

Per-Vaginal Delivery of a Schistosomus reflexus Monster Fetus Due to Dystocia in a Friesian Cross Bred Cow-A Case Report

Ezakial Napoleon R*, Palanisamy M, Ravikumar K, Prakash S, Manoharan S, Senthilkumar K, Selvaraju M and Vikramachakravarthy P

Department of Clinics, Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal -637 001, Tamil Nadu, India

Case Report

Received date: 07/17/2018

Accepted date: 27/08/2018

Published date: 04/09/2018

*For Correspondence:

R Ezakial Napoleon, Department of Clinics, Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal -637 001, Tamil Nadu, India, Tel: +9443461168

E-mail: napolean1964@yahoo.co.in

Keywords: Dystocia, Obstetrical mutation, Schistosomus reflexus, Teratology

ABSTRACT

Dystocia due to maternal and fetal complications are observed during the periparturient period is not uncommon, but difficulty due to teratological defective fetus and its successful per vaginal delivery after performing obstetrical mutation is given in this case study. A Friesian cow in its third calving or around five years old was referred with the history of difficulty in calving and suspected for a tear in the genitalia with the intestines protruding out through vulva. Fetal anomalies affecting the trunk causing dystocia is not uncommon, this congenital anomalous fetus with the strong ventral curvature and angulations of the spinal cord was confirmed by vaginal examination and on deciding the internal pelvimetry and sufficient space in the dam it was decided to cast the dam on a hind quarter elevator. After giving the epidural anesthesia to the dam and infusing enough vaginal lubricants, obstetrical mutation was performed to correct the transverse ventral presentation into the anterior presentation with dorsosacral position. By giving traction and forced extraction and securing the ankylosed limbs, the anomalous fetus named "Schistosomus reflexus" fetus was delivered. The cow was successfully managed without any tear in the genitalia and sent with uneventful recovery following ecbolics, antibiotics and supporting fluid therapy for the subsequent three days.

INTRODUCTION

Inherited congenital fetal anomalies are more probable in exotic breeds of cattle characterized by the strong ventral convex contracture with the spinal inversion producing an exposed abdominal viscera named as schistosomus reflexus [1,2]. Schistosomus reflexus is a major congenital fetal anomaly most commonly leading to the dystocia in ruminants.



Figure 1. Exposed viscera of the monster fetus through the Cow's genitalia.

This fetal anomaly includes complexes of deformities which at times leads to the fatal end of the dam either causing severe damage and tear in the genitalia or delayed in the second stage of labour ending in laparohysterotomy and further complication. Reports' pertaining the incidence of this schistosomal reflexus-scoliosa or bifida is not uncommon but prompt obstetrical intervention, diagnosis and manoeuvre always leads to the success as in the present case.

CASE REPORT

A pluriparous Friesian cross bred cow in its third calving was presented to the casualty unit of the Teaching Veterinary Clinical Complex of the Veterinary College and Research Institute, Namakkal with the history of having treated and suspected for uterine tear and exposure of the viscera is anamnesis (**Figure 1**). Vaginal examination revealed exposed viscera of the fetus occupying the entire vaginal cavity and the dead fetus in the anterior presentation with right lateral deviation of head and neck and dorso sacral position with bilateral shoulder flexion. The animal was secured and by lifting the tail and pin pointing the sacro coccygeal joint 4 ml of 2 per cent lignocaine hydrochloride was given as epidural anesthesia (**Figure 2**).



Figure 2. Periparturient Cow in the trevis.

The animal was then taken and cast on the hindquarter elevator for operating ease during the obstetrical manoeuvrability. Sufficient obstetrical gel was infused into the birth canal for lubrication and obstetrical mutation involving repulsion of the foetus into the birth canal was carried out following rotation, version and adjustment of the extremities by correcting the deviation of head and neck and shoulder flexion. By applying Williams obstetrical long hook on the right inner canthus of the eye (**Figure 3**) and by giving forced traction a dead female fetal monster named "Schistosomus reflexus" was relieved with exposed viscera and improper closure of the thorax and abdomen and entire placenta.



Figure 3. Cow in hindquarter elevator.

A strong angulation of the spinal curvature with stricture of the muscles and joints was also encountered. Simple traction has been suggested as successful delivery [3-6] however in cases of dam with lack of space in the vaginal cavity and emphysematous fetus fetotomy and cesarean sections was suggested and employed. The cow was maintained under fluid therapy with antibiotics, ecbolics and other supportive therapy which led to an early recovery within three days (**Figure 4**). The exact cause is not known but the probability of this monstrosity could be due to teratogens causing deformities in the developing fetus. The lethal teratogens could be drugs, medicines like hormones, chemical exposures, virus, toxic weeds and plants and fetal vulnerability.



Figure 4. Schistosomus reflexus fetus with ventral curvature of the spine and exposed.

CONCLUSION

Per vaginal delivery with proper lubrication and obstetrical mutation and forced traction through the birth canal will favour early recovery during the post-partum period unlike the fetotomy and laparohysterotomy where the complications and recovery is questionable. If the disorientation and acute angulation of the spine is severe with lack of vaginal space, it may lead to serious post-operative complications. Partial fetotomy by removing certain parts of the fetus thus creating space in the genital tract is suggested and if the spine is notice with strong curvature preventing the passage again fetotomy may not be possible leading to caesarean section. Knowledge on the pelvimetry and fetal monstrosity with prompt decision will pave way to secure the dam and the present communication gives information on vaginal delivery after assessing the feto-pelvic proportion, pelvimetry, teratology and obstetrical mutations involving rotation, repulsion and version with forced traction.

REFERENCES

1. Sitali MC, et al. Schistosomus reflexus from a Holstein -Friesian cow -Case report. Therio Insight 2014;4:65-70.
2. Sloss V and Dufty JH. Hand book of Bovine Obstetrics, 1980; Waverly Press, Inc. Mt. Royal and Gulford Aves, Baltimore, MB 21201 USA.
3. Anand KP, et al. Schistosomus refluxus Monster fetus in bovine and its successful management. Res J Vet Pract. 2017;5:25-27.
4. Mehrotra S, et al. Schistosomus refluxus with eutocia in cross bred cow -A rare case report. Intl J Sci Envir Tech. 2016;5:4473-4476.

Research & Reviews: Journal of Veterinary Sciences

5. Roberts SJ Veterinary Obstetrics and Genital Diseases 1971; 2nd Ed. Edwards Brothers, Inc., Ann .Arbor, Michigan, USA.
6. Velladurai C, et al. Dystocia due to Schistosomus reflexus in a crossbred jersey cow - A case report. Indian J Vet Sci Biotech. 2015;10:80-81.