Short Communication

Management of dystocia due to breech presentation in doe: A case report

Muhammad Umer^{1*}, Sajid Ali¹, Shahid Faraz Syed¹, Saifullah¹, Muhammad Zahir¹, Abdul Baseer¹ and Fazal Wadood²

1. Faculty of Veterinary and Animal Sciences, Lasbela University of Agriculture, Water and Marine Sciences, Uthal, Pakistan

2. Department of Theriogenology, Cholistan University of Veterinary and Animal Sciences, Bahawalpur, Pakistan

*Corresponding author's email: umerchhargari81@yahoo.com

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Abstract

Dystocia is one of the most common complications in parturition associated with high risk in Balochistan. This condition causes considerable economic losses to local farmers, if not properly treated. These are mostly due to mixed breeding practices among different breeds, management problem as well as inaccessibility to veterinary practitioner. An adult local non-descript doe weighing 41 kg was presented to teaching veterinary hospital at Faculty of Veterinary and Animal Sciences (FVAS), Lasbela University of Agriculture Water and Marine Sciences (LUAWMS), Uthal. Animal had a history of difficulty in giving birth with straining since more than last 20 hours. On per-vaginal examination, the ruptured foetal membrane was present with fully dilated cervix. Similarly, bilateral hock flexion (Breech presentation) was diagnosed. No any foetal reflex was present during examination. Defective postured foetus was successfully taken out after adopted the traction procedure. Treatment was given to avoid any post-parturient infection. No any remarkable complications were seemed one week follow up of treatment. The purpose of this report is providing awareness among the livestock practitioners about incidence of dystocia cases, draw backs of management malpractices to be held in the mix breed herd in the Balochistan province.

Keywords: Breech; Doe; Dystocia; Management

Introduction

Difficulty in giving birth to a new born is called dystocia, sometimes requiring the significant human assistance [1]. The dystocia in small ruminants is well described by many veterinary obstetricians. Relatively, the incidence of dystocia in does is less as compared to large ruminants. In normal parturition, animal isolates itself from the herd and shows signs of restlessness, loss of appetite, and abdominal contraction during first stage of parturition. In second stage of parturition, the expulsion of foetus occurs

within 15-30 minutes, while, the third stage of parturition followed by foetal membrane expulsion [2]. However, dystocia may cause mortality both in kids and dams [3]. Importantly, proper diagnosis of dystocia has a key role in the successful treatment before its initial management [3]. These obstetrical techniques include manual traction, hormonal therapy, fetotomy and caesarean section [4]. A large number of local farmers are unaware about the care and management of parturition of goats in Balochistan. In this short communication,

a case of dystocia related to breech presentation with bilateral hip flexion was reported with the incidence, related management and causes of dystocia. There was no study found from Baluchistan on the incidence of dystocia in the small ruminants; although the largest proportion of small ruminant population has been reared in Baluchistan.

History

A local non-descriptive breed of goat weighing 41 Kg was presented with a history of difficulty in giving birth to Animal Reproduction Clinic, FVAS, LUAWMS, Uthal, Balochistan. The parturition process was initiated 20 hours before presentation to the clinic. The animal showed the signs of restlessness, straining, pain and little bloody discharge from vulva.

Physical examination

The body temperature of animal was slightly increased (103.5 °F) and increased heart rate (tachycardia). The animal was laid on lateral decubency position due to pain and straining. There was no any wound or injury on the hind limb. However, there was little blood shreds were observed on floor and vulvar region. Vaginal examination was performed and revealed that cervix was fully dilated, the foetal membrane was already ruptured and little fluid was rushing. Animal was not dehydrated and it was checked by skin fold test and skin turgor test for dehydration but it was restless. Moreover, on foetal examination no any reflex was present; both hinds were intact in uterus (breech position) only both hip joints were visible with posterior longitudinal presentation. Foetus was already dead with normal posterior longitudinal presentation. Similarly, the position of foetus was normal with dorso-sacral posture. Finally, dystocia was diagnosed due to defected posture with bi-lateral hip flexion at right and left hip joint.

