Case report

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Management of Dystocia due to Schistosomus Reflexus in Holstein Friesian Cow- A Case Report

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ABSTRACT

Schistosomare flexus are a major congenital anomaly which occurs during embryonic development. Schistosomare flexus are characterized by incomplete fusion of abdominal wall leading to exposed viscera and marked ventral curvature of spine. A genetic or chromosomal abnormality, mutation, chromosomal anomaly, infectious agent, or a combination of these factors may be the cause, although its etiology is unknown. A Holstein Friesian (HF) cross-bred cow of 4 years with straining and fetal intestine hanging through the vulva was presented to the veterinary clinical complex for parturition failure. Thus, it was diagnosed as a case of Schistosomare flexus. With per vaginal examination it was further confirmed that visceral organs were from the fetus. Therefore, it was decided to remove the fetus through caesarean section.

Introduction

The organic deviation in either structure or form or both in one or several part of the body is known as "Monster". Schistosomare flexus is a rare type fetal monstrous primarily seen in cattle and occasional in sheep, goat and in other species (Roberts, 2004). It inevitably causes dystocia because of the monstrous changes in the shape of the foetus. This fetal congenital syndrome is mainly characterized by the presence of exposed abdominal and sometimes thoracic viscera (Schistosomus) and acute angulation of vertebral column (reflexus) such that tail lies close to the head (Roberts, 2004). It is a major congenital anomaly which occurs during embryonic development. The etiology is unknown but it may be due to genetic factors, mutation, chromosomal anomalies, infectious agents and environmental factors or combination of all the factors (Noakes et al., 2009). In India, occurrence of Schistosoma reflexus in bovines was reported by (Rao et al., 1993) and (Jana and Ghosh, 2001). Caesarean section is mandatory for delivery of a Schistosomus reflexus.

Case history and clinical observation

A 4 year old crossbred cow of HF was presented was presented to the VCC in the gynaecology department of the

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College of Veterinary Science & A.H., Rewa (M.P.) with a history of straining since last 6 h with no progression in parturition. Fetal intestine was hanging through the vulva of the dam (Fig. 1) and in per vaginal examination revealed fully dilated cervix, ventral curvature of the vertebral column and presence of hind limbs, along with other visceral organs was palpated in the birth canal (Fig. 2 and 3). The exposed visceral organs were palpable through incompletely closed ventral body wall. Thus, it was diagnosed as a case of Schistosomare flexus. It was further confirmed that visceral organs were from the fetus and realized that obstetrical maneuver would be dangerous to the dam. Therefore, it was decided to remove the fetus through Caesarean section.

Fig. 1. Schistosomare flexus in HF cow

Treatment and discussion

The lubrication of birth passage was done by liberal application of the liquid paraffin. Under epidural anesthesia 2 per cent lignocaine hydrochlorides, traction was applied to the head and limbs inside the uterus, but it was not possible due to the less space so it was decided to perform a caesarean section. Local infiltration (inverted L field block) of anesthetic (2% Lignocaine hydrochloride) in the left flank region was used. A long oblique incision was given in the left flank region adopting the standard operating procedure. The uterus was explored and the incision was given at gravid horn over greater curvature saving caruncles. A dead Schistosoma reflexus foetus was removed along with its exposed viscera. Following fetal delivery, the dam was administered with antibiotics, fluid and intra uterine medication as Inj. Intacef Tazo 3372 mg I/M and Inj. Belamyl 10 ml I/M once daily for five days, Inj. Melonex 10 ml I/M, Inj. RL 5 litre I/V, Inj. Metrogyl 2 litre I/V and Inj. NS 3 litre I/V once after the caesarean section, Bolus cleanex Intrauterine four bolus. Following routine post-operative cares animal recovered uneventfully. This paper reports about a surgical approach for relieving dystocia due to Schistosomare flexus in a crossbred cow.

Fig. 2. Exposed visceral organs

Fig. 3. Congenital curvature of spine

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