The effect of experimental infection of Boran cattle in early and mid-pregnancy with Trypanosoma vivax.

Abstract:

Six susceptible Galana and five trypanotolerant Orma Boran (Bos indicus) cattle were infected experimentally with Trypanosoma vivax KETRI 2501 by cyclical transmission using Glossina morsitans during early and mid-pregnancy. Four pregnant animals, two of each Boran type were used as controls and remained uninfected throughout the study period. Three out of the six infected susceptible Galana Borans aborted, whilst one had a stillborn calf. None of the trypanotolerant Orma Boran cattle aborted and all carried their pregnancies to term. All control animals produced live calves at term. The mechanisms leading to disruption of reproductive function in susceptible Boran cattle were not clear but could involve a number of factors, including anaemia, weight loss and post-infection decline of plasma progesterone levels. It is concluded that infection with T. vivax disrupts maintenance of pregnancy in susceptible Galana Borans but does not affect maintenance of pregnancy in the Orma Boran, demonstrating their tolerance to infection with T. vivax.