

# Neonatal Diarrhoea in Foal: A Case Report

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## Abstract

Diarrhoea means the production of faeces that are softer than normal. Five days old female foal brought with a history of diarrhoea since last 24 hours. Owner reported that the foal was unable to stand, lethargic, dehydrated and pass watery yellow colour faeces. Foal was treated with antibiotics acting in gastrointestinal tract Metronidazole, combination of Sulphadimidine and Trimethoprim, Fluid Therapy and Flunixin Meglumin for analgesia. Foal responded immediately after treatment and stood after 30 minutes of treatment but complete recovery occurred in next three days.

**Key words:** Neonate; Diarrhoea; Foal.

## Introduction

Diarrhoea means the production of faeces that are softer than normal. Normal equine faeces are produced as non-offensive, greenish-brown, semisolid that will break up in the hand, revealing varying degrees of fibrous content, depending upon diet. Foals with enteritis or enterocolitis develop varying degrees of endotoxemia and suffer a number of metabolic complications like hypovolemic shock, acidosis, hypotension and bacteremia. Numerous non-infectious and infectious agents are likely to be responsible for enteritis and enterocolitis in the neonatal foals (Magdesian, 2005). Almost foals develop diarrhoea for a transient period within the first weeks of life (Masri *et al.* 1986 and Kuhl *et al.* 2011). Studies have reported different etiologies for foal diarrhoea as bacterial, viral, and parasitic origin (Dunkel *et al.* 2004; Magdesian, 2005; Knottenbelt *et al.* 2007; Gulati *et al.* 2007; Velde *et al.* 2011). Diarrhoea is a significant cause of morbidity and mortality in the neonatal foal (Cohen, 1994; Gundram and More, 1999; Dubey *et al.*, 2008) and is almost completely curable by good management. The highest risk period for diarrhoea is from birth until about 1 month of age (Rao and Nagarcanekar, 1980).

## Case history and observations

Five days old female foal brought with a history of diarrhoea since last 24 hours. Owner reported that the foal was unable to stand, lethargic, dehydrated and passed watery yellow colour faeces (Fig.-1). On clinical examination foal showed suckling reflex, Temperature -99.8°F, Respiration-28/min., Pulse- 72/min. and CRT-more than 2 Sec. Abdominal auscultation increased gut sound and showed intermittent signs of pain.

## Treatment and discussion

First aim of treatment restore hydration and pain relief, foal was treated with Inj.- Metronidazole @ 22mg/kg bwt, q24h X 2days, Fluid Therapy (Normal Saline 500ml and 1 ltr. RL), normal hydration of foals may be maintained by nursing or by administration of oral fluids (Electoral powder diluted with fresh water and milk), Inj.- Biotrim (Sulph. + Trimethoprim) @ 20mg/kg bwt, q24h, 2days and Inj.- Flunixin Meglumine @ 0.2mg/ kg I/V only once (relieve the pain). After a few minutes of treatment, the foals can sit in sternal recumbency. IV fluids are often continued to provide maintenance and replace on-going losses. Foal showed immediate response after treatment and stood after 30min. of treatment but complete recovery within three days (Fig-2). A different treatment regime of Ivermectin @ 0.2 mg/kg body weight was found highly effective in foal diarrhoea of parasitic origin (Kumar, *et al.* 2013).



Picture 1- Foal with Diarrhoea



Fig 2- After complete recovery

Medical management of foals with diarrhoea depends on the severity of the diarrhoea and clinical signs. For foals with diarrhoea, clinical signs of sepsis and hypovolemia, hospitalization, with frequent monitoring and aggressive fluid therapy, are often necessary. Severe cases of diarrhoea and colitis are life threatening and require aggressive intensive care.

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