

Research Paper

Successful C-section of a Non-descriptive Goat to Relieve from Dystocia

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ABSTRACT

Present case study was associated with successful management of a pregnant doe from dystocia by caesarean section. A 1.5 years old pregnant non-descriptive doe was admitted in the TVCC, C.V.A.Sc., Pantnagar, Uttarakhand with a history of complete gestation period and prolonged labor (more than 12 hours). There was protrusion of both fetal forelimbs from the vaginal opening. Gynaecological examination revealed that the fetus was in Nape presentation. The case was diagnosed as dystocia due to abnormal fetal disposition. The animal was subjected to caesarean operation. The operation was performed under light sedation with 0.1 ml of xylazine and regional inverted L- block was also done with 2% Lignocaine. An oblique incision was given at left flank and recovery of one dead male fetus occurred. Post-operative treatment was done with Inj. Amoxicillin-sulbactam @10 mg/kg intramuscularly, Inj. Tribivet® 5 ml intramuscularly, Inj. Chlorpheniramine maleate @0.5 mg/kg intramuscularly, Meloxicam@0.5 mg/kg intramuscularly and NS 250 ml for five days. Local antiseptic dressing and fly repellent spray was advised for every alternative day. The skin suture was removed on 10th day post-surgery.

Keywords: Doe, Nape presentation, Dystocia, Caesarean operation

Dystocia or difficulty in birth is a common problem in all farm animals including goats and causes death of the fetus even death of the dam if not treated earliest (Majeed *et al.* 1992). In small ruminants, dystocia mainly occurs due to fetal mal position, multiple fetuses, fetal disproportion, incomplete cervical dilation and uterine inertia (Reddy *et al.* 2016; Iqbal *et al.* 2020). The incidence of dystocia of small ruminants ranged from 1-4% (Brounts *et al.* 2004; Ismail, 2017). Some authors reported higher as 8.57% of incidence (Bhattacharyya *et al.* 2008). It was reported that more than 60% dystocia occurs in primipara (Sharma *et al.* 2014). Successful management of dystocia depends upon the correct diagnosis and suitable measurement (Ahmed *et al.* 2019). In case of small ruminants, caesarean operation is preferred to relieve dystocia as manual obstetrical operation is difficult to fetal oversize and narrow pelvic girdle (Hussain

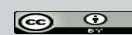
and Zaid, 2010). The survival rate of dam after caesarean section is around 94% (Bhattacharyya *et al.* 2015). The prognosis of caesarean surgery and future fertility was found good in case of goat if vaginal manipulation is less and prompt surgical intervention (Ismail, 2017).

Case History and Diagnosis

A 1.5 years old primipara non descriptive doe (weighing 20 kg) was represented to TVCC, C.V.A.Sc., Pantnagar, Uttarakhand with a prime complaint of prolonged kidding period. The doe started straining 24 hours before the admission and

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water bag was ruptured. On physical examination, the animal observed dull, depressed and both foetal limbs were protruded from the vaginal opening (Fig. 1). Clinical examination revealed normal respiration and heart rate, rectal temperature was 101.4o F. Upon gynaecological examination, it was confirmed that the foetus was in Nape presentation. The foetus was dead and the case was diagnosed as dystocia due to foetal malposition. Vaginal delivery was ruled out after failure of mutation operations and caesarean operation was decided to relieve dystocia.



Fig. 1

Treatment

The doe was stabilized with Inj. Dexamethasone 5 ml intramuscularly, Inj. Neohista (antihistaminic) 2 ml intramuscularly, DNS 250 ml intravenously and NS 100 ml intravenously. The left flank area was shaved and cleaned. For light sedation, 0.1 ml of xylazine was given intramuscularly. Regional anaesthesia was applied at operative site by inverted L block with 2% lignocaine. About 15 cm oblique incision was given at middle left para lumbar fossa and about 5 cm incision was made over gravid horn at inter caruncular area (Fig. 2) and one dead male foetus was recovered (Fig. 3). The uterine wall was sutured by inverted suture with catgut and the muscle was sutured by continuous suture pattern with catgut. Finally, the skin was closed by horizontal suture with silk (Fig. 4). During the whole time of operation, total 250 ml of NS was given with moderate flow. During post-operative care, inj. Amoxirum forte @10 mg/

kg intramuscularly, inj. Meloxicum @ 0.5 mg/kg intramuscularly, inj. Chlorpheniramine maleate @0.5 mg/kg intramuscularly, inj. Tribivet @ 5 ml intramuscularly and inj. NS 250 ml intravenously were injected for five days. Antiseptic dressing and application of fly repellent spray were advised for every alternative day. The skin suture was removed on 10th day after surgery.



