PER-VAGINAL DELIVERY OF A SCHISTOSOMUS REFLEXUS MONSTER IN A MURRAH BUFFALO– A CASE REPORT

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SUMMARY

Present case report deals with a rare case of dystocia due to Schistosomusreflexus in a Murrah buffalo and its successful management through per-vaginal delivery.

Key words: Congenital anomalies, Dystocia, Schistosomus reflexus

Schistosomus reflexus (SR) is a rare type of congenital syndrome of fetus and it is characterized by the presence of exposed abdominal and often thoracic viscera (Schistosomus), and marked spinal angulation leading to a distinct ventral curvature of vertebral column (reflexus). The schistosomus aspect of the syndrome, i.e. the presence of a congenital schistocoelia, is reported in many species (Pivnick et al., 1998) but the reflexus aspect is most often reported in ruminants (Bezek and Frazer, 1994). SR is very rare obstetrical condition ranging from 0.01% to 1.3% of total bovine dystocia but mostly seen in cows as compare to other species (Laughton et al., 2005). Occurrence of inherited congenital anomalies are common in all cattle breeds, moreover specific trait selection favours its spread in a population. (Whitlock, 2010). This condition pertains to the family of deformities involving failure of complete closure of ventral aspect of fetal body wall. However, the exact cause leading to aforesaid defect cannot be stated. Moreover, Laughton et al. (2005) indicated possibility of genetic cause where fetus carries recessive gene from dam as well as sire, leading to defective embryonic development.

An adult Murrah buffalo at full term in her 4th parity was brought to department of Veterinary Gynaecology and Obstetrics with history of continuous straining without delivery of fetus. Upon clinical examination, clinical parameters were observed within normal physiological range i.e. temperature 101°F, respiratory rate 46/minute and pulse rate 66/minute. Vaginal examination revealed fully dilated cervix with all the four limbs and exposed abdominal cavity in the birth canal. The condition was diagnosed as dystocia due to Schistosomus reflexus. Perianal region of the buffalo was thoroughly cleaned with 0.1% potassium permanganate solution and low plane epidural anesthesia was given with 5 ml, 2% Lignocaine hydrochloride followed by lubrication of birth passage with liquid paraffin. Gentle traction was applied on the head and two limbs with simultanious repulsion on other limbs inside the uterus, the malformed fetus was delivered.



The fetus was photographed and described macroscopically with following features. Scoliosis (reflexus) and unclosed thoracic and visceral wall with exposed viscera (Schistosomus) which confirmed our diagnosis as case of SR (Fig.1). Following delivery, the dam was treated with routine medication and the dam recovered uneventfully.

Dystocia can be defined as difficulty in parturition which may arise due to maternal or fetal factors. Fetal cause of dystocia is major contribution to total bovine dystocia (Kumar et al., 2018). In fact, SR is rare but an important fetal cause leading to considerable loss to cattle owners. The dystocia in this condition was due to fetopelvic disproportion and malposture (Youngquist and Threlfall, 2007). The definite cause for the occurrence of SR has not been established yet but several authors suggested genetic and congenital causes responsible for such type of monstrosity. The present case confirms Schistosomus reflexus defined by specific features i.e. ventral curvature as well as exposed viscera due to unclosed thoracic and abdominal wall, however ankylosis of the joints was not observed, that's why per-vaginal delivery in the present case could happened.

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