Infection with the protozoan parasite *Plasmodium falciparum* places a huge burden on human life and is a major cause of morbidity and mortality in tropical countries especially in the sub-Saharan Africa. Children bear most of the morbidity and mortality from this disease, which comes as a result of complications such as severe anaemia or cerebral malaria (coma). A clear understanding of the factors that play a role in the pathogenesis of complicated *P. falciparum* malaria is essential, as this will contribute to the development of effective therapeutic and prophylactic interventions. Evidence from human and animal studies suggests that circulating immune complexes (CICs) develop during malaria infection. However, it is not clear what role these complexes play in the pathogenesis of complicated *P. falciparum* malaria. This study aimed at determining if children with severe malaria had higher levels of CICs than children with uncomplicated malaria and whether there is a correlation between age and levels of CICs in naturally infected patients from a malaria endemic area. To achieve these objectives two types of studies were carried out. One was a case-control study in which cases of severe malaria were compared to age and gender-matched controls with uncomplicated symptomatic malaria or with no symptoms regardless of parasitaemia. In the second study, a cross-sectional survey was carried out that included children and adults of all ages. CICs were quantified by a solid phase Clq ELISA and a novel CR1 ELISA binding assays. Children with severe malarial anaemia and those with cerebral malaria had significantly higher levels of CICs than age and gender-matched controls and following treatment these levels declined and no differences remained between groups thus suggesting that malaria infection causes increase in CIC levels. The high levels of CIC were associated with disease severity especially in SA where low haemoglobin was associated with higher CIC levels. In the cross-sectional survey, the level of ICs increased with age. However, the overall levels in all groups were lower than in children with severe malaria thus suggesting a possibility of a comparatively well-developed IC clearance mechanism in adults.