Conclusion

This case highlights the successful management of thelitis in a first calving dairy buffalo using homeopathic therapy. Despite initial treatment failures with conventional approaches, homeopathy proved to be effective in resolving the inflammation of the teat. This underscores the importance of considering alternative therapies in cases where conventional treatments fail, emphasizing the potential efficacy of homeopathy in veterinary medicine.

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Dystocia in *Muntiacusmuntjak* - A case report

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Abstract

Dystocia, or difficult labor, is a critical reproductive challenge in various mammalian species, including the barking deer (*Muntiacusmuntjak*). In this case, a barking deer with a history of dystocia was presented in Teaching Veterinary Clinical Complex. The doe, displaying signs of distress and prolonged labor.The forelimb of the fawn was found hanging from the vulva.Vaginal examination revealed a dead fawn with anterior presentation with one fore limb presented in the birth canal. The mal-positioned fetus was extracted out by caesarean section.

Key words : Barking deer; Dystocia. Caeserean section

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Dystocia refers to abnormal or difficult birth (Aiello *et al*., 2005). Dystocia, commonly attributed to causes such as uterine inertia, insufficient size of the birth canal (maternal factors), or an oversized fetus and also arise from fetal factors like abnormal orientation in the birth canal. The deer family, Cervidae, probably arose from traguloid ancestors in the Oligoceneare polyestrus with each cycle lasting for 14 to 21 days and an estrus lasting for 48 hours (Darlington, 1957). Gestation period is six to seven months. (Morris, 1965).

Case History and Observations

A free- ranging full-term pregnant barking deer, was brought to the Teaching Veterinary Clinical Complex at Dr. GC Negi College of Veterinary and

Fig 1: Doe in right lateral recumbency with a one limb presented outside the birth canal

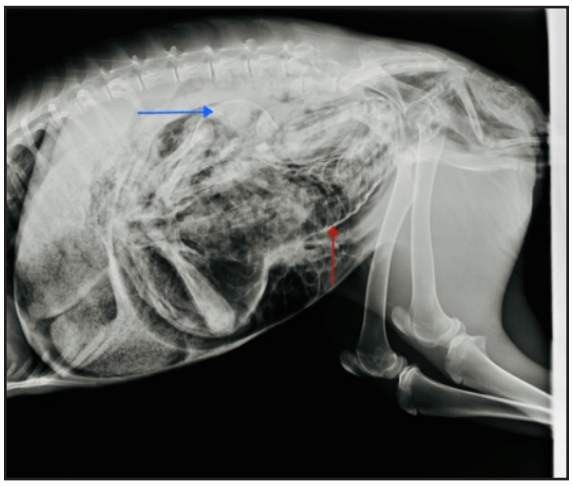

Fig. 2. Left lateral deviation of head and neck (blue arrow); Ribs of fetus (red arrow)

Animal Sciences with an anamnesis of straining for 24-48 hours, displaying anorexia and difficulty walking, following a recent attack by stray dogs. The deer exhibited signs of distress, including prolonged straining suggestive of potential birthing complications, likely exacerbated by the stress of the dog attack. The barking deer, rescued by local forest staff, presented with a fair general condition but exhibited a drop in heart and breathing rates. Notably, its rectal temperature at presentation was 90°F, requiring immediate intervention to normalize it before proceeding with further treatment, including a caesarean section. Per-vaginal examination was conducted following proper restraint, revealing anterior longitudinal presentation, dorso-sacral position, with the right forelimb positioned in the birth canal alongside left shoulder flexion (Fig 1). These findings indicated a challenging birthing situation, necessitating prompt intervention to ensure the safety of doe. Radiographic imaging provided additional insights, revealing a left lateral deviation of the head and neck, as depicted in (Fig 2). This observation highlighted the complexity of the birthing process and underscored the need for careful planning and precise execution of subsequent steps. Following thorough assessment and evaluation of the deer's condition and birthing presentation, the caesarean section was opted as treatment of choice.

Treatment and Discussion

Initially, the deer received fluid and supportive therapy to enhance its overall condition and stabilize vital parameters. This step was crucial in preparing the deer for the subsequent procedures. The doe received infusion of intravenous administration of warm crystalloid Dextrose Normal Saline (Ardex- DNS®; Aarna Healthcare) 500mL and Inj. Calcium gluconate (Calcium Sandoz®; Novartis) 10mL diluted in DNS along with intramuscular administration of Inj. Ceftriaxone and Tazobactum (Intacef-Tazo®; Intas Pharmaceuticals) (250 mg) and Flunixin meglumine (Megludyne®; Virbac) 0.5mL. During this administration of the drugs, the temperature of the room was carefully monitored so as to prevent the hypothermia in doe. Despite attempts at manual traction to aid in fetal expulsion, the procedure was unsuccessful. Subsequently, the barking deer was positioned in right lateral recumbency and the site of incision was prepared for a caesarean section. Under local anesthesia, a left oblique ventro-lateral approach was employed for the caesarean section. An incision approximately 6 inches was made, through which the dead male emphysematous fetus was carefully extracted. Following the caesarean section, intramuscular administration of the Inj. Oxytocin (Pitocin®; MSD Animal Health) 20 I.U and Inj. Methycobalamine (Neuroxin®; Zenex) 2mL was given. Post-operatively, the barking deer was closely

monitored for any signs of complications or distress. Careful attention was paid to vital signs, wound healing, and overall recovery progress. Adequate postoperative care and medication administration were essential to promote healing, prevent infections, and support the doe's recovery following the challenging caesarean section. Post-operative care involved close monitoring of vital signs, pain management, and supportive therapy to facilitate recovery.

Causes of dystocia and its management has been widely studied in farm animals but very little is known about dystocia in free living and wild ruminants or zoo animals as cases are either rare or are not diagnosed (Pople *et al*.,2001). In red deer, the issue of feto-maternal disproportion primarily arises from a combination of factors *viz.* a narrower birth canal and larger fetal size due to excessive maternal nutrition during pregnancy, compounded by mating with a larger male deer (Takahashi *et al*., 2005). Furthermore, dystocia frequently arises in deer farming due to the incorrect positioning of the calf during birth (Gill, 1988). This complication poses significant economic challenges for deers' globally. To mitigate these losses, caesarean sections are often employed to assist hinds experiencing dystocia, ensuring the survival of both the dam and calf (Takahashi *et al*., in 2005).

Summary

A case of dystocia in barking deer with anterior longitudinal presentation, dorso-sacral position, with left shoulder flextion was presented to the clinics. As traction didn't prove to be effective, caesarean section was performed to remove the dead fawn.

Acknowledgment

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