

**Diseases and Signs of Disease in the One-humped Camel (*Camelus dromedarius*)  
Under Open Range System**

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**ABSTRACT**

Twenty-two salient clinical symptoms indicative of disease in the One-humped camel (*Camelus dromedarius*) are described. Eight viral infections causing clinical disease in camels (Camel pox, contagious ecthyma, camel papillomatosis, neonatal diarrhoea, rabies, Rift valley fever, parainfluenza, Peste des petits ruminants –PPR) and their etiological agents are tabulated. The clinical picture and/or pathological changes resulting from infection by the first five viruses are shown. Moreover, five non-pathogenic viral infections (Foot-and-mouth, Akabane disease, blue tongue, infectious bovine rhinotracheitis and African horse sickness) for which camels are seropositive without showing clinical signs are also tabulated.

Twenty-seven bacterial and one fungal disease and their etiological agents are tabulated (Anthrax, brucellosis, salmonellosis, hemorrhagic septicemia, pseudotuberculosis, contagious skin necrosis, pneumonia, tetanus, blackleg, enterotoxaemia, paratuberculosis "Johne's" disease, tuberculosis, collibacillosis, nocardiosis, listeriosis, strangles, leptospirosis, dermatophilosis, mastitis, abscesses, neonatal diarrhea, otitis media, hemorrhagic disease, keratoconjunctivitis, heart water, anaplasmosis and chlamydiosis). The clinical picture, gross pathological and/or histopathological changes produced by 15 of these diseases are shown.

Eight protozoa infecting camels are tabulated (Trypanosomiasis, babesiosis, theileriosis, blantidiasis, coccidiosis, trichomoniasis, toxoplasmosis, sarcocystosis). The clinical picture and/or pathological changes of 4 of these diseases are shown.

Sixteen genera and 32 species of Nematodes and Three genera and five species of filarial worms infecting camels and their site of infection are tabulated, and the eggs of some of these nematodes are shown.

Six genera and nine species of trematodes infecting camels together with their intermediate hosts and site of infection are tabulated. The mature worms, eggs and pathological changes caused by two genera of these worms are shown.

Two genera and three species of cestodes infecting the small intestine and one genus and species infecting the bile ducts of camels are tabulated. The intermediate stages of cestodes infecting the small intestine of *Canidae* (*Hydatid cysts* of *Echinococcus granulosus*, *Cysticercus cerebralis* of *Taenia multiceps*, *Cysticercus tenuicollis* of *Taenia hydatigena* and *Cysticercus dromedarii* of *Taenia hyaenae*) and *Cysticecus bovis* of *Taenia saginata* infecting the small intestine of man consuming the meat of infected camels are tabulated and are shown in the different organs and muscles of camels.

The clinical picture and signs of mange caused by *Sarcoptes scabiei*, adult and embryonated eggs, life cycle of the mite and the pathological changes resulting from the disease are also shown.

Different genera and species of ticks infesting camels are tabulated and shown. Flies causing different types of myiasis and flies causing nuisance and transmitting viral, bacterial and parasitic diseases to camels are also tabulated and shown.

The clinical picture and/or pathological changes of some management (lactic acidosis, bloat) and nutritional deficiency diseases (copper, selenium and vitamin E) are shown.

The clinical picture and post mortem changes caused by *Aspergillus clavatus*, Salinomycin and aluminium toxicity resulting in the mortality of a large number of camels fed accidentally on contaminated wheat bran is shown.

**Keywords:** Camel diseases, Clinical signs, Aetiology, Pathological changes