Fig. 2



Fig. 3



Fig. 4



DISCUSSION

The causes of dystocia mainly divided into two groups as maternal and foetal causes (Thedford, 2008; Hussain and Zaid, 2010). The incidence of foetal origin dystocia was reported 54.29% (Bhattacharyya *et al.* 2015). The incidences reported for maternal causes of dystocia were 31.4 % (Purohit *et al.* 2006) and 37.14% (Bhattacharyya *et al.* 2015). Within foetal origin factor, around 45.45% dystocia caused due to foetal malposition in uterus (Sharma *et al.* 2014). In present case study the foetus was in nape presentation. This was a foetal cause of dystocia. Treatment of dystocia either mutation (Retropulsion, version, adjustment and traction) or surgical management. Per-vaginal delivery of the maldisposed foetus of small ruminant is very difficult due to narrow birth canal causing rupture of vagina, uterus and subsequent chances of prolapse of uterus and abdominal organs (Sharma *et al.* 2014). Caesarean section is more effective treatment of dystocia in case of small ruminants (Sharma *et al.* 2010; Sharma *et al.* 2014). In present case, caesarean operation was considered after making efforts for vaginal delivery. For light sedation of the animal low dose of xylazine (0.1 mg/kg b.wt.) and to perform the caesarean section regional anaesthesia (inverted L block) with 2% lignocaine were used. To combat the secondary complications, broad spectrum antibiotic Amoxicillin-sulbactam was given for five days. Post-operative pain management was done with Meloxicam @ 0.5 mg/kg intramuscularly. Supportive treatment was done with multivitamin and normal saline.

CONCLUSION

Dystocia is a common but important problem of all farm animals. It causes death of the foetus and sometime even the death of dam if treatment is not started earliest. Proper and prompt management of dystocia is necessary to save the life and maintain subsequent fertility of dam.

REFERENCES

- Ahmed, N., Baishya, M.P., Das, J.M., Das, A., Boro, P.K., Yadav, S.N. and Sarma, B.K. 2019. Surgical management of dystocia in a Assam hill goat: A case report. *Haryana Vet.*, **58**: 114- 115.
- Bhattacharyya, H.K., Fazili, M.U., Bhat, F.A. and Buchoo, B.A. 2015. Prevalence and Dystocia of Sheep and Goats: A Study of 70 Cases (2004-2011). *J. Adv. Vet. Res.*, **5**(1): 14-20.
- Bhattacharyya, H.K., Goswami, B.K. and Biswas, R.K., 2008. Effect of insemination time on multiple kidding and dam's blood constituents in Beetal X Assam local goat. *Indian J. Small Rumin.*, **14**(1): 107-109.
- Brounts, S.H., Hawkins, J.F., Baird, A.N. and Glickman, L.T. 2004. Outcome and subsequent fertility of sheep and goats undergoing caesarean section because of dystocia: 110cases (1981- 2001). *J. American Vet. Med. Assoc.*, **224**(2): 275-279.
- Hussain, S.O. and Zaid, N.W. 2010. Dystocia in goats, causes and treatment. *AL-Qadisiya J. Vet. Med. Sci.*, **9**.
- Iqbal, N., Aslam, S., Hussain, N., Luqman, Z. and Jawad, H. 2020. Dystocia handling by cesarean section in beetal goat in Pakistan: a surgical approach. *J. Anim. Health Prod.*, **8**(3): 134-137.
- Ismail, Z.B. 2017. Dystocia in sheep and goats: Outcome and fertility following surgical and non-surgical management. *Mac. Vet. Rev.*, **40**(1): 91-96.
- Majeed, A.F., Taha, M.B. and Azawi, O.I. 1992. Caprine Caesarean section. *Small Rumin., Res.*, **9**: 93-97.
- Purohit, G.N., Gupta, A.K., Gaur, M., Sharma, A. and Bihani, D.K. (2006). Periparturient, disorders in goats- a retrospective analysis of 324 cases. *Dairy Goat J.* **84**: 24-33.
- Purahit, G.N. 2006. Dystocia in the sheep and goat- A review. *Ind. J. of Small Rumin.*, **12**(1): 1-12.
- Reddy, N., Vamshi, K.G., Aruna Kumari, K. and Ramchandra, R. 2016. Dystocia Due to Fetal Goiter in A Goat-A Case Report. *J. Anim. Sci.*, **73.5**: 1487-1492.
- Sharma, A., Kumar, P., Singh, M. and Vasishta, N. 2014. Retrospective analysis of dystocia in small ruminants. *Intas. Polivet.*, **15**: 287-289.
- Thedford, T.R. 2008. Delivery problems in sheep and goats and methods of correction. www.lordoats.com. 2/8/2008.

