

PYGOMELIA WITH SCHISTOSOMUS REFLEXUS IN A BUFFALO - A CASE REPORT

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ABSTRACT

A full term she buffaloes at third parity was presented to the Veterinary Clinical Complex, Gannavaram with a history of dystocia. Clinical examination revealed presence of three limbs and the abdominal viscera of the fetus hanging out of the vulva. Detailed obstetrical examination revealed that dilatation of cervix was complete with presence of supernumerary hindlimbs in the birth passage. The birth canal was lubricated and a deformed dead male fetus with pygomeia and schistosomus reflexus was delivered by mutation and traction.

Keywords: *Bubalus bubalis*, buffalo, dystocia, pygomeia, Schistosomus reflexus, Ankylosis

INTRODUCTION

Supernumerary ectopic limb(s) is a congenital anomaly, which is defined as the presence of accessory limb(s) attached to various body regions (Hiraga *et al.*, 1989). Depending upon the site of attachment to the body region, polymelia have been classified as notomeia, cephalomeia,

thoracomeia and pygomeia (Kim *et al.*, 2001). Polymelia may be caused by external factors like exposure to toxins, radiation, or chemical agents and occurred as solitarily or rarely associated with other developmental or inheritable anomalies (Giofre *et al.*, 2004). Schistosomus reflexus is primarily observed in ruminants, its defining features include spinal inversion, exposure of the abdominal viscera because of a fissure of the ventral abdominal wall, limb ankylosis, positioning of the limbs adjacent to the skull with hypoplasia of lungs and diaphragm (Laughton *et al.*, 2005). The present paper reports a successful per vaginal delivery of a fetus with pygomeia and schistosomus reflexus condition.

CASE HISTORY AND CLINICAL OBSERVATIONS

A full term she buffaloes at third parity was presented to Veterinary Clinical Complex, Gannavaram with a history of dystocia. On vaginal examination, birth canal was dry with complete dilatation of cervix. Clinical examination revealed presence of three limbs and the abdominal viscera of the fetus were hanging out of the vulva.(Figure



Figure 1. Abdominal viscera of the fetus.



Figure 2. Supernumerary ankylosed limbs.

1) Detailed obstetrical examination revealed that dilatation of cervix was complete with presence of supernumerary ankylosed limbs in the birth passage.

The animal was stabilised with intravenous fluid therapy (DNS 3liters, RL 1 liter) along with a dose of stryptics (Vit K) before attempting the correction of dystocia. Epidural anaesthesia was given into the sacrococcygeal space by using 2% Lignocaine hydrochloride at a dose rate of 6 ml. Detailed obstetrical examination revealed that dilatation of cervix was complete with a dead fetus in posterior longitudinal presentation and supranumerary limbs. Lubrication of the birth canal was performed by infusing 5 liters 2% carboxymethyl cellulose into the uterus. Cotton snares were applied above the fetlock joint to both the hind limbs and the extra limb also. Supranumerary limbs were aligned parallel to the spine and hind limbs, and forced traction was used along with manipulative forces to bring about correction of the extremities. A dead male fetus could be relieved by traction as the size of the fetus was significantly smaller than normal.

Clinical examination of the dead male fetus revealed presence of supernumerary ankylosed limbs that are attached at the pelvic region of the fetus by connective tissue (Figure 2).

The underdeveloped accessory hindlimbs were shorter bifurcated at stifle joint and attached to the lateral side of the pelvis. Supernumerary digit was recorded in one of the accessory limbs. The entire teratological portion was hanging down from the left side of the fetus within the uterus. The bones of the exterimities were shorter, ankylosed and duplicated, while each extremity had two fully formed hooves. Further, the fetus had incomplete closure of the abdominal wall through which abdominal viscera protruded out. Murondoti and

Busayi (2001) reported a case of a supernumerary limb attached below the vulva in a heifer. The phenomenon of polymelia was usually associated with other congenital defects such as polydactyly (extra fingers or toes) or with the presence of additional and often underdeveloped bones (Murondoti and Busayi, 2001). Congenital deformity of pygomelia was also reported by Rahman *et al.* (2006) and Mistry (2010). Schistosomus reflexus is a heritable genetic defect and various studies have suggested that Schistosomus reflexus occurred due to an autosomal recessive gene having incomplete penetrance in a developing embryo (Laughton, 2005). Distortion of the fetus usually starts when a thickened area on the surface of the embryo failed to curve inwards and join with the opposite side to form the body cavity, which resulted in exposure of the viscera due to failure in closure of the abdominal wall (Knight, 1996).

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