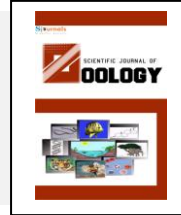


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Case report

Schistosomus reflexus in a red Sokoto doe

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ABSTRACT

Dystocia was observed in a primiparous One year old Red Sokoto Doe and was relieved manually, the fetus was observed to be monstrous and gross pathological examination showed; cleft sternum, scoliosis, abdominal and thoracic evisceration, absence of diaphragm, pulmonary hypoplasia, malpositioned kidney and heart, spinal inversion and limb ankylosis. The digestive, respiratory, cardiovascular, urogenital and skeletal system anomalies were observed in this report. Many of the malformations and malpositioning have been previously reported. The above clinical findings suggest Schistosomus Reflexus.

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1. Introduction

Schistosomus reflexus(SR) is a common fatal congenital disorder, primarily observed in ruminants; its defining features includes spinal inversion, expulsion of the abdominal visceral because of the fissure of the ventral abdominal wall, limb ankylosis, positioning of the limb adjacent to the skull with lungs and diaphragm hypoplasia.(Dennis *et al.*,1965). Variable components of SR include scoliosis, cleft sternum, expulsion of thoracic or abdominal viscera and abnormalities of the digestion and urogenital system (Jackson, 1995).

Fetal monsters have been reported to be due to autosomal recessive gene and has been classified as either lethal or sub lethal depending on their manifestations (Roberts, 1971). Documents suggest that schistosomus reflexus is one of the most common congenital anomalies encountered in farm animals (Bedford 1967, Jackson 1995). Chromosomal involvement and exposure to teratogenic agents have been the likely causes of schistosomus reflexus (Fatimah *et al.*, 1981, Magaji *et al.*, 1999). Previous reports of these conditions were not associated with much complication and mostly as the foetus is dead (Garba *et al.*, 1994). Cases of schistosomus reflexus that survive before passing away are rare and have not been known to have been documented.

2. Case report

A one year old primiparous Red Sokoto doe was presented to the Veterinary Teaching Hospital Usmanu Danfodiyo University, Sokoto, with the chief complaint of presence of intestine out of the Doe during labour. The Doe was kept with five other goats under semi intensive system of management. Upon physical examination the animal was recumbent, straining, grinding its teeth with protruded intestinal mass from the vulva. The Doe was relieved by manual manipulation. A closer observation of the monster indicated fresh carcass, although some abdominal and thoracic organs (Heart, liver, spleen, fore stomach, small and large intestine) were seen outside (fig 1).

There was incomplete fusion of the xiphoid cartilage and the skin around the area. The limbs were hyper extended. The fusion of the sternal cartilage stopped at the 3rd intercostal rib (Fig 2). The left lung was not fully developed and fissures to demarcates individual lobes were absent the right kidney was in the thoracic cavity. Diaphragm was completely absent. There was convergence of the left ribs towards the vertebra column, ventrally and laterally (fig 3). Base on these finding the monster was diagnosed to be a case of schistosomus reflexus.

3. Discussion and conclusion

There are several reports of a schistosomus reflexus born alive that resulted to obstetrical complications in the doe in this area (Garba and Mohammed, 1993). There was no ankylosis which is in line with the earlier findings (Magaji *et al.*, 1999). Who reported Dystocia without ankylosis in SR. Although, toxic plants, irradiations, mycotic infections, drugs or trace element imbalance, have been incriminated as the possible aetiologic agents (Garba and Mohammed, 1993 and Amin, 1995). These factors may be the possible cause of this condition.

In conclusion, there seems to be an increase in the number of reported cases of SR, which in turn produces reproductive problems, especially fetal wastage. We therefore call for more detailed investigation into the aetiology; prevention and control of the condition as well as other teratological condition with a view to prevent their occurrence.



Fig. 1. Shows thoracic and abdominal content (arrow).



Fig. 2. Shows the point of fusion of sternal cartilage (arrow).

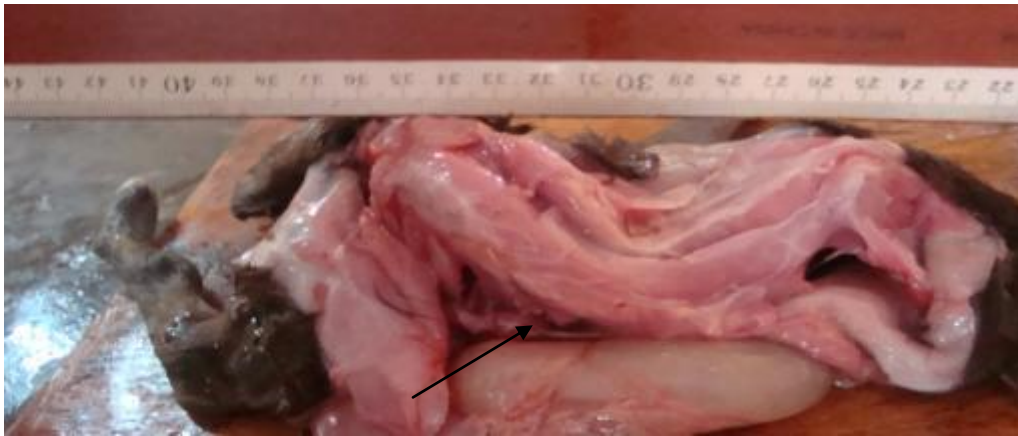


Fig. 3. Dorsal inversion of the spine and vertebral column (arrow).

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