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CASE REPORT

FOETAL MONSTER IN A 4 -YEAR OLD YANKASA EWE WITH DYSTOCIA

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INTRODUCTION

Monstrosities and other congenital malformations may not only cause dystocia but also lead to economic loss in food animals resulting in decreased calf and lamb crop yields, early culling and increased medical bills (Gyang *et al.*, 1984). Few cases of monsters and other congenital malformations in ruminants have been reported in Nigeria, and these includes amelia, scoliosis, umbilical hernia, cleft palate, atresia ani, acephalia, microcephaly, kyphoscoliosis, spinal bifida, incomplete twinning (Gyang *et al.*, 1984; Ibrahim *et al.*, 1987; 1990), brachygnatia (inferior), arthrogryposis, absence of patella, crooked fore and hind limbs, poorly developed thigh and other muscles (Ate and Allam, 2002), blindness and cataracts (Ate, 2005). Reports elsewhere on monstrosities and other congenital malformations include asymmetry in co-joined lambs (Willis, 1962), double monster and poor muscle development in calves (Gordon and Lower, 1973), *Schistosoma reflexus*, *Perosomus elumbis*, and foetal oedema in sheep (Arthur *et al.*, 1996). Dystocia means difficult or interrupted parturition (Gyang, 1990; Arthur *et al.*, 1996). Economic significance of dystocia in bovine and ovine foetal, calf and lamb losses have been reported severally (Arthur, 1975; Greene, 1984; Gyang *et al.*, 1984, Arthur *et al.*, 1996; Odeyemi, 2004). Incidence of dystocia ranging from 1% - 31% in the various species have also been reported (Roberts, 1971; Omamegbe, 1978; Arthur *et al.*, 1986; 1996; Auta, 2004). Causes of dystocia are maternal or foetal in origin (Gyang, 1990, Arthur *et al.*, 1996), and the foetal causes include developmental defects such as monstrosities, *Schistosoma reflexus, Perosomus elumbis,* faulty disposition and oversize. This paper, we report a case of foetal monster in a 4-year old Yankasa ewe associated with dystocia presented to the Large Animal Clinic of the Veterinary Teaching Hospital, Ahmadu Bello University, Zaria, Nigeria.

KEY WORDS: Foetal Monster, Yankasa Ewe, Dystocia

CASE REPORT

A 4 - year old Yankasa ewe weighing 40kg was presented to the Large Animal Clinic of the Veterinary Teaching Hospital, Ahmadu Bello University, Zaria, Nigeria with the complaint of difficulty in delivery. History revealed that the animal was in labour nine hours prior to presentation. The ewe had three parturitions in the past. There was dystocia in the first lambing and the ewe lamb died shortly after birth. The client could not confirm any developmental abnormality of the lamb. The ewe had rumenotomy eight months prior to presentation. There was also a history of ecto- and endoparasite control on the animal shortly after the surgery.

The vital parameters were 39°C, 28 cycles/minutes and 88 beats/minutes for rectal temperature, respiratory rate and pulse rate respectively. Clinical signs observed include protruding limbs of dead foetus, oedematous vulva, intermittent straining, bruxism and engorged udder.

Vaginal exploration was conducted and dystocia was diagnosed based on clinical examination. Blood and faecal samples were collected. The foetus was found to be posteriorly presented and oversized due to palpable oedema. An attempt to deliver the foetus by forced extraction failed and emergency surgery was indicated.

Caesarean section was carried out employing standard technique (Gyang, 1990). The foetus was delivered dead and found to have several abnormalities (Fig. 1). Post-surgical care comprised the administration of procaine penicillin at 20,000 iu/kg; Oxytocin at 10 iu/kg; streptomycin at 10mg/kg; vitamin B-complex, 10ml, and wound healing oil at surgical site.

