

## Clinical Management of Obturator Paralysis in a Cow

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### Abstract

A Jersey crossbred cow in its third parity suffered from Obturator paralysis due to improper handling of dystocia. The cow was successfully treated by combination of steroids, nerve stimulants and physiotherapy.

**Keywords:** Dystocia; obturator nerve; physiotherapy

### Introduction

Obturator paralysis occurs as a result of pressure on obturator nerve during parturition causing inability to adduct thighs and cow is in recumbency (Sack *et al.*, 2002). Large size fetus if delivered by forceful traction may results in damaging nerve endings of dam. The affected dam occupies a typical 'frog sitting posture' with a grave.



Fig. 1: Sternal recumbency

### History and Observation

A seven year old third calver, crossbred Jersey cow was referred with complaint of being in sternal recumbency since 5 hours (Fig. 1). The cow was severely exhausted because of violent

traction and delivery of a dead fetus. On clinical examination by needle prick revealed no sensation in hind quarter. On the basis of owner complaint, posture of the animal and needle prick test, it was tentatively diagnosed as obturator paralysis.

### Treatment

To overcome the exhaustion, the cow was administered 10 liters of Dextrose Normal saline intravenously. 10 ml of Inj. Dexona<sup>a</sup> was administered epidurally along with Inj. Intacef Tazo<sup>b</sup> 4.5 g, I/m; Inj. Tribivet<sup>b</sup> 10ml, I/m; Inj. Melonex<sup>b</sup> 5ml, I/m. The cow was put on a sling and was made to stand at least 2 hrs in a day (Fig. 2). The colostrum was removed in order to ease pressure of udders. The cow was given physiotherapy *via* infra-red lamp (Fig. 3) of abductor muscles and joints twice a day. This procedure was continued for 14 days. The cow showed minimal signs of improvement upto the 10<sup>th</sup> day, however significant improvement was



Fig. 2: Cow made to stand using sling

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observed after day 11<sup>th</sup> when it began to put weight on its hind legs. The sling support was continued for another 3 days after which it was removed. Further recovery of animal was uneventful (Fig. 4).



Fig. 3: Physiotherapy in progress

### Discussion

The case was a downer cow because the cow had remained on sternal recumbency for more than 24 hours after initial recumbency and after treatment for primary medical problems (Merck's Vet. Manual, 2005). The cow was diagnosed with obturator paralysis which was causing inability to stand, knuckling of fetlock joints and particular 'dog sitting' or 'frog sitting' posture that cow preferred. The affected muscle and joints were massaged regularly in order to restore blood



Fig. 4: Recovered animal

supply and nerve sensibility (Ogilvie, 1998 and Muthoni and Nganga, 2009).

### Summary

A case of obturator paralysis is successfully discussed with uneventful recovery of cow.

### References

- Mwaura Sarah Muthoni and Kiarie Nganga (2009). Successful management of downer cow in Limuru, Kenya. *J. Anim. Plant Sci.* 4: 379-83.
- Sack W, Wensing CJG, Dyce KM (2002). Obturator paralysis, *Textbook of Veterinary Anatomy*, Saunders.
- Merck Veterinary Manual (2005) Obturator Paralysis. Ninth Edition, USA. <http://www.merckvetmanual.com/mvm/index.jsp?file=htm/bc/91100.htm>
- Ogilvie Timothy H. (1998). *Large Animal Internal Medicine*. National Veterinary Medical Series Edition Number: 11, Wiley, John & Sons, Blackwell Publishers.