

RARE CASE OF AN EXTERNAL HYDROCEPHALIC KID IN A GADDI GOAT

AKSHAY SHARMA*, AMIT SHARMA, MADHUMEET SINGH and PRAVESH KUMAR
Department of Veterinary Gynaecology and Obstetrics, College of Veterinary and Animal Sciences,
CSKHPKV, Palampur-176062, India

SUMMARY

The present case study reports a case of external hydrocephalic kid causing dystocia in a Gaddi goat and its successful management through per-vaginum delivery.

Key words: Dystocia, Gaddi goat, Hydrocephalus, Per-Vaginum delivery.

Hydrocephalus is accumulation of excessive fluid in dura mater or ventricles of brain (Purohit *et al.*, 2012). Two types of hydrocephalus have been reported i.e. internal hydrocephalus, a collection of fluid in the cerebral ventricles, and External hydrocephalus, a collection of fluid outside the brain substance (Cole and Moore, 1942). This report records a case of dystocia in a Gaddi goat, caused by hydrocephalic fetus that was delivered per vagina by excision of fetal head, followed by traction.

A Gaddi goat aged 3 years was presented in clinics with a history of continuous straining from last 8-10 h. It passed 2 hours when first water bag was ruptured. Per vaginal examination revealed an enlarged fetus with, fluctuating fluid filled sac like structure (Fig.1) with one forelimb in anterior longitudinal presentation within the birth canal. There was left lateral downward deviation of head.

Cervix was dilated enough to make an incision

on the dropsical part of fetal head with the help of fetotomy knife after sufficient lubrication with liquid paraffin. Deviation of the head was corrected manually by adjusting the position of fetus which was followed by traction and a dead male kid was delivered per vagina. Post operative management was done with Inj. Ceftriaxone plus tazobactam @ 15 mg/kg body wt. (Intacef Tazo 562.50 mg; Intas Pharma. Ltd.[®]) I/M, Inj. Meloxicam @ 0.2 mg/kg body wt. I/M (Melonex[®]; Intas Pharma Ltd.) for 5 days. The fluid therapy was done with Inj. Ringer's Lactate (500 mL), Inj. Normal saline (500 mL) by I/V route along with Inj. Oxytocin (50 I.U.) by I/M route. Gross examination and dissection of fetal head revealed the absence of cranial bones and a skin pouch on head (Fig. 2) which was filled with cerebrospinal fluid. Based on the above findings, the present case was diagnosed as congenital external hydrocephalus (Fig. 2). Radiograph revealed silver beaten appearance of the head of fetus (Fig. 3).



Fig. 1. Kid with hydrocephalus



Fig. 2. Absence of cranial bones in dropsical part indicating external hydrocephalus

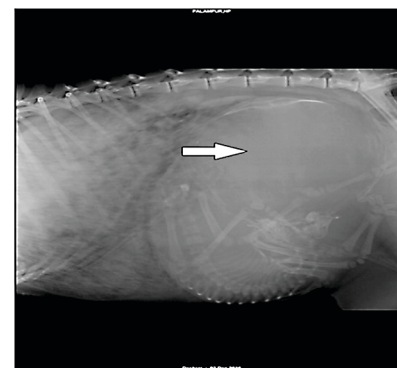


Fig. 3. X-ray image of hydrocephalic kid with Silver beaten appearance (white arrow)

*Corresponding author: akshays482@gmail.com

Congenital anomalies and less frequently, multiple congenital anomalies, are reported to be encountered in domestic animals that are present at birth, which in turn may cause obstetrical problems (Arthur *et al.*, 2001). Hydrocephalus involves swelling of the cranium due to accumulation of fluid, which may be in the ventricular system or between the brain and dura mater. In severe form of hydrocephalus, there is marked thinning of the cranial bones (Noakes *et al.*, 2009). It may be caused due to genetic, nutritional and environmental factors (Kalman, 1989). Obstruction in free passage of cerebrospinal fluid in to the arachnoid space leads to excessive swelling of cranial cavity during foetal development (Salunke *et al.*, 2001). Occurrence of dystocia due to foetal monster particularly hydrocephalus is rare in goats (Dennis, 1974; Majeed *et al.*, 1992; Balagopalan *et al.*, 1996) and mare (Singh *et al.*, 2013). It is more common in cattle (Purohit *et al.*, 2006; Yadav, 2008) and canines (Noakes *et al.*, 2009). Majeed *et al.* (1992) reported that the incidence of congenital defects is more in goats (55.5%) as compared to sheep (25.0%).

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