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Clinicopathological Findings of Partuberclosis in Camels: Possible Steps for Control Strategy

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Abstract: Mycobacterium avium subspecies paratuberculosis causes paratuberculosis, a chronic debilitating granulomatous enteritis, in camels as well as domestic and wild ruminants. The clinical manifestation of the disease in camel is not well characterized, therefore this study was aimed to investigate the clinical and pathological pictures of camels that are suffering from partuberculosis. Twelve young camels that were presented to the Veterinary Teaching Hospital, King Faisal University were investigated. Clinical and pathological examination were performed. The results revealed highly significant increase in creatinine, blood urea nitrogen, magnesium, AST and ALT in diseased camels, while glucose, total protein and albumin were highly significantly decreased in diseased camels when compared to healthy ones. Post-mortem testing indicated thickening, corrugation of the intestinal wall, folded mucosa, enlarged and oedemated ileocaecal and mesenteric lymph nodes. The microscopic findings detected short, blunt and distorted intestinal villi with hyperactive goblet cells of the villi and the crypts of lieberkuhn contained mucin droplets. The lamina propria was heavily infiltrated with mononuclear cells mostly macrophages. This clinical picture of paratuberculosis may be used to initiate control strategy to limit the spread of the disease in camel herds.

Keywords: camel, partuberclosis, control, Saudi Arabia

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