Photographs and radiography of the foetal monster were made. Postmortem examination was also carried out on the dead foetus. Fig. 1 shows prognathia, enlarged head and distended abdomen while Fig. 2 shows rudimentary male sex structures (scrotal sac and preputial orifice). Fig. 3 shows complete absence of urinary bladder and internal male sex organs. Fig. 4 shows fissure of the sagital suture. Fig. 5 shows left displacement of the ribs (R_1 to R_1), congenital abnormality of the thoracic cage, and generalized oedema. Fig. 6 shows prognathia and generalized oedema.

DISCUSSION AND CONCLUSION

Many congenital malformations have been seen in this clinic but only few were reported. Left displacement of the ribs (R_1 to R_1), congenital abnormality of the thoracic cage, prognathia and superimposing eviscerated abdominal mass have not been reported. Rudimentary male sex structures (scrotal sac and preputial orifice) with complete absence of the penis and urinary bladder were observed. Dropsy indicated by distended abdomen, enlarged head and generalized oedema were also observed in this case. The hydrocephalus was accompanied by fissure of the sagital suture with the fluid freely flowing between the skin and the cranium. The brain tissue was not well formed.

The congenital malformations observed involved more than one system of the body as noted and reported by Gyang *et al.* (1984), Ibrahim *et al.* (1987), and Ate and Allam (2002); and those that affected the central nervous system (CNS) was incompatible with life (Gyang *et al.*, 1984).

The causes of these congenital abnormalities were not confirmed. However, benzimidazoles and ivermectin are routinely used as antihelminthics in the clinic. The use of these drugs following the earlier laparatomy in this patient was suspected, to have been responsible for these anomalies. This may be true because Roger, (1998) reported that parbendazole is the primary benzimidazole for which teratogenic effects (skeletal malformations) have been demonstrated in sheep. Our experience with a particular brand of iverniectin within the period when the reported case was handled showed that the agent induced abortion in more than 50% of the pregnant animals medicated. Also reports by Arthur *et al.* (1996) indicate that certain plants (*Varatrum californicum and Lupins spp*) are teratogenic. Feed scarcity during the dry season may be responsible for ingestion of some of these plants. An example is the *Nicotiana tabacum*, known to have teratogenic effects in animals, and is found around the area of the reported case. This may be critical during organogenesis as in our case.

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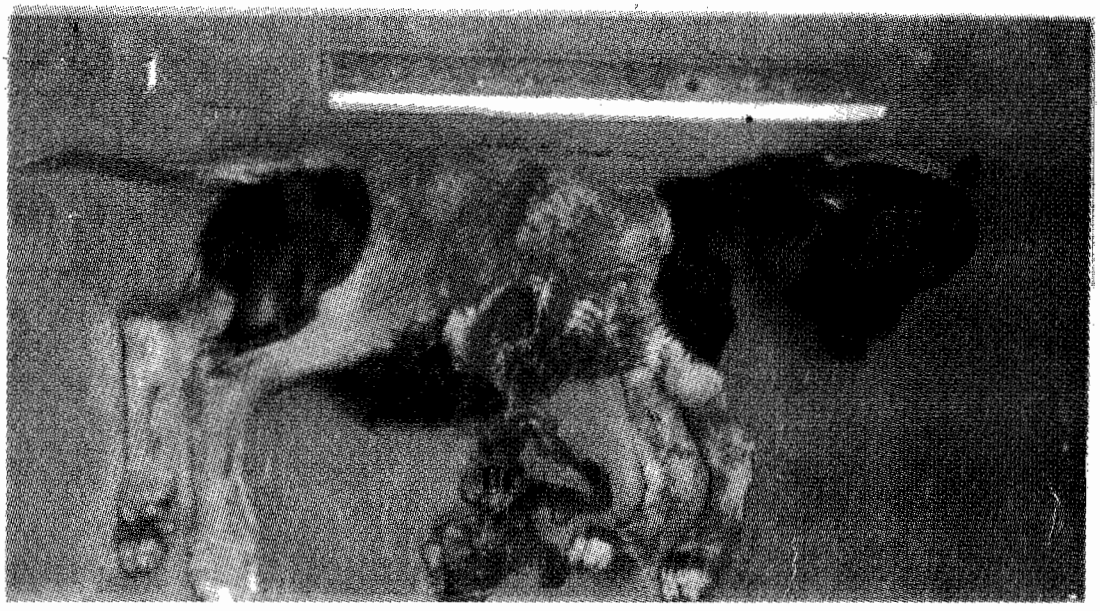

