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Trypanosome non-specific IgM antibodies detected in serum of *Trypanosoma congolense*-infected cattle are polyreactive

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Abstract

Serum Ig from *Trypanosoma congolense*-infected cattle were affinity-purified using immobilised trypanosome or non-trypanosome antigens (β -galactosidase, cytochrome C and ferritin). The bound and unbound IgG and IgM fractions were collected and tested in ELISA for reactivity to each antigen. The results indicated that the presence of reactivity to non-parasite antigens in serum of infected cattle is due to polyreactive IgM antibodies. However, the IgG fraction only bound to trypanosome antigens and was only present in post-infection sera, indicating that it was induced by the infecting trypanosomes. Since the polyreactive IgM antibodies were also present in pre-infection sera, it is probable that they were natural antibodies that were not induced but only amplified by the trypanosome infection.

Keywords

Trypanosomosis; *Trypanosoma congolense*; Cattle; Polyreactive antibodies; Natural antibodies