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Pathological Observations of Intestinal Coccidiosis in Camel (Camelus dromedarius)

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Abstract : The camel (Camelus dromedarius) is an important animal component of the fragile desert eco-system of India. Apart from others, impaired milk and meat production decrease in performance and even death are some of the major consequences of parasitic disease like coccidiosis in camel. Coccidiosis which is an acute invasion and destruction of intestinal mucosa by protozoa of the genera Eimeria or isospora spp. Post-Mortem examinations of 5 carcasses of dromedary of different age groups aged from 2 to 5 years were conducted. The history indicated that the camels were suffering from diarrhoea, dysentery, pyrexia, inappetence, weight loss, and emaciation. Post mortem examinations showed macroscopic and microscopic alterations in the small intestine, particularly in jejunum and ileum regions. The mucosae were congested, and haemorrhagic on which there were numerous whitish-grey nodular foci were observed. The affected intestinal tissue specimens were preserved in 10% formal saline and processed mechanically for paraffin embedding by acetone and benzene technique. The sections were stained with haematoxylin and eosin method of staining for histopathological examinations. Histologically, typical lesions such as congestion and haemorrhages were present. The intestinal villi were oedematous; mucosa degenerated and desquamated, along with infiltration of eosinophils and macrophages. Crypts of lieberkuhn were obliterated due to presence of schizonts in lamina propria. Older camels served as the source of spread of coccidial infection and were also predisposed to secondary infections.

Keywords : camel, coccidiosis, Eimeria, histopathology
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