

Dystocia due to accumulation of fluid in peritoneal cavity and intestines of fetus in a cross bred cow

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ABSTRACT

A rare case of dystocia due to accumulation of fluid both in fetal intestines and peritoneal cavity in a cross-bred cow was treated with obstetrical manoeuvres.

Keywords: Dystocia, fetal dropsy, fetal ascites

Dystocia in cross-bred cow due to fluid accumulation in gastro-intestinal tract has been reported earlier by Dhaliwal *et al.* (1994). Cystic enlargement of fetal abdominal organs in buffalo has also been reported to cause dystocia (Subramaniam & Sunder Singh, 1986). Dystocia due to excessive fluid accumulation in peritoneal cavity of fetus is rarely encountered in bovines (Sloss & Dufty, 1980). The present report describes a rare case of dystocia due to accumulation of fluid both in fetal intestines and peritoneal cavity in a cross-bred cow.

A pluriparous cross-bred cow with a history of abortions in last trimester during previous gestations was presented in Veterinary clinics. The animal was 9 months pregnant and started straining 12 hours before being brought to the clinics. Per vaginal examination revealed posterior presentation with one hind limb extended in birth passage and another one retained in abdominal cavity. An unusually enlarged abdomen with fluid thrill was palpable. Attempts to relieve dystocia by mutational operations were unsuccessful.

Since passage was relaxed, fetotomy was considered to be the appropriate treatment. Fetotomy was performed under posterior epidural anaesthesia (10 ml, 2%, Lignocaine Hydrochloride) and lubrication of the passage using carboxy methyl cellulose-Na (S. D. Fine CHEM, Mumbai) gel. One hind limb was amputated to create more

space. Moderate traction applied on remaining part of fetus yielded no results. An incision of about 3 inches was given in the abdominal region of fetus to evacuate the fluid accumulated in the peritoneal cavity. Digital pressure applied on the fetal abdomen resulted expulsion of straw colored fluid in huge amount. Continuous straining speeded up the process of evacuation, thus resulted in reduction of fetal abdomen. Subsequently the calf was delivered with moderate traction. The animal recovered uneventfully with normal feed and water intake and was thus discharged with necessary supportive therapy.

Careful dissection of the fetus revealed enlarged small and large intestines (Fig.1) distended with light green colored fluid. Histopathology of spleen and kidneys revealed reactive spleen and mild congestion of glomeruli respectively. Liver was also congested.



Fig 1: Accumulation of fluid in fetal intestines.

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Dropsy of peritoneum (fetal ascites) is seen as an occasional cause for dystocia and is a common accompaniment of infectious disease and developmental defects of fetus (Arthur *et al*, 1982). A pathological enlargement of any hollow or secreting organ may be due to an anomaly in development causing stenosis to release fluid. The congestion of liver causes an increase in hepatic lymph and may be linked with a diminished urinary excretion of water (Jubb and Kennedy, 1970). The accumulation of fluid in intestines may occur due to ingestion at the time of delivery by the fetus, but in the present case fluid accumulation in intestines as well as in peritoneal cavity might be due to some developmental defects however, reasons could not be ascertained on gross examination.

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BOOK REVIEW

"Manual on Veterinary Obstetrics"

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Price: Rs. 120.00, IVRI Publication

The manual on veterinary obstetrics deals with the diagnosis and correlation of various forms of dystocia in cows and buffaloes. There are eleven practicals in the manual. The author has tried to incorporate latest informations on importance of pelvimetry, epidural anesthesia, causes of dystocia, obstetrical instruments and obstetrical operations including caesarean operations.

The language of manual is simple. The manual will be useful for the students, teachers and field veterinarians. Author is congratulated for the publication.

L.P. Singh