

ABSTRACT

Sprague Dawley rats infected with *Trypanosoma brucei brucei* strain IL3579 (2616) developed parasitaemia characterised by intermittent remission and relapses. Infected rats developed progressive anaemia that was macrocytic normocytic. The rats responded to trypanosome infection by formation of antibodies, as shown by, enhanced γ -globulin levels and agglutination of trypanosomes by serum derived from infected rats.

Dexamethasone treatment, using different concentrations administered 24 hours before infection, ablated the antibody response as evidenced by reduced γ -globulin levels in the treated groups. In dexamethasone treated rats, parasitaemia were elevated and remission eliminated, suggesting the involvement of an antibody in trypanosome clearance in rats whose humoral response was not compromised. The corticosteroid treatment also ameliorated the infection-induced anaemia, as evidenced by reduced percentage fall in haematocrit. It is, therefore, most probable that the γ -globulin fraction not only plays a key role in trypanosome clearance but also in the aetiology of anaemia in rodent trypanosomiasis.