Fig. 1: Foetal monster on lateral recumbency.
Note: P = Prognathia, EH = Enlarged Head, UC = Umblical Cord and DA = Distended Abdomen.

Fig. 2: Foetal monster on dorsal recumbency
Note: RS (arrows) = Rudimentary Scrotum, RP (arrow) = Rudimentary Preputial Orifice

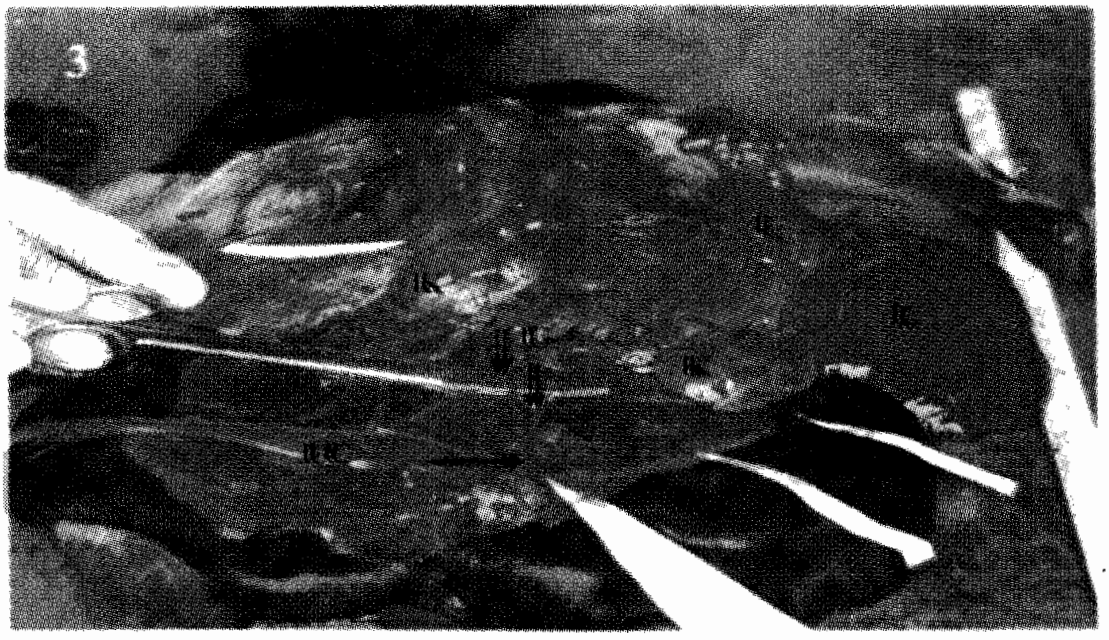

Fig. 3: Dissection of the foetal monster. This is the abdominal cavity.
Note: K = Kidneys, U = Ureters, UC = Umbilical Cord, L = Liver and I = Intestine.

Fig. 4: Dissection of the foetal monster. This is the cranium (Enlarged)
Note: FC = Frontal Cranial bones, F = Fissure of the sagital (frontal) suture.

