Per Vaginal Delivery of Schistosomus Reflexus Monster Fetus by Cervicotomy in a Cow

Manokaran, S.1*, Selvaraju, M.2, Prabaharan, V.3, Senthilkumar, K.4
Ezakial Napolean, R.5 and Palanisamy, M.6

Department of Animal Reproduction, Gynaecology and Obstetrics, Veterinary College and Research Institute, Namakkal – 637 002 (India)

1, 3, 4 Assistant Professors,
5 Professor and Head, Dept. of Animal Reproduction, Gynaecology and Obstetrics &
2 Professor and Head,
6 Associate Professor, Dept. of Clinics

*Corresponding author: smanokaran@rediffmail.com

Abstract
A Jersey crossbred cow admitted with the history of dystocia was examined and diagnosed as a case of dystocia due to schistosomus reflexus monster with imperfect cervical dilatation. The cervicotomy was performed and a dead monster fetus was delivered by forced traction.

Key words: Cow, Schistosomus Reflexus, Cervicotomy

Introduction
Schistosomus reflexus is a rare and fatal congenital disorder seen in cattle (Laughton et al., 2005). It is an anomaly of the trunk where the thoracic and abdominal cavities are incomplete ventrally so that the viscera are exposed (Noakes et al., 2001). In general, this defect is identified at the time of normal parturition as a cause of dystocia and is delivered per vaginum by traction or by fetotomy or by cesarean section (Azawi et al., 2012 and Purohit et al., 2012). The present report documents a successful per vaginal management of a schistosomus reflexus fetal monster by cervicotomy in a Jersey crossbred cow.

Case History and Observations
A five years old Jersey crossbred cow on its second calving was brought to the Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of water bag ruptured eight hours back but was unable to deliver the fetus on its own. At the time of admission the cow was able to walk and was having severe and continuous straining. The general clinical examination of the cow recorded a body temperature of 39.1°C, respiration rate of 29/minute, pale mucus membrane and
mucus coated dung. The udder was edematous and the secretion turned to colostrum. Two fetal limbs along with intestinal loop and portion of rumen were noticed outside the vulva (Figure 1). Per vaginal examination revealed a dry and inflamed birth canal. The cervix was hard and thick and was able to pass the hand with difficulty. Careful examination of the fetus revealed an anteriorly presented schistosomus reflexus fetus with mild ankylosis of both the limbs and presence of fetal viscera in the birth passage.

Clinical Management

Based on per vaginal examination, it was assessed that the cervical dilatation was not sufficient to deliver the fetus. The owner was not willing to perform cesarean section on the cow. Hence it was decided to perform cervicotomy to deliver the fetus. The cow was administered with 10 ml of 2% Lignocaine epidurally at sacro-coccygeal space. The birth passage was lubricated with cetrimide cream. The Gunther’s embryotome was taken through the vaginal passage and approximately 5 cm incision was made on the dorso-lateral aspect of cervix on either side. Obstetrical snare and long obstetrical hook was applied on the legs and inner canthus of fetus. By careful traction delivered a dead schistosomus reflexes monster fetus per vaginum. Clinically the cow was treated with inj. Streptopenicillin (5.0 gm, i/m), inj. Meloxicam (175 mg, i/v), inj. Chlorpheniramime maleate (350 mg, i/m), inj. Oxytocin (30 IU, i/v), inj. Calcium borogluconate (450 ml, i/v) and inj. DNS (3 liters, i/v). The treatment with antibiotic, antihistamine and anti-inflammatory drugs along with intravenous fluid was continued for three days.

Description of the Fetus

Gross examination the fetus demonstrated ankylosed fetal limbs with an acute curvature of the vertebral column. The thoracic and abdominal cavities were open and the viscera were exposed. The congested abdominal viscera viz. stomach, intestine, spleen and liver etc. were protruded out through abdominal cavity. Both the kidneys and genital organs (testicles) were present. The head, eyes, nose, fore and hind limbs were fully developed (Figure 2).
Discussion

Schistosomus reflexus monster is primarily observed in ruminants (Suthar et al., 2011). Its defining features include spinal inversion, exposure of the abdominal viscera because of a fissure of the ventral abdominal wall, limb ankylosis, positioning of the limbs adjacent to the skull and, lung and diaphragm hypoplasia (Laughton et al., 2005). Variable components of schistosomus reflexus include scoliosis, cleft sternum, exposure of thoracic viscera, and abnormalities of the digestive and urogenital systems. The calf may be carried to term, and the first sign of a problem may be a dystocia in which the cow fails to make any progress towards delivery. Knight (1996) reported that among 90 cases of schistosomus reflexus attended over a period of 20 years, 56.7% were treated by embryotomy, 25.6% by caesarean section, 3.3% by simple traction. Treatment of the remaining 14.4% of cases was not completed and was considered hopeless, mainly because of the emphysematous condition of the foetus and the toxic condition of the cow, which gave a poor prognosis. In the present case, the cow was reported 8 hours after the rupture of water bag. Hence the cervical dilatation was sufficient enough to deliver the fetus, the cervicotomy was performed and the monster fetus delivered. Prompt care and treatment after the delivery helped in early and uneventful recovery of the dam.

References