

## **Host and parasite immunopathogenesis of Malaria**

### **ABSTRACT**

*Malaria is a major health problem in various parts of the world especially affecting the tropical countries. It affects the vital organs causing severe complicated malaria. Clinical syndromes like severe cerebral malaria, anaemia, coagulation abnormalities, respiratory distress and severe anaemia can increase the mortality of malaria infected cases. Variation in individual susceptibility and severity and type of clinical presentations of malaria raises the need for study of both the parasite and host immune reactions as well as the contribution of inflammatory cytokines in malaria pathogenesis. This study explored the immunopathological basis and advances of severe malaria and their importance in pathogenesis of malaria and its complications. Previous and ongoing studies indicate that changes in endothelium during the sequestration of parasites in organs causes disruption of endothelial barrier function leading to serious effects of malaria. Parasite and host factors contribute to disturbance of cytokine regulation and escape of parasites from the immune system of the host. Disturbance of cytokine regulation and escape of parasites from the immune system of the host also contribute to pathogenesis of severe malaria. Immunopathological changes and dysregulation of cytokine production play central role in pathogenesis and disease severity in malaria.*