

Abstract

1. The degree of rat erythrocyte lysis and immobilization of *Trypanosoma brucei* in infected blood by buffered hypotonic solutions of sodium chloride and sources was studied. 2. At 0.3% sodium chloride solution 98% hemolysis of erythrocytes was achieved while 95% of the original bloodstream trypomastigotes survived and were found to be motile and viable for biochemical study. 3. Further increase in the concentration of sodium chloride above 0.3% revealed an increase in the immobilization of trypanosomes and a decrease in the erythrocyte hemolysis. 4. Bloodstream trypomastigotes have been prepared by differential osmotic lysis of infected blood in 0.3% sodium chloride solution and used for studying their metabolism.