

Pathogenesis and Pathology of East Coast fever in Cattle

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East Coast fever (theileria parva infection) is an important killing disease of cattle in east and certain parts of Africa. The research on this disease has been recognized to be of great importance in various institutions with the possible result of finding a vaccine or a curable remedy. Pathogenesis and Pathology. "High-grade" steers 6-9 months old of various exotic breeds and brought from farms operating vigorous tick control were used for the study of pathogenesis and pathology of E.C.F. The parasite used for experimental infection of cattle was *Theileria parva* (Muguga) and also a local strain of parasite isolated from a field case of E.C.F. The pathogenesis and Pathology of the disease in the steers was evaluated on symptomatology, appearance of different stages of the parasite, haematology, changes in serum proteins and enzymes, gross pathology and histopathology. There was slight decrease in haemoglobin and packed cell levels in protracted cases. Also changes were noted in the differential leukocyte counts and slight elevation of SGOT levels again in protracted cases. No changes were noted in serum proteins. Gross and microscopical lesions were observed in most of the organs. There was often enlargement of the lymph nodes more so in the early stages of the development of the disease. Other gross lesions which were almost constantly encountered were lung oedem and abomasal ulcers. Significant microscopical changes were lymphocytic cell infiltration in the body organs. In the lymphoid tissues, there was often lymphocytic cell proliferation but in protracted cases there was depletion of the cells from the lymphoid tissues. Degenerative changes were also noted in some organs.