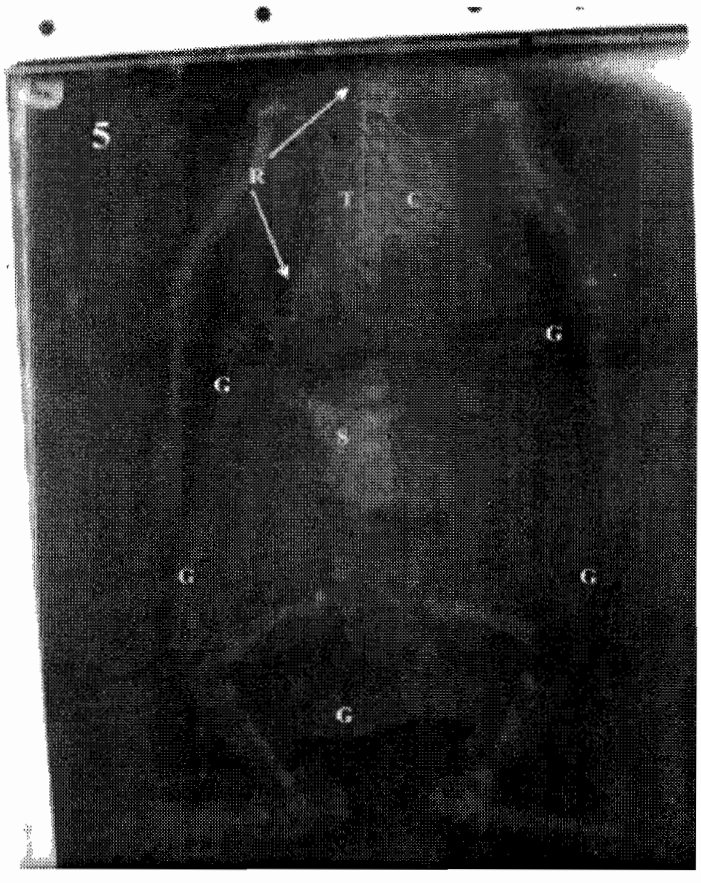

Fig. 5: Radiograph of the foetal monster on ventro-dorsal view
Note: R and TC = Left displacement of ribs (R_1 R_{10}) and the congenital abnormality of the thoracic cage, G = Generalised oedema and S = Umbilical cord

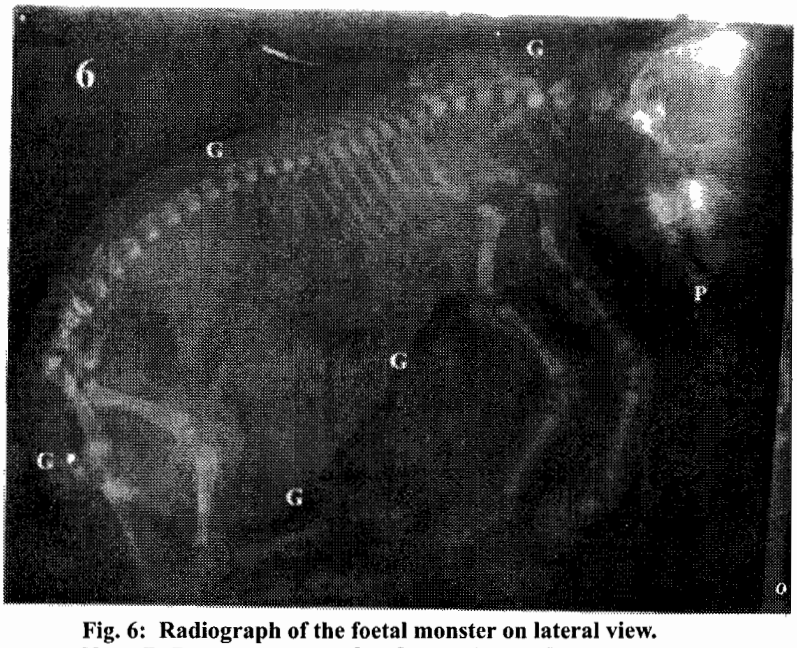

Fig. 6: Radiograph of the foetal monster on lateral view.
Note: P=Prognathia and G = Generalised oedema

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