



## Per Vaginal Delivery Following Partial Fetotomy in Fawn with Bilateral Shoulder Flexion

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### ABSTRACT

Present case reports depicted successful management of dystocia due bilateral shoulder flexion in a free ranging deer. Deer was presented with head of fetus occuluding the birth canal. Clinical examination revealed bilateral shoulder flexion and dystocia was successfully managed through partial fetotomy of head and subsequent obstetrical mutation.

**Key words:** Bilateral shoulder flexion, Deer, Dystocia, Fetotomy, Local Anaesthesia.

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### INTRODUCTION

Dystocia is the most common reproductive problem observed in free ranging wild ruminants and zoo animals kept in captivity (Arora, 2003; Thirumurugan *et al.*, 2014). Dystocia may be caused by fetal, maternal or mechanical causes (Hafez and Hafez, 2000; Jackson, 1995). The fetal causes of dystocia are more numerous of which the commonest are postural defects of head and forelimbs (Roberts, 1971). Fetotomy remained a widely used obstetrical operation for management of dystocia in large domestic ruminants but its use for management of dystocia in deer is sparsely reported. A case of dystocia due to fetal maldisposition in a free ranging deer and its successive treatment is reported here.

### CASE HISTORY AND OBSERVATIONS

A free ranging full-term pregnant deer was brought to the veterinary clinical complex of Lala Lajpat Rai University of Veterinary and Animal Sciences from Deer Park Hisar, Haryana. Deer was observed to be standing isolated by animal attendants of farm and it was found that head of the fawn was protruded out from the vulva. Clinical examination revealed that animal was continuously straining and fawn was dead Further per vaginal examination revealed that both forelimb of the fawn were flexed under the body from the level of shoulder with head occluding the vulva.

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**Fig. 1:** Deer in lateral recumbency with head of fawn protruded out of vulva



**Fig. 2:** Decapitated head of fawn



**Fig. 3:** Delivered dead fawn

## TREATMENT AND DISCUSSION

The decision made to perform partial fetotomy and then assist delivery of fawn by mutation. Deer was restrained in lateral recumbency to avoid respiratory distress and bloat (Fig. 1). Epidural anesthesia using 2% Lignocaine hydrochloride (1.5 ml) was given and the protruded head of the fetus was decapitated using B.P. blade (Fig. 2). Luke warm liquid paraffin was infused in birth canal for proper lubrication and flexion of left forelimb was corrected by using blunt eye hook. Similarly, flexion of right forelimb was also corrected and fawn was delivered using forced traction (Fig. 3). Intravenous fluid therapy including 1 lt. dextrose normal saline (5%) was administered to animal and broad spectrum antibiotic (Inj. Neomycin, 1.5 ml IM) with other supportive treatment including multivitamin injection (Inj. Tribivet, 1.5 ml IM) and NSAIDs (Inj. Melonex, 1.5 ml IM) was advised for 3 days. Deer recovered uneventfully and was released in farm after 3 days.

Veterinary assistance for deer's dystocia is important and the time factor is crucial for the survival of the fawn and future breeding life of dam. Also, Jackson (1995)

opined that all obstetrical cases should be treated as potential emergencies and should be handled without delay. In the present case, fetal maldisposition due to bilateral shoulder flexion caused dystocia. Factors responsible for fetal maldisposition are difficult to explain. Fetal maldisposition may result from accidental trapping of nose or foot on the brim of pelvis or soft structures in birth canal during early stages of parturition (Roberts, 1971). When foot is trapped then due to contractions, it is forced backwardly and would generally progress to carpal flexion and some time may end up with shoulder flexion (Thirumurugan *et al.*, 2014). Signs of dystocia in deer includes appearance of fetal head but no fore limbs, the tail but no hindlimbs or fetal head and a single fore limb. Larger fetuses of monotocous species like deer are more prone to maldisposition than relatively small fetuses of polytocous species like sow (Jackson, 1995; Takahashi *et al.*, 2005). Fetotomy is done only when fetus is dead and preferred over cesarean section due to postoperative complications and care needed after cesarean section (Roberts, 1971). Thus, fetotomy is a promising alternative for cesarean section in free ranging species like deer in which post-operative care for longer

duration is not feasible. Also, in present case reduction of dystocia was not amenable to manual correction due to lack of space in birth canal. Thus, it was decided to perform partial fetotomy and relieve dystocia in present case.

## CONCLUSIONS

Thus, a successful correction of dystocia due to bilateral shoulder flexion and delivery of dead fawn through vulvo vagina is recorded.

## CONFLICT OF INTEREST

None.

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