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Case report

Caesarean operation to relieve dystocia due to left lateral deviation of the neck of the foetus in a four year's old Sokoto Gudali heifer: a case report

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ABSTRACT

A Caesarean operation was undertaken to relieve a dystocia problem in a Sokoto Gudali cow. The four years old cow with an estimated weight of 300kg was presented to the Veterinary Teaching Hospital Usmanu Danfodiyo University Sokoto by a client from the Minanata area of Sokoto town on 13/05/2012. The cow was managed semi-intensively with three other cows and was usually supplemented with wheat bran and corn stalk. The patient was routinely dewormed, but no history of vaccination. On physical examination, the patient was recumbent and straining intermittently; on vaginal exploration, the cervix was found to be dilated. The temperature, pulse and respiratory rate 40.1°C, 85beats/minutess and 30 cycles/minutes respectively. The foetus was found to be in anterior presentation, dorsal position, and the limbs were extended but the foetal neck was deviated to the left. Manual manipulation to correct the foetal posture proves impossible .hence the dystocia was relieved through aseptic caesarean operation. The procedure and the role of caesarean operation in animal husbandry were discussed in the paper.

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1. Introduction

Dystocia is a common complication of the parturition process. It is said to occur when a parturition process is believed to be prolonged, difficult or even impossible (Roberts 1971; Straitton, 1992; Peter and Jackson, 1995). Dystocia in heifers is obviously more common than in older multiparous animals. This could be due to physiological inexperience, hormonal imbalance, and occasionally fetomaternal disproportion or due to abnormalities of presentation, position and posture. The present case being reported could be said to be due to a combination of fetomaternal disproportion and abnormality of posture. i.e. the deviation of the neck to the left. The foetus was a relatively large foetus, the dam was a *primipara* heifer, and the birth canal of the dam is a relatively small and did not provide adequate room for obstetrical mutation. Several vigorous futile attempts were made at retropulsion and extension of the deviated neck. It was then decided that a caesarean operation was necessary to deliver the foetus.

2. History/Signalment

Four years old Sokoto Gudali Heifer with an estimated weight of 300kg was presented to the Veterinary Teaching Hospital (VTH) Usmanu Danfodiyo University Sokoto by a client from the Minanata area of Sokoto town on 13/05/2012 with the chief complaint of straining for about 12 hours. The cow was managed semi-intensively with three other cows and was usually supplemented with wheat bran and corn stalk. The patient was routinely dewormed, but no history of vaccination. On physical examination, the patient was recumbent and straining intermittently; on vaginal exploration, the cervix was found to be dilated. The temperature, pulse and respiratory rate 40.1°C, 85beats/mins and 30cycles/minutes respectively. The foetus was found to be in anterior presentation, dorsal position, and the limbs were extended but the neck was deviated to the left. The heifer was managed semi-intensively with three (3) other cows and was fed on wheat bran and corn stalk. The patient was dewormed about earlier, but had no history of vaccination. On physical examination, the patient was recumbent and straining intermittently; there was vaginal Prolapse. On vaginal exploration, the cervix was not fully dilated. The temperature, pulse and respiratory rate were 40.1°C, 85beats/mins and 30 cycles/ minutes respectively. The problem list includes Recumbency, Straining, dystocia and a **tentative diagnosis** of Dystocia was made. Faecal and blood sample were taken for parasitological examination. To take blood sample for Packed Cell Volume(PCV) and complete blood count, to take vaginal swab to Microbiology for culture and sensitivity.

3. Management and discussion

Dystocia cases are regarded as emergencies and should be regarded as such always (Roberts 1971, Straitton, 1992 Peter and Jackson, 1995). The present case was promptly attended upon receipt of the signalment. The ambulatory team on arriving at the scene quickly conducts routine physical, clinical, and obstetrical assessment of the dam. The dam was seen to be in good bodily condition and clinically stable. Blood and faecal samples were collected for laboratory analysis. Blood sample was sent to the physiology and Parasitology laboratories, results of which indicate normal haemogram and no haemoparasites were found.

Obstetrical assessment via vaginal exploration reveals a fairly large foetus in anterior presentation with the two forelimbs presenting in vulval area, further exploration reveals a deviated neck to the left. Several attempts were made to correct the anomaly but prove impossible. Partly because of the large size of the foetus and minimal room for manoeuvre within the birth canal. Several attempts were made at retropulsion to enable extension of the deviated neck. All attempts at retropulsion, extension did not succeed. It was eventually concluded that a caesarean operation is necessary to relieve the dam and possibly the foetus. A caesarean operation was performed aseptically with all the necessary surgical precautions through the left flank approach as in Straitton, (1992), Peter and Jackson, (1995), Roberts, (1972) a dead foetus was removed from the uterus. It was not possible to ascertain the viability of the foetus before delivery (even though it was noted that the foetus did not show a pinching reflex,) due to the fact that the head was deviated and in the pelvis as such the suckling reflex could not be tested. The foetus was finally removed dead. The death of the foetus could be attributed to the prolonged parturition process; foetuses in the birth are more likely to die within a short period than those in the uterus, because as the foetus moved into the birth canal there is the severance of the umbilical cord and consequently loss of nourishment. Procaine penicillin and Streptomycin sulphate were administered at 20,000 i.u./kg and 10mg/kg, im x 5/7.

4. Laboratory results

Parasitology result, Faecal sample: No parasite found, Blood sample: No parasite found, Haematology result: Parameters Obtained value Reference value the patient was recumbent with intermittent straining, Vaginal region was swollen, the surgical site was intact. The client was Advice to Report all cases promptly to the nearest veterinary clinic.

5. Conclusion

Dystocia is a common husbandry problem in cattle. Farm managers and livestock breeders should be wary of it. Not all dystocia cases can be relieved by the manipulation of presentation, position, posture and application of traction. In some cases, the use of caesarean section becomes inevitable as long as you will want to save the dam and the foetus or sometimes just the more valuable dam. Any farm with a population more than ten cows needs to have a qualified and experienced veterinarian on their call in the event of dystocia. Performing Caesarean operation in the cow is a Herculean task. Because of the sheer amount of energy and man power required, the right size of the instruments is needed. The hide is usually tough when it comes to suturing. The veterinarian undertaking the operation should know that a caesarean operation in cattle is a matter of team work, a team of surgeons if available and a number of assistants and lay hands are needed.

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