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Dystocia due to schistosomus reflexus (cojoined twins) in a Yankassa ewe

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PEER REVIEW

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Comments

The paper brings information on the active approach to the dystocia in ewes. It is of interest for the professional community, and could contribute to the good practice.

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ABSTRACT

A two years' old, white and brown Yankassa ewe, weighing 20 kg was presented with dystocia of about 48 h duration at Mabs Veterinary Centre Ltd, Lagos. On thorough physical and vaginal examination, there were evidences of foetal parts and foul smelling discharges per vagina. A systematic and calculated traction and retropulsion revealed schistosomus reflexus cojoined twins. There was a complete recovery of the ewe 3 days post operative management. Finally, this case reported a true schistosomus reflexus cojoined twins in Yankassa ewe which was successfully relieved through traction and retropulsion despite the supposedly small birth canal which precluded the procedure in ewes except for caesarian section or fetotomy.

KEYWORDS

Dystocia, Schistosomus reflexus, Cojoined twins, Monstrosity, Ewe

1. Introduction

Schistosomus reflexus is a rare congenital birth defect primarily seen in ruminants[1,2]. A true schistosomus reflexus is classified as a case with both displayed viscera and spinal inversion[3]. The condition commonly occurs in cattle[1], sporadically in goats and ewes and even in dogs[4,5]. However, dystocia due to this condition is rare in other species than in

cattle[1], but could result from conditions such as poor maternal pelvic conformation, pregnancy in immature ewes, abnormal foetal position in the uterine or birth canal, fetal oversize, vaginal prolapse, uterine inertia, uterine rupture, uterine torsion, ring womb and ectopic pregnancy[6–8]. It could also result from utter negligence and unskilled attendance[9]. Schistosomus reflexus is mandatorily handled through caesarian section or fetotomy[1,10]. And cases of unassisted prevaginal expulsion only occur in

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miniature monster fetuses[11]. From the few available literatures, they appear that schistosomus reflexus commonly occur in ewes just as in cattle but are probably underreported[4]. And due to the paucity of information on this condition in ewes and alternative management, we report a case of successful retropulsion of schistosomus reflexus in a Yankassa ewe.

2. Case report

A two years' old, white and brown Yankassa ewe weighing 20 kg was presented with dystocia of about 48 h duration at Mabs Veterinary Centre Ltd, Lagos. The ewe which was a primer in a herd of six Yankassa ewes was managed under an extensive/free range system. On physical examination, fetal parts and foul-smelling, pinkish discharges were visible in vulva. There was absence of visible abdominal/uterine contractions or straining (Figure 1). Clinically, the rectal temperature, 39.5 °C, heart rate (90 beats/min) and respiratory rate (50 breaths/min) were within normal ranges for the breed. The mucous membranes were pinkish (normal) and capillary refill time was less than 2 seconds. The intravaginal exploration under an epidural block with lidocaine/adrenaline exposed a fully dilated cervix containing fetal parts felt per vagina (Figure 2). Based on clinical signs and physical examination, a tentative diagnosis of dystocia due to malpresentation and malpositioning was made. Surgical retropulsion and manual traction were employed to relieve a schistosomus reflexus cojoined twins (Figure 3). Post-surgical care was administered by insertion of an intra-uterine bolus (estradiol) containing 20 mg of estrogen, the administration of pen/strep injection (20/25 mg) intramuscularly for 3 d and the administration of piroxicam injection (20 mg/kg) intramuscularly for 3 d. Follow up: following the 3 days intensive care, the ewe responded well to treatment and recuperation process was on course as seen in Figure 4. The ewe was then discharged on full recovery by the fourth post operative day.



Figure 1. Ewe on presentation with a foul-smelling, pinkish discharges from the vulva.



Figure 2. Manipulation of the ewe via retropulsion and traction.



Figure 3. Mummified cojoined schistosomus reflexus–fetuses from ewe.

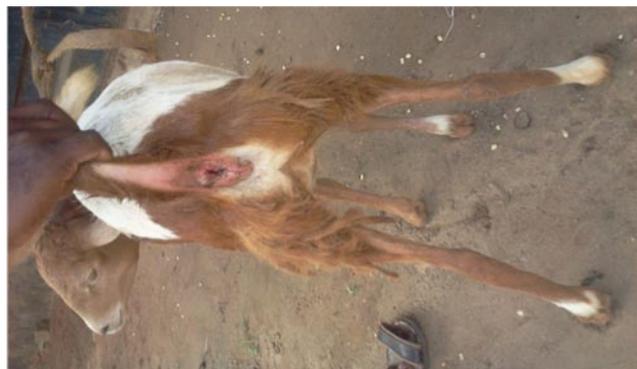


Figure 4. Recovery state of vulva of ewe post/after relief of dystocia.

3. Discussion

Naturally, ewes would lamb without assistance at term. In ewes, parturition occurs in 3 successive stages that do not exceed 2 to 3 h and delays only signify some form of complications[12]. Schistosomus reflexus is one of the congenital anomalies that promote dystocia in ewes[3]. This fatal congenital syndrome is characterized by the presence of exposed abdominal and sometimes thoracic viscera (schistosomus) (Figure 3), and marked spinal inversion producing a distinctive ventral convex curvature reflexus[4]. The condition is commonly marked by incomplete closure of the ventral body wall often presenting as mummification and monstrosity. Schistosomus reflexus is mostly reported in cattle than in other species[4,13,14]. The disparity in

the occurrence of this congenital abnormality in different species may be attributed to underreport of clinical cases. In small ruminants including ewes, schistosomus reflexus is best relieved by caesarian sections or fetotomy than other procedures due to the relatively small birth canal especially in the primigravidae[1,6]. However, schistosomus reflexus cojoined twins in Yankassa ewe was successfully relieved through a well performed traction and retropulsion. It is important that ewes relieved of this condition be placed on adequate post operative treatment as described in section 3. In conclusion, the case presented is a true schistosomus reflexus cojoined twins in Yakassa ewe. Similar genetic aberration in breeds should be reported for proper representation and breed selection in ewes.

Conflict of interest statement

We declare that we have no conflict of interest.

Comments

Background

Dystocia is a serious issue in animal breeding, bringing financial lost for the breeders, and suffering for the animals. Schistosomus reflexus belongs to the relatively often congenital disorders. Its etiology was not clarified yet. So, the topic of the paper seems to be of interest for the animal and veterinary research community.

Research frontiers

The paper describes the case of dystocia in ewe caused by the schistosomus reflexus, and the medical treatment.

Related reports

Schistosomus reflexus is surprising to less experienced breeders, even for the veterinarians. There is beneficial to describe the cases, and to inform the professional community.

Innovations and breakthroughs

The case report describes surgical treatment of the schistosomus reflexus case in ewe. It brings an example of successful solution of the problem.

Applications

The case report could become an example for solving of

schistosomus reflexus in ewes.

Peer review

The paper brings information on the active approach to the dystocia in ewes. It is of interest for the professional community, and could contribute to the good practice.

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