The results of a clinical and pathological study on naturally and experimentally infected dogs indicate that 2 distinct trypanosomiasis syndromes occur. In *Trypanosoma brucei* infection there is widespread invasion of all body tissue by trypanosomes, resulting in severe tissue damage and specific organ failure. A moderate anaemia develops and pronounced changes are found in lymph nodes, spleen, eyes, heart, skeletal muscle and subcutaneous tissues. By contrast, *T. congolense* infection may manifest either as a progressive anaemic syndrome or as an acute haemorrhagic crisis. [AS]