, Gynaecology & Obstetrics,
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana - 141004

ABSTRACT

A rare case of dystocia in a buffalo due to muscular hypertrophy of fetal neck was relieved by partial foetotomy and described in this report.

Keywords: Buffalo, Dystocia, Muscular hypertrophy.

Muscular hypertrophy of fetus characterized by light bones, thin skin and large muscles, is a hereditary condition, which often leads to severe fetal dystocia (Roberts, 1971). The present report describes a case of dystocia in a buffalo due to muscular hypertrophy of fetal neck.

A pluriparous buffalo with complete gestation period and showing symptoms of dystocia was presented for treatment at veterinary clinics, Punjab Agricultural University, Ludhiana. Animal was recumbent and straining since eight hours. The allantoic and amniotic bags had ruptured. Fetal delivery was attempted unsuccessfully by the field veterinarian. Per-vaginal examination revealed the presence of both forelimbs and head in birth passage.

Attempts to relieve dystocia by mutations were not successful because of some obstruction felt at the level of fetal neck. Since birth passage was fully relaxed, fetotomy with wire saw (Bovivet, Saw wire, Denmark) was considered. Partial fetotomy was attempted under posterior epidural anaesthesia, achieved with 7ml Lignocaine Hydrochloride (2%) and lubrication of the birth passage with sodium carboxy methylcellulose gel (Carmellose-Na 1%, WDT, Garbsen, Germany).

Simultaneous amputation of one forelimb and head was not successful because of excessively large neck muscles. However, amputation of only head and half of the neck was successfully carried out.

Traction on remaining fetus could not relieve the dystocia, so another fore limb and remaining part of the neck was also amputated. Moderate traction, after adequate lubrication of the birth passage resulted in successful delivery of remaining fetus. The placenta was removed. The buffalo recovered uneventfully after administering supportive treatment, which included isotonic saline solution, antibiotics, analgesics, multivitamins, steroids and calcium borogluconate.

Gross examination of the fetus revealed extremely large neck muscles (Fig 1.). Histopathological examination confirmed muscular hypertrophy of the neck. In buffaloes, fetal dystocia due to hypertrophy of muscles of neck and hindquarter (Dhaliwal *et al.*, 1989), pseudo-muscular hypertrophy (Prabhakar *et al.*, 1995) and muscular hypertrophy in the thoracic region (Prabhakar *et al.*, 2003) has been reported earlier. Abnormal size of fetus is due to expression of recessive lethal genes (Roberts 1971). However, in the present case, the cause and pathogenesis of the hypertrophied fetal neck muscles could not be ascertained.

Present address : [1] Assistant Gynaecologist, [2] PhD Student, [3, 4]Assistant Professor, Department of Animal Reproduction, Gynaecology and Obstetrics, Guru Angad Dev Veterinary and Animal Sciences university, Ludhiana- 141004

Fig 1: Buffalo fetus with extremely large cervical muscle causing dystocia

REFERENCES

Dhaliwal, G. S., Prabhakar, S. and Sharma R. D. (1989). Dystocia due to fetal muscular hypertrophy in buffaloes. Indian J Anim Reprod, **10:** 72-74.

Prabhakar, S., Gandotra, V. K. and Honparkhe, M. (2003). Dystocia due to fetal muscular hypertrophy and excessive accumulation of abdominal fat in a buffalo fetus. Indian J Anim Reprod, **24** (1): 80-8 1.

Prabhakar, S., Singh, Parkash, Nanda, A. S. and Rana J. S. (1995). Muscular pseudo-hypertrophy in a buffalo fetus-A Case Report. Indian Vet J., **72:** 997-98.

Roberts, S. J. (1971). Veterinary Obstetrics and Genital Diseases. 2nd Edn., CBS Publishers, New Delhi.