# CONGENITAL INTERNAL HYDROCEPHALUS IN A FOAL

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## ABSTRACT

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A rare case of successful delivery of a Hydrocephalic Foal was recorded

KEY WORDS: Hydrocephalus, Foal, Dystokia

## INTRODUCTION

Hydrocephalus, caused by an accumulation of excess fluid in the cranial or skull cavity, is a rare congenital abnormality of great clinical and obstetrical importance and been previously recognized in Arabian foals. {Andrews, 1Q98. Srnirh.  $2002 \pm$  Gilman, 1956). It may be caused by genetic, nutrional and environmental factors including infective etiology (Kalman, 1989).

## **CASE HISTORY & OBSERVATIONS**

A mare at term was reported at the veterinary polyclinic complex shahpur distt.Kangra (HP) with the history of straining for the last 36 hours.

The animal was examined per-rectally and then per -vaginally and diagnosed for severe dystokia.

### TREATMENT AND DISCUSSION

Per-Vaginal examination revealed an enlarged head of the foal hindering its smoolh passage through the cervicai canal. Epidural anaesthesia (5 ml. 2% Lignocaine Hcl) and lubrication was done with liquid paraffin. Dystokia was relieved through gentle traction and a foal was delivered. Initially it was unable to nurse from the mother and was bottle fed for 48 hours. Its respiration rate was 41 breaths per minute, Heart rate

Vety Surgical Specialist VPCShahpur. V.O. V.H. Gola Vety Gynecologists, VPC Shahpur. was 84 beats per min and rectal temperature was 102.5 degree F. The foa! was bottle fed for three days. On the 4<sup>I</sup> day, it died. Gross examination revealed fluid filled sac outside the head. Necropsy was conducted which revealed marked abnormalities of gyri and sulci with severe cerebrocortical thinning. Since the normal absorption of CSF occurs in the cerebral veins and venous sinuses, any obstruction to the normal flow and absorption of CSF results in accumulation of CSF central to the site of obstruction. Such accumulation within the cranium is defined as hydrocephalus. Clinical signs in live cases include enlarged and dome shaped head, changed mentation and abnormal gait.

Hydrocephalus is uncommon in horses and is usually identified as a neonatal problem and/or diagnosed at necropsy. Based on the field data, possibb causes of the defect could neither be proved nor specifically overruled in individual cases (Ojala, 1992). Affected foals often do not nurse sufficient amounts of colostrum and die from septicemia (Smith 2002).

Simple autosomal recessive genes have been reported to be linked \vith hydrocephalus in cattle (Roberts 1986). Jubb and keneddy (1970) stated that congenital hydrocephalus is known to be inherited in cattle and exacerbated in its manifestation by coexisting hypovitaminosis-A.

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