

DYSTOCIA DUE TO SCHISTOSOMA REFLUXUS MONSTER WITH ECTOPIC VISCERA IN A CROSSBRED COW - A CASE REPORT

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Introduction

Schistosoma reflexus is an infrequent congenital anomaly mostly reported in cattle, buffalo and occasionally in sheep, goat and pigs. It is characterized by marked skeletal defects and extensive deformities involving an organ or a part of the body. Ectopic presentation of all the abdominal and thoracic viscera in such a monster has been reported but is rare. This communication reports fetal monster with Schistosoma reflexus and ectopic viscera in a crossbred cow.

History and obstetrical findings

A three year old, crossbred full term heifer was presented with the history of labor pain since six hours but without any success. Per vaginal examination revealed live fetus with loops of intestine in the vaginal passage. Careful examination revealed the intestine to be those of the calf. Further examination revealed complete backward flexion of the head and both the fore and hind limbs. The fetus was tightly packed in the vaginal passage. The fetal diameter was compared with that of the birth canal and found to be favourable to birth.

Treatment

The animal was positioned from left lateral recumbency to sternal recumbency and applied adequate lubrication of birth canal. After a short period of traction by holding on the fetal limbs it was found to have insufficient relaxation of the posterior vagina and vulva. Under local infiltration analgesia with 2% Lignocain HCl, a 4cm length episiotomy incision was made in a dorsolateral direction in the upper third of the vulval labium. Traction was applied synchronized with the expulsive efforts of the cow and a male calf was removed alive which died after 10 minutes. The uterus was searched for any injury and to ensure the absence of a second fetus.

The lips of the wound were brought into close apposition and the two edges of the mucous membrane were sutured together using silk and the skin edges along with subcutaneous tissues were apposed using nylon. The animal was given 2 litres of dextrose-saline intravenously followed by routine analgesic and antibiotic treatment. The animal recovered within a week and sutures were removed.

The weight of the fetus was about 10kg. There was marked ventral curvature of the spine and arching of the back at the thoraco-lumbar junction. The limbs were ankylosed and turned backward exposing the thoracic and abdominal viscera. The organogenesis was complete, but the skin, musculature and peritoneum over the viscera behind the xiphoid cartilage were absent. Liver was abnormal in shape, the lungs were small but the heart was of normal size. The pelvis was small, flattened, deformed with atresia ani.

Discussion

The exact cause of occurrence of such an anomaly is not known. However, interplay of multiple genes has been advocated as the most important genetic mechanism of such anomalies (Jana and Gosh, 2001). Hogger (1965) suggested the effect of autosomal recessive gene as a cause of this condition.

This anomaly is characterized by the acute angulation of the vertebral column such that the tail lies close to the head. The thoracic and abdominal cavities are incomplete ventrally so that viscera are exposed and the foetus may be presented viscerally or by its extremities causing dystocia. It is not uncommon for a fetus in visceral presentation to be naturally born in which fetal viscera may be seen protruding from the vulva; if not, they are soon located by vaginal exploration. The viscera may be mistaken for those of the mother and uterine rupture may be

suspected, but by careful examination it is not difficult to rule out this doubt by the absence of uterine tear and the continuity of the viscera with the fetus.

With exception of anasarca fetus, gross malformation is often associated with ankylosis of joints and muscular dystrophy; consequently the monster weigh less than normal calves and they are sometime associated with abortion or premature birth or may be sufficiently small to be passed spontaneously. However, grossly irregular development including bending or twisting of the vertebral column and ankylosis or duplication of limbs result in severe dystocia, due to a wider fetal diameter at pelvic inlet.

Fetal diameter has to be compared with that of the birth canal, where it seems favourable to birth, a reasonable traction with adequate lubrication can be applied, paying particular attention to the possibility of damage by bony fetal prominences to the birth canal, a smooth delivery may be achieved. Where, after a short period of such traction, it is clear that safe vaginal delivery is not possible, the fetus should be bisected by means of a fetotome or wire-saw. When Schistosoma reflexus presents by its' extremities -three or four legs- with or without the viscera, excessive fetal diameter, together with ankylosis of joints it is difficult to perform obstetric

delivery per vaginum, fetotomy or lapro-hysterotomy will be required.

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