Trypanosoma evansi is the cause of surra, a camel disease which is the most important single cause of economic losses in camel rearing areas. Sheep and goats herded with camels are the most likely hosts for T evansi. Upon intravenous infections goats developed erratic parasitaemia, lost weight and their packed cell volume dropped significantly (P < 0.001). Trypanosomes were demonstrated by direct microscopy in extravascular locations such as synovial, peritoneal and cerebrospinal fluids and also in lymph by subinoculations into mice. The carcasses were emaciated and pale. Histologically there was lymphatic tissue hyperplasia, muscular atrophy and nephrotic changes. Two animals had necrotic foci in the liver, kidneys, lymph nodes, spleen and lungs and also bronchopneumonia. Histologically there was depopulation of lymphocytes in lymphatic tissues, destruction of hepatocytes in the liver with infiltration by inflammatory cells in the liver, lymph nodes, spleen and the kidneys.