

***Schistosomus reflexus* foetus in cross breed Iraqi cow: a case report**

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(Received January 5, 2012; Accepted June 13, 2012)

Abstract

This is the first record of *Schistosomus reflexus* in cross breed Iraqi cow, in a calf, and how to deal with it.

Keywords: *Schistosomus reflexus*, Foetus, Cow, Dystocia, Iraqi cross breed cow.

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تشوه *Schistosomus reflexus* في جنين بقرة عراقية من سلالة مضرية: تقرير حالة

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الخلاصة

يصف هذا التقرير حالة تشوه جنيني *Schistosomus reflexus* في عجل أبقار تسجل لأول مرة في العراق وكذلك كيفية التعامل مع الأبقار المصابة بهذه الحالة.

Introduction

Schistosomus reflexus is common abnormality in ruminants (1). The main defect is acute angulations of the vertebral column such that the tail lies close to the head and the main defect is in skeleton (2). The thoracic and abdominal tunics are absent or incomplete ventrally exposing the visceral contents. It is a major congenital anomaly which occurs during embryonic development. The aetiology is unknown but it may be due to genetic factors, mutation, chromosomal anomalies, infectious agents and environmental factors or combination of all the factors (1). Such cases may cause dystocia in which the head and limbs are directed towards the pelvic inlet, fetotomy may be extremely difficult, and a better means of removing the fetus is by a caesarian operation (3).

Case description

A veterinarian consults the Department of Surgery and Theriogenology Clinic, Teaching Hospital, College of Veterinary Medicine, University of Mosul, claimed that an

8 y old full term pregnant cross breed (Frisian x local breed) cow belonging to a local farmer in Badosh village was presented to the private clinic of the second author, with a history of labour pain since 12h. Fetal fluid was escaped since 2 h and visceral organs were protruded from vulva and the veterinarian thought that these visceral organs were from the dam due to obstetrical manipulation. On the farm, the vulva was wiped cleaned with damp clean towel, then disinfected with iodine-povidine, and then washed again with water. On vaginal examination, the cervix was fully opened and the head and both forelimbs and hind limbs were in birth canal. We revealed that these viscera were from the calf and realised that obstetrical manoeuvre or fetotomy are dangerous to the dam. Then we decided to remove the foetus by Caesarean operation.

Treatment

Caesarean operation was performed with the dam on the left lateral recumbency. The cow was placed on her right side and her left hind leg pulled backward and fixed

in this position by tying to a post. A local anesthetic of inverted-L block of the ventro-lateral laparotomy using 2% lidocaine HCL was performed. A 40 cm long incision was made 8 cm lateral and parallel to the left external abdominal milk vein. The incision passed through the skin and underlying rectus abdominis muscle. The peritoneum was lifted to expose the uterus. An incision made along the greater curvature of the uterus. A large uterine (40 cm) incision was performed to avoid the risk of tearing the uterus during fetal extraction. When the calf is being extracted, the uterus was held in place to prevent spillage of uterine contents into the abdomen by using grasping forceps. The uterus was closed with two rows of inverting sutures with absorbable suture material and returned to abdomen. Before closure of the abdomen penicillin 3×10^6 IU and streptomycin 3 g dissolved in distilled water were instilled into the abdomen to minimize risk of peritoneal infection. Post operative care was followed by injections with estradiol benzoate 6 mg followed by oxytocin 100 IU 12 h later and 5 days course of antibiotics intramuscularly. After removal of the calf it was examined and found that the body was fully developed, the vertebral column, sternum, and sacrum fully developed, abnormal curvature of spine, diaphragm was incomplete, and there was herniation of heart, liver, spleen, small intestine and large intestine to the outside in environment through a fissure measuring 10×5 cm located just end of the sternum to the anterior aspect of the pubic bone (Fig. 1). This is the first record of *Schistosomus reflexus* case in Iraqi cows.



Figure 1: *Schistosomus reflexus* in local cross breed Iraqi cow foetus.

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