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ESTABLISHMENT OF AN EXPERIMENTAL MODEL OF A NATURALLY OCCURRING SIMIAN MALARIA INFECTION IN SRI LANKA : *PLASMODIUM INUI* IN THE TOQUE MONKEY (*MACACA SINICA*) USING *ANOPHELES ELEGANS* AS THE VECTOR

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Progress of research on immunological and chemotherapeutic aspects of human malaria has created an increasing demand for newer and better experimental non-human primates malaria systems. In this study we have established in the laboratory, a naturally occurring simian malaria system indigenous to Sri Lanks, *P. inui shortii* using natural host and vector, and characterised the model for studies on experimental immunization against malaria.

The natural course of infections in blood was studied in 25 animals. Within 3 weeks of patency, infections rose to peak parasitaemias of upto 4% and declined rapidly to be maintained as chronic infections (below 0.5% parasitaemias) for more than 30 weeks. Later, infections became subpatent, but sterile immunity was not acquired during the observation period of 30 weeks.

SECTION A

In infected monkeys splenectomy caused an increase of parasitaemias up to 35 and thereafter infections became chronic. Up to 20 months after splenectomy there was no evidence of sterile immunity.

Data on the sporogonic cycle of *P. inui* in *A. elegans*, and its transmissibility are presented here for the first time. *An. elegans* was found to be an efficient vector of *P. inui*.

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