

ATYPICAL CYCLOPIA WITH ANKYLOSED MONSTER CALF AND
ITS MANAGEMENT THROUGH FETOTOMY- A CASE REPORT

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ABSTRACT

A case of dystocia associated with malpresentation and atypical cyclopic monster with ankylosed limbs was delivered Per-vaginal with the help of fetotomy in a murrah (*Bubalus bubalis*) buffalo.

Keyword: *Bubalus bubalis*, buffaloes, Ankylosed calf, cyclopia, fetotomy, monster

INTRODUCTION

Cyclopia is most commonly seen in pig and sheep (Roberts, 1971) but also reported in goats (Kanthraj, 2010; Sivasudharshan *et al.*, 2010) and cows (Gupta and Aanand, 2002; Ozcan *et al.*, 2006) and very few reports in buffaloes (Singh *et al.*, 2013; Patel *et al.*, 2019). The present case report describes in detail, the management of dystocia associated with malpresentation and atypical cyclopic monster with ankylosed limbs and successful pervaginal delivery through fetotomy.

CASE HISTORY AND OBSERVATION

A five year old Murrah buffalo in its 2nd parity with a body condition score 3.0, presented with a history of full-term gestation, straining since last twenty five hours and water bag ruptured before presented to Veterinary Clinical Complex, International Institute of Veterinary Education and Research (IIVER), Bahu Akbarpur, Rohtak, Haryana (Reg. No. 2788/10-11-2021). An increase in pulse and respiration rate however a normal rectal temperature was recorded. Per-vaginal examination revealed a dead fetus in anterior longitudinal presentation and dorso-sacral position with fore limb flexed in uterus. It was astonished to note that and abnormally large size fetal head was palpated and obstructed the birth canal.

TREATMENT AND DISCUSSION

Animal was restrained standing position inside travis. Perineal area was cleaned with antiseptic solution (potassium permanganate ratio of 1:1000). Gynaeco-clinical examination was



Figure 1. (A): All head part of cycloopia monster; (B): Ankylosed all limbs of female foetus.

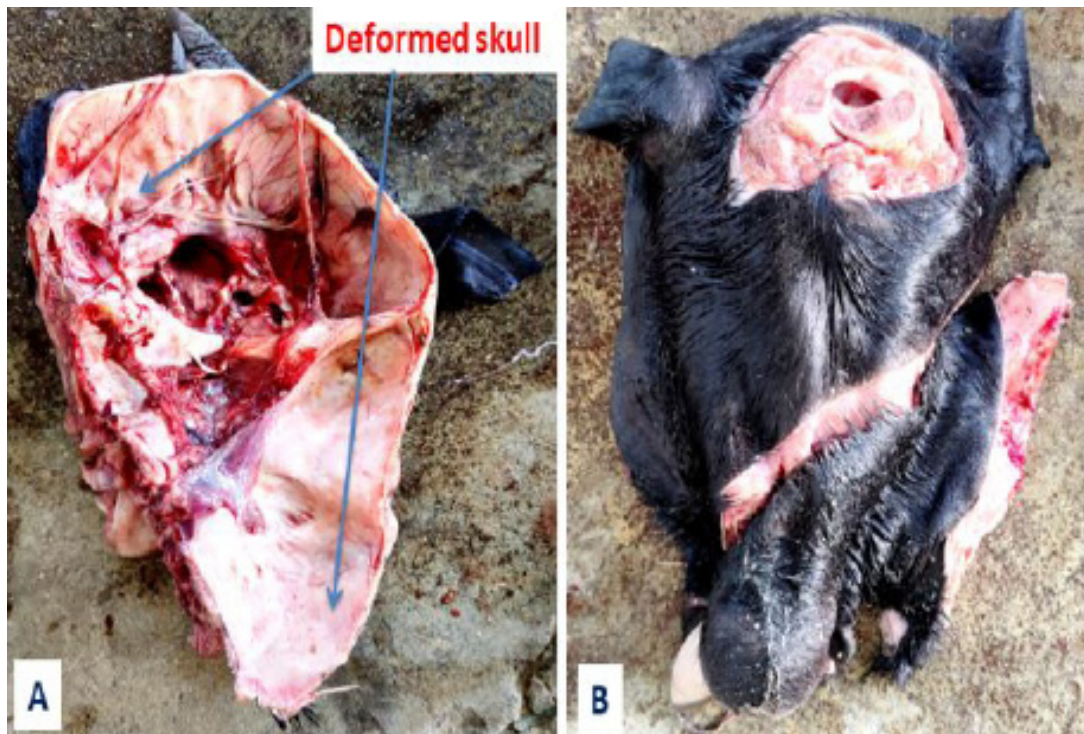


Figure 2. (A): Deformed brain and skull part of female; (B): All head part of calf.



Figure 3. (A): Deformed mandible of monster calf; (B): Ventral part of deformed mandible.

done under epidural anaesthesia (5 ml 2% lignocaine HCl) after sufficient lubrication of birth canal through liquid paraffin.

A monster foetus was palpated inside the uterus by per-vaginal examination; the foetus was unable to deliver with the help of manual traction. So it was decided to amputate the foetus with the help of double barrel Thygeson's fetotome at the cranial region / head part by subsequently three continuous cuts of forehead and neck region Figure 1 (A and B) and a female calf was delivered after foetotomy. Both ears were normal and hairs were present all over the body. The buffalo was stabilized with fluid therapy comprises of Inj. Dextrose normal saline (5%)- two litres, Inj. Calcium boroglucanate (450 ml) half I/V and half S/C, Inj. Antibiotic- Enrofloxacin (30 ml), I/M, Inj. NSAID - Meloxicam (100 mg, I/M), Inj.

antihistamine - Avilin (10 ml, I/M), and boli- Furex (Intrauterine- 6). Placenta was expelled within six hrs after foetotomy. After one week postpartum, the animal was in normal and healthy in condition.

Ozcan *et al.* (2006) reported an atypical cyclopia in a Brown Swiss cross calf with most significant malformation such as deformed mandibular, skull bones Figure 3 (A and B) and Figure 2 (A and B).

Cebocephalus (cyclopia) monster in a cross-bred cow is reported by Khasatiya (2010) and noted epitheliogenesis imperfecta over the forehead and body, having atypical deformed jaw, rudimentary and separate eye balls.

Thus the present report describes relieving dystocia due to severe deviation of neck and head associated with atypical cyclopia along with ankylosed limbs in a buffalo. The congenital

abnormality generally due to effect of genetic defects or adverse environmental effect during the organogenesis of the fetus.

These factors were ionising radiation, some of drugs like contraceptives, viraemia plus corticosteroids and salicylates, rubella vaccine, antibiotics, and amidopyrine (aminopyrine) as reported in human (Benawra *et al.*, 1980; Mollica *et al.*, 1981).

Congenital anomalies causing obstetrical problems have been well documented in cattle (Sloss and Dyfty, 1980; Shukla and Chauhan, 2004) and in buffaloes (Mahajan *et al.*, 2006; Shukla *et al.*, 2006; Kumar *et al.*, 2020). Leipold *et al.*, (1996) reported that ankylosis is one of the musculoskeletal deformities commonly encountered as congenital disease in farm and pets animals. In this condition, there are permanent joint contractures (Kumar *et al.*, 2016).

Attempt to deliver such type of monsters per-vaginally through fetotomy may be one of the best method as it avoids caesarean section, requires little assistance, reduces chances of trauma to the buffalo through use of exuberant traction and also budgetary to the farmer.

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