PER-VAGINAL DELIVERY OF CONJOINED TWIN MONSTER BY OBSTETRICAL INTERVENTION IN A MURRAH BUFFALO

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Introduction
Congenital defects are abnormalities of structure or function present at birth. Duplication of the cranial portion of the foetus is more common than that of the caudal portion (Robert, 2004). Conjoined twin monster is an important foetal cause of dystocia in animals. Its occurrence is very rare and is about one in 1,00,000 in bovines, at birth (Arthur, 1956). Foetal anomalies and monstrosities are common cause of dystocia in bovines (Shukla et al., 2007). It is important to know various types of monsters in animals that usually cause dystocia, which cannot be easily delivered and require caesarean section or a foetotomy most of the time (Patil et al., 2004 and Sharma, 2006). Dystocia due to conjoined twin monster is uncommon (Dhami et al., 2000 and Hannappagol et al., 2005). These twins have been reported to result from a single ovum and are monozygotic (Bowen, 1966). For the obstetrical management of conjoined twins, delivery by cesarean section is usually undertaken (Whitlock et al., 2008). But, this communication reports a delivery of conjoined twin monster i.e. Dicephalus Sternopagus Tetrabrachius Tetrapus Dicaudatus by foetotomy in a Murrah buffalo.

Case history and clinical observations
A four-year-old Murrah buffalo in first parity having full term pregnancy was presented at the Teaching Veterinary Clinical Service Complex, LUVAS, Hisar with a history of labour since 12 hours. Veterinary aid provided locally did not facilitate vaginal delivery. The animal was alert with normal muzzle and good body condition. Reddish discharge and foetal hind limbs protruded from vulva were noticed. Per vaginal examination revealed an abnormal foetus in posterior longitudinal presentation and dorso-pubic position. On further exploration, jointed foetuses nearby thoracic region were felt having two heads. As foetus was a monster, so attempt to deliver by force can cause threat to dam. Hence, the obstetrical procedure -foetotomy was indicated.

Obstetrical procedure and treatment
The animal was restrained in lateral recumbency following low epidural anesthesia with 2% of lignocaine hydrochloride. After proper lubrication, foetotome wire saw was inserted per vaginally, partially threaded on one side and a loop was made around the jointed portion of thoracic region of one foetus. The foetotome was then completely threaded outside and sawing was done till the jointed region was cut. The cut portion was removed by traction applied on the hind limbs with the help of snare. Then, the decollation of head of same foetus was done and extracted out. Now, other two forelimbs approached were cut separately with wire saw and removed by traction. Finally the traction was applied on the forelimb of the intact foetus and delivered with moderate force (Fig. 1). After the obstetrical intervention, antibiotic therapy and NSAID were injected. The supportive therapy was provided as calcium borogluconate (450 ml) and amino acids plus vitamins. Anti-inflammatory and antibiotic were given for five days.

Results and Discussion
The foetus was conjoined from the thoracic region at the sternum (sternopagus). Rest of the body parts of both the foetuses were same. They have separate head, neck and limbs. On post-mortem examination the conjoined twin monster was found to be attached at the sternum and all the organs were present in the body like heart, lung, liver, gall bladder, spleen etc. Both the heart were congested. Shukla et al. (2007) reported the similar type of conjoined monster in buffalo. Conjoined twins are non-inherited teratogenic defects (Shukla et al., 2011). This condition may be due to genetic or environmental factors. Environmental factors includes toxic plants, infectious agents, drugs, trace element deficiencies and physical agents such as radiation, hyperthermia and embryo manipulations (Dennis and Leipold, 1986). According to the literature, cesarean section has been performed mostly to correct these types of dystocia (Shukla et al., 2011; Monfared

Fig. 1: Showing Dicephalus Sternopagus Tetrabrachius Tetrapus Dicaudatus Monster

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et al., 2013) which is not possible in field conditions. However, delivery of such abnormal embryonic duplications, resulting in conjoined twins by foetotomy is very rare and is not well documented in buffalo. In the present report, foetotomy was performed successfully instead of caesarean section to resolve the dystocia due to conjoined twin monster. So this case report will be helpful for the field veterinarians challenged by that type of dystocia cases in fields to resolve them successfully by foetotomy.

References