

## **A RARE CASE OF DYSTOCIA IN A COW AND ITS CLINICAL MANAGEMENT**

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**Abstract:** A rare case of dystocia in a cow due to fracture of tubercoxae and its clinical management is discussed.

**Keywords:** Fracture of tubercoxae, Narrow pelvis, Dystocia, Cow.

### **Introduction**

Dystocia means delayed or difficult calving that may require manual assistance (Lombard *et al.*, 2007). Congenital and acquired deformities of the pelvis, cervix, vagina or vulva lead to dystocia by altering the shape and volume of the birth canal (Sloss and Dufty, 1980). Among various maternal causes, dystocia due to narrow pelvis accounts for 9.2% (Sharma *et al.*, 1992). Narrowing of pelvis due to fracture may be an important cause of dystocia in domestic animals (Noakes *et al.*, 2001). The present report describes a rare incidence of dystocia due to fracture of tubercoxae leading to narrowing of pelvis.

### **Case history and observation**

A second calving full term jersey cross cow with history of dystocia was came to notice. As per history, the water bags had ruptured and still straining for more than 24 hours. Reportedly ,the cow was suffered a pelvic fracture 6 months back due to falling down in to a deep drench and was not treated for fracture. The present case had been handled by the local veterinarian but failed to deliver the calf.

Per vaginal examination revealed one foetal forelimb in the birth passage and the remaining part foetus was deep in uterus. Thorough careful examination of pelvic cavity revealed a fracture of left shaft of ilium lead to narrowing of pelvis. So as such per vaginal delivery of the foetus was not possible, then it was decided to perform caesarean section.

### Treatment and Discussion

The caesarean section was performed through oblique incision just below left flank under epidural and local infiltration (Inverted L" block) anaesthesia in right lateral recumbency. A dead female foetus was delivered. The surgical wound was sutured as per standard procedure. Pre operatively the animal was stabilized with 2000ml of DNS I/V with broad spectrum antibiotic (Intacef 4.5gm). Post obstetrical treatment for first 2 days was parental administration of the same broad spectrum antibiotic Bid with DNS 2000ml per day and injection melonex 15 ml I/M, injection Anistamine 10 ml I/M and injection Tribivet 10 ml I/M which was continue for 7 days, in addition on 3 rd day 200 ml of calcium borogluconate and vitamine AD3 was given. Along with homeopathic drug of Arnica 30 potency 10 drops / time orally for 4 times a day for first 2 days were also given. The cow stood with in 4 hours post operative and started ruminating the day night itself. Wound was dressed as per standard procedure. Two days after surgery the cow came to normal route in life. Fallow inquiry revealed that the animal had an uneventful recovery.

Though not common, pelvic fracture can occur when the cow falls on a hard object or deep drench leading to narrowing of pelvis. Previously accidental injuries of the pelvis caused by automobile vehicle, rolling of dam to relive torsion, falling on iron stake had been reported in domestic animal (Noakes *et al.*, 2009 and Singh *et al.*, 2015). Narrowing of pelvis may occur due to accidents causing pelvic fracture (Sharma *et al.*, 1992) or pathological causes like tumours (Sharma *et al.*, 1977). In the present case, pelvic configuration with outward projected tubercosae may be the most probable case of fracture while falling in to a deep drench and resulting in dystocia (**Fig-1**). Caesarean operation is being universally followed in cases of complicated dystocias (Purohit *et al.*, 2013). But they should be performed as early as possible otherwise lives of calf as well as dam are questionable. Purohit *et al.* (2012) reported that no calf was born alive, when the case was presented beyond 36 h after 2nd stage of labour as observed in the present case. It was concluded that caesarean section should be adopted as early as possible after onset of 2nd stage of labour when normal parturition is not progressed. As narrow pelvis due to previous history of accidents of pelvis can be anticipated to have dystocia at full term, it is recommended to plan for caesarean operation in order to save life of the calf as well as cow. In the present case narrowing of pelvis due to fracture, the caesarean was performed to deliver the dead foetus. Due to proper care and treatment after caesarean the cow recovered uneventfully.

## References

- [1] Lombard, J.E., Garry, F.B. Tomlinson, S.M and Garber, L.P. 2007. Impacts of dystocia on health and survival of dairy calves. *J. Dairy Sci.*, 90: 1751-1760.
- [2] Noakes, D.E., Parkinson, T.J. and England, G.C.W. (2001). *Arthur's Veterinary Reproduction and Obstetrics*. W.B. Saunders company, Harcourt publishers limited, Philadelphia, Pennsylvania, pp 229-44.
- [3] Noakes, D.E., Parkinson, T.J and England, G.C.W. (2009). *Veterinary Reproduction and Obstetrics*, 9th edition, Saunders, Elsevier, pp-347-366.
- [4] Purohit, G.N., Kumar, P., Solanki, K., Shekher, C. and Yadav, S.P. 2012. Perspectives of fetal dystocia in cattle and buffalo. *Vet. Sci.Devel.*, 2(8): 31-42.
- [5] Purohit, G.N., M. Gaur, M., Kumar, A., Shekher, C and S. Ruhil, S.(2013) Perspectives of caesarean section in buffaloes. *Asian Pacific J. Repr.*,2(3): 229-237.
- [6] Sharma, G.P., Reddy, V.P. and Hafeezuddin, M.1977. A note on fibroma of cervix in a buffalo. *Indian Vet. J.*, 54: 763.
- [7] Sharma, R.D., G.S. Dhaliwal G.S. and Prabhakar, S.1992. Percutaneous fetotomy in management of dystocia in bovines. *Indian Vet. J.*, 69: 443-445.
- [8] Singh, A.K., Amin, R.U., Bilawal Singh, Gurdip singh, Singla ,V.K. and Brar, P.S. (2015). Fracture of tubercoxae in a buffalo: A cause of Dystocia and its Clinical Management. *Indian vet. J.*, 92(10):67-68
- [9] Sloss, V and Dufty, J.H.(1980). *Handbook of Bovine Obstetrics*. The Willams and Wilkins Company, Baltimore, USA, p-111.

### PHOTOGRAPH SHOWING DEFORMED PELVIS ON ITS LEFT SIDE

