

## Full Length Case Report

### RABIES IN A CAMEL - A CASE REPORT

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#### ABSTRACT

A 4 year old she camel with the history of dog bite reported with the symptoms of aggressiveness and weakness of hind quarter. The clinical symptoms recorded were anorexia, foaming in mouth, change of voice along with deep bellowing, hyper excitability, switching up of tail with thrusting it on anus and frequent micturation. The animal died on third day with complete paralysis of the body. On the basis of clinical symptoms the case was diagnosed as a case of rabies.

**Key words:** Hyper Excitability, Switching, Symptoms.

#### INTRODUCTION

All mammalian species are believed to be susceptible to rabies virus (Bloch and Diallo, 1995). Rabies is a fatal disease for warm-blooded vertebrates, which causes central nervous system infection, paralysis and death (Esmaili *et al.*, 2012). Although the clinical signs of rabies are similar in different animal species, its signs in camels are rarely cited in text books. Sylvatic and urban forms are the 2 features of the disease that appear in extreme and mild degrees of ferocity, respectively (Radostits *et al.*, 2007). Camels are used in India as draught animals or riding animals, mostly by nomadic people. Veterinarians encounter the disease in wild animals and in the common species of domestic animals, and also appeared in domestic Camelidae (Bloch and Diallo, 1995). The present paper described an case of rabies in camel which was attacked by an rabid dog.

#### Case History and Observations

A 4 year old she camel was brought to the medicine clinic of the college with the history that she was off feed and withheld water intake since last two days. Animal showed aggressiveness and weakness. There was history of presence of two rabid dogs in village who had bitten many animals of village possibly this camel also. The Camel was isolated and observed constantly. The clinical signs recorded were anorexia, foaming in mouth, change of voice along with deep bellowing, frequent change of posture, hyper excitability

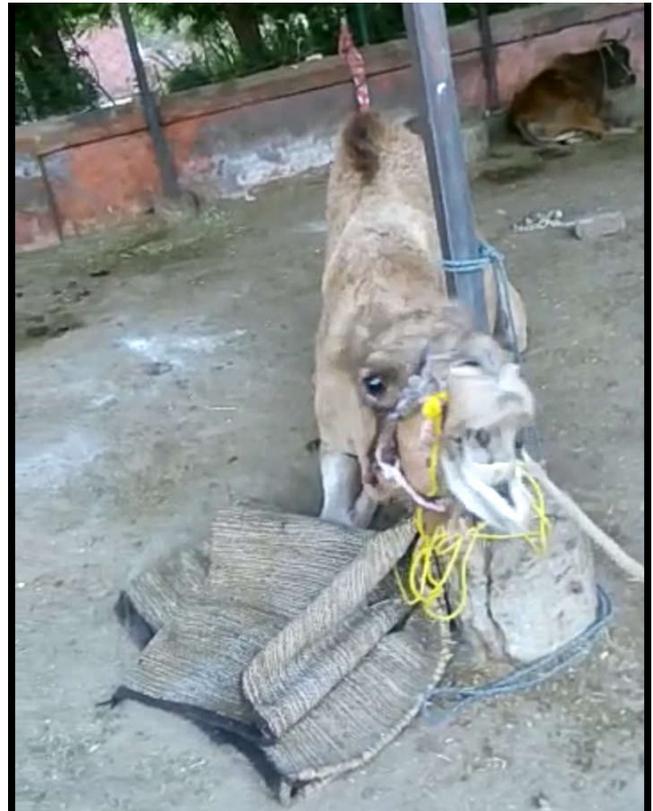
(Fig.1 and 2), switching up of tail slowly and bringing down with thrusting it on anus and frequent micturation. Animal tempted to charge and bite nearby persons(Fig.3). On second day of admission, paralysis of muscles was observed characterized by inability to get up. Animal died on third day. On the basis of history and clinical sign, it was diagnosed as a case of rabies.

#### DISCUSSION

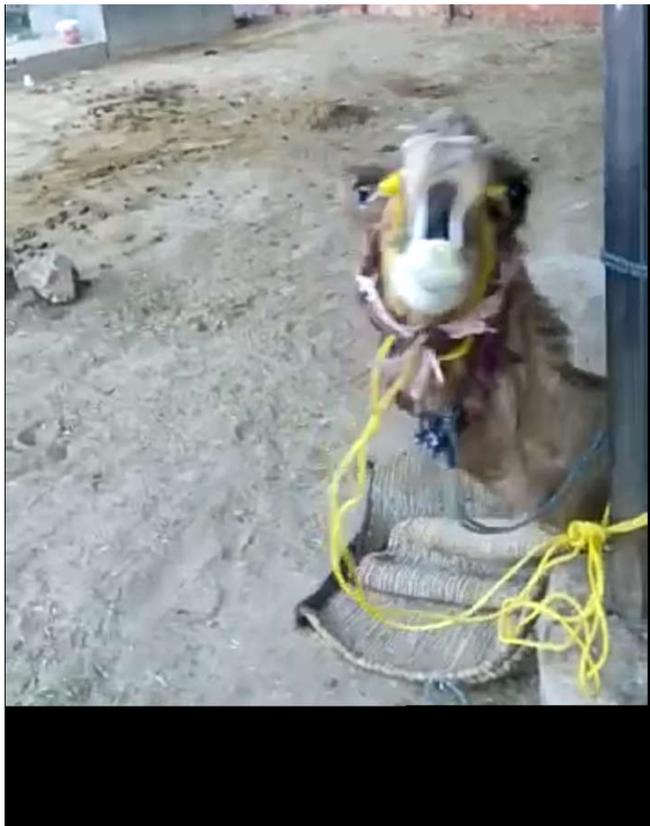
A global report on rabies has found India accounts for more than one-third of all deaths due to dog bite worldwide (Jha, 2015). Dogs are the main source of human infection, while cats constitute the second most important group of domestic animals followed by cattle, sheep, goats, camels, donkeys and then wild animals (Seimenis, 2008). In the present case the dog is to be suspected for the transmission of disease in camel. Rabies is an acute, progressive viral encephalomyelitis that principally affects carnivores and bats, although any mammal including Camel can be affected (Charles, 2016). It is caused by a Lyssa viruses of the Rhabdovirus family. Lyssa viruses are usually confined to one major reservoir species in a given geographic area, although spillover to other domestic species is common (Nibret, 2015). Identification of different virus variants by laboratory procedures such as monoclonal antibody analysis or genetic sequencing has greatly enhanced understanding of rabies epidemiology (Jean *et al.*, 1992). Generally, each virus variant is responsible for virus transmission between members of the same species in a given geographic area. (Charles, 2016). Transmission almost always occurs via introduction of virus-laden saliva into tissues, usually by the bite of a rabid animal (Charles, 2016).

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**Figure 3. Camel tempted to charge and bite nearby persons.**



**Figure 1 and 2 – Camel showing hyper excitability**

Incubation period for rabies in camel is 3 weeks to 6 month (Mcgrane and Higgins, 1985). Rabies in camels were also earlier reported by Ahuja *et al.* (1994) and Gahlot (1994). The symptoms recorded in the present report were similar to those reported by previous workers (Ahuja *et al.*, 1994; Gahlot, 1994 and Omer *et al.*, 2006).

Prevention of rabies can be done by many effective vaccines, such as modified-live virus, recombinant, and inactivated virus, for use in cattle and sheep, these vaccines can also be used in camels and for camel recommended vaccination frequency is 1 year (Ye Liu 2016).

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