

Kinky spine or Scoliosis in Nilagiri lamb

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ABSTRACT

A case of Scoliosis, a congenital malformation of axial skeleton in Nilagiri lambs has been reported.

Key words : Scoliosis, Nilagiri lamb, skeleton

Congenital abnormalities have been reported from time to time in lambs (Dennis and Leipold, 1986; Whittington *et al.*, 1988; Singh, 1989 and Elias and Bennett, 1992). The defects may be functional or structural that affect a single anatomic structure or an entire system or part of several systems (Saperstein *et al.*, 1975). Kinky spine or Scoliosis is a congenital malformation of the axial skeleton caused by genetic or environmental factors such as intrauterine viral infection or some plant poisoning (Linklater and Smith, 1997). The defect is characterized by the lateral curvature of the spine, and it rarely occurs alone but usually with other skeletal defects such as ankylosed limbs and arthrogryposis (Roberts, 1977). The present paper reports a rare occurrence of the scoliosis with two lateral curvature of the spine in a lamb.

A primiparous full term pregnant Nilagiri ewe at Sheep Breeding Research Station, Sandynallah, The Nilgiris has shown symptoms of lambing and the water bag ruptured at 6 a.m. and ewe was not able to deliver. No fetal parts are seen outside. On vaginal examination the cervix was fully dilated and only the vertebrae of the foetus was lodged in the cervix. The fetus was relatively oversized and was in transverse presentation and all the limbs were placed in the cranial direction in the uterus. A rigid bent vertebrae was presented, hence some anomaly of the limbs (ankylosis) or the vertebrae was suspected. On repulsion, right forelimb of the fetus was palpable which was rigid with flexion at fetlock joint. On manual handling the right forelimb was broken and was removed. Since the foetus was found to have ankylosed legs caesarian section was resorted. The animal was sedated with triflupromazine hydrochloride @ 0.2 mg/kg B.wt. and local infiltration anaesthesia was given with 2% lignocaine hydrochloride. Caesarian was performed at left para

median site as per standard procedure. A dead female lamb was relieved. On examination of the fetus, an inverted 'V' shaped bent in the thoracic vertebrae, a small 'U' shaped bent in the sacrum with fully bent and ankylosed fore limb and ankylosis of the hind limbs were noticed (Fig. 1). Though several anomalies



Fig. 1. Scoliosis or kinky spine in a lamb

of musculoskeletal system have been reported in lambs only Linklater and Smith (1997) have reported the lateral deviation of vertebral column (Scoliosis) in lambs as in the present case. The defect is also rare in other domesticated livestock like cattle and pig (Roberts, 1977).

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