Management of dystocia

The foetuses removed via traction after subsidence of bilateral hip flexion. Before starting correction of default posture, 2ml of xylazine (2%) was injected between 1st and 2nd inter-coccygeal space for epidural anaesthesia to prevent the straining. Moreover, proper lubrication of birth canal was done using mustard oil as available locally.

Assistance during traction

Doe needs assistance for safe delivery, due to straining and severe pain, kid was presented with defective breech posture. Therefore, the foetus was pushed back for posture correction by retro-pulsion. In this stage, the doe was alert with abdominal as well as active uterine contractions. Moreover, adequate space was obtained after retro-pulsion, each flexed hind limb was corrected by extended medio-posteriorly. After faulty posture correction, traction was applied on both hind limbs of kid to taken out the foetus from the birth canal. Eventually, dead kid was found with putrefied discharge. Afterward, uterus was checked for twin foetuses, and entire uterine wall was cleaned gently for any remaining placental attachment (Fig. 1).

Treatment

The doe was treated with Chlorpheniramine maleate @ 0.5 mg/kg body weight, diclofenac sodium @ 2.5 mg/kg body weight and Oxytetracycline @ 20 mg/kg body weight intramuscularly. Moreover, one pessary of Unetol, Star, Laboratories (PVT, LTD) was placed inside the uterus for prevention of uterine infection. The composition of pessary is as under;

Sulphathiazole	1750mg
Pencilline-G	100,000 i.u.
Streptomycine Sulphate	50 mg
Ethinylloestradiol	0.5 mg

There was no any uterine infection of other complication were seen in one week follow up treatment. Similarly, the doe was alert and responded well to treatment showed normal clinical parameters.

Figure 1. Dystocia management in doe: (a) successfully dead foetus was removed by applying traction procedure; (b) dead foetus with foetal membranes

Discussion

Foetal dystocia was more common as compared to maternal dystocia, and the rates of incidence were 54% and 37%. Deviation of head, forelimb flexion, breech presentation, dog-sitting position and foetal monstrosities were the common causes from the foetal side. However, the cervical non-dilation is the common cause from the maternal side [5].

Dystocia in small ruminant is very common condition in a large area of Balochistan. Besides foetal and maternal causes, other factors such as lack of proper care, acute shortages of veterinary personnel and assistance, horrified the situation for small animal farmer. In addition, veterinary personnel have not enough expertise in diagnosis of kidding and lambing difficulties, which is a very crucial step for dystocia treatment [6]. Generally, maternal and foetal are the

common causes but the most common cause of dystocia is due to foetal postural defects [7]. In this clinical case, the foetal postural defect with bi-lateral hip flexion was diagnosed; in which both hind legs were intact in the uterus and hip joints were tightly intact in the birth canal. In flocks with high twin proportions, the hock and hip flexion postures are the significant causes of dystocia [8].

According to present clinical case, the foetus was died within uterus due to delayed and bilateral hip flexion. The mal-postures can be handled easily in ewes as compared to cattle. In delayed cases, foetal fluid is needed to be exchanged; the manipulation of the foetus and its retro-pulsion must be gently carried out. In cases of irreducible cause of defective posture in dead lambs, the alternative appropriate fetotomy or caesarean section, hysterotomy could be performed [8].

Conclusion

Goats are valuable and productive animal for local poor farmers in Balochistan. Many local farmers are unaware about the care and management of parturition of goats during pregnancy. First decision to be taken for dystocia treatment is very important for obtaining the significant results in goats. Similarly, does mostly require less assistance to fix bilateral hip flexion defect compared with other animals. It is concluded that the obstetrical procedures may consider as potential worth for goat breeding. Moreover, awareness about the incidence, management and veterinary personnel services must be provided to local farmer of Balochistan for saving the life of kid and doe.

Authors' contributions

Conceived and designed the experiments: M Umer & Saifullah, Performed the experiments: M Umer, S Ali & M Zahir, Contributed reagents/ materials/ analysis tools: A Baseer & F Wadood, Wrote the paper: M Umer, SF Syed & Saifullah.

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