

A study was made of the effects of serum and gamma-globulins from vaccinated cattle (donor cattle) given to cattle exposed to *Theileria parva* infection. The latter were treated with normal serum, with serum containing high antibody titre against *T. parva* (as evaluated by the indirect fluorescent antibody technique), or with globulins prepared from normal and from immune serum. They were infected by inoculation of standardized suspension of *Rhipicephalus appendiculatus* containing *T. parva* infective particles. Neither the establishment of infection nor the clinical and haematological changes in the principals were influenced by treatment with immune serum or concentrated globulins; all died of East Coast fever. Humoral antibodies did not protect cattle against fatal ECF, neither did they enhance the infection.