

**FOETAL ANASARCA IN A SOKOTO RED KID****OBUDU, C.E.; UMARU M.A. AND OGUNJOBI, F.***Department of Veterinary Physiology and Pharmacology,  
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Usmanu Danfodiyo University, Sokoto.***Abstract**

This is a report of foetal anasarca in a Sokoto Red Goat kid. The foetus was delivered by obstetrical manipulation as a result of dystocia. The foetus was found to have the following suspected histopathological lesions: epitheliogenesis imperfecta, brachygnathia, anodontia, ankyloblepharon and hypoplasia of the visceral organs.

**Key Words:** Dystocia, Anasarca, Foetus.

**Introduction**

An anasarcaous fetus is a foetus with extensive subcutaneous oedema (Blood and Studdert, 1988). The affected foetus is usually carried to term and concern is caused by the lack of progress in the second stage of labour. This is due to great increase in foetal volume caused by the excess fluid in the subcutaneous tissues particularly of the head and hind limbs (Arthur, 1988). Cases of foetal anasarca are rare in this area and have not been known to have been documented.

**Case Report**

A one year old primiparous Sokoto Red doe was presented to the State Veterinary Clinic, Sokoto with the chief complaint of prolonged labour over 12 hours. The doe was kept with five other goats under the semi intensive system of management. Upon physical examination, the animal was found to be recumbent, straining, grinding its teeth and a foetal limb had protruded through the dam's vulva. Its vital parametres were as follows:- temperature 42°C, pulse 140 beats/minute and a respiratory rate of 26 cycles/minute. The cervix was found to be dilated and milk was expressed from the udder.

**Treatment**

The dam was delivered of a dead foetus which

was manually removed using simple obstetrical manipulation. The forelimbs and the head were felt and traction was applied and the fetus retracted. The foetus was seen to be presented with suspected epitheliogenesis imperfecta (Fig. 1), anasarca and brachygnathia, ankyloblepharon (Fig 2), anodontia and hypoplasia of the visceral organs. The client was advised to cull the doe if the condition recurs.

**Discussion and Conclusion**

Reports of foetal anasarca in goats are rare. There is no known report from this environment. However, Arthur *et al* (1993) reported a peculiar form of the condition in the Ayrshire breed of cattle. This case is likely to be the first report of foetal anasarca in goats. The degree of fluid accumulation was mild especially when compared with the anasarca in Ayrshire cattle reported by Arthur, *et al* (1993). As mentioned above, the foetus was delivered dead and this death could be due to several reasons. It could have been as a result of prolonged dystocia, or it might have been due to excessive subcutaneous fluid accumulation. This excessive fluid accumulation is said to be a hereditary condition and is determined by an autosomal recessive gene (Donald *et al*, 1952). The mode of action of the genetic factor is unknown (Herrick and Eldridge, 1955). There is need in this case to

differentiate anasarca from foetal emphysema which is the bloating with gas, of a dead fetus, unlike foetal anasarca. Both conditions usually result in dystocia.

In conclusion, there seems to be an increase in the report of the incidence of foetal monstrosities in this environment (Garba and Mohammed, 1993;

Garba *et al.* 1994; Amin, 1995; Magaji *et al.* 1999). There is need for a much more thorough and systematic study of foetal monstrosities. For example, there is need for histopathological, electromicroscopic and genetic studies to be embarked upon on such cases; facilities for which are often lacking.

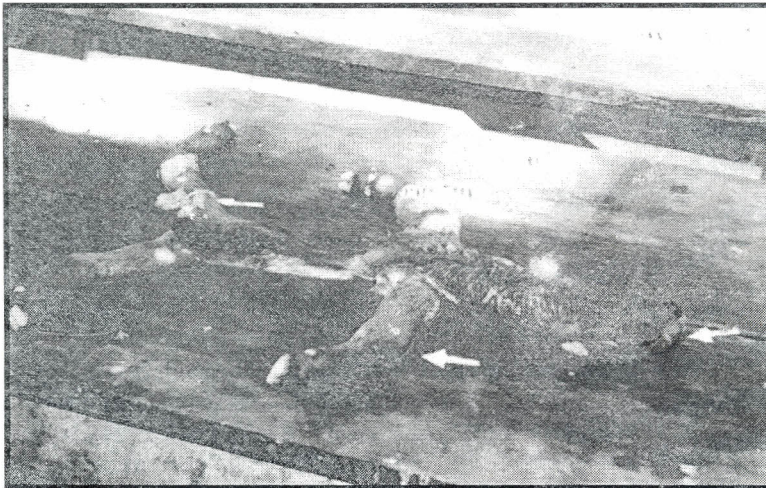


Fig 1: Body of foetus showing suspected Epitheliogenesis imperfecta



Fig 2: Head of the foetus Showing Suspected Ankyloblepharon and Brachygnathia.

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