PREDAVANJE

Malaria acute respiratory distress syndrome (MA-ARDS): effects of parasite on host lipids metabolism, oxidative defences and cytokines production

Diletta Scaccabarozzi

Department of Pharmacological and Biomolecular Sciences, University of Milan

utorak, 14. novembar 2017 u 10.00 časova

Mali hemijski amfiteatar Hemijskog fakultete, Studentski trg 12-14, Beograd

Abstrakt

Malaria is a major health problem, with more than 650.000 deaths and 212 million clinical cases each year. Respiratory distress as malaria associated acute respiratory distress syndrome (MA-ARDS) is a common complication. The pathogenesis of MA-ARDS is mainly inflammatory and one of the main observation is the presence of abundant monocytes and macrophages inside the blood capillaries, in the interstitium and also in alveolar spaces.

The aim of our studies was to perform a comprehensive analysis of the local and systemic inflammatory response present in MA-ARDS and to analyze the lipid profile of the pulmonary surfactant, the lung and liver tissues and plasma using two different models of murine malaria of similar gravity, but different involvement of lungs or liver. In particular, we studied C57BL/6J mice infected with two different species of Plasmodium: Plasmodium berghei NK65 strain which induces MA-ARDS and Plasmodium chabaudi (PcAS), which does not. The two models allowed us to directly compare the different pathological manifestation of the same infection in order to identify peculiarities which could be exploited for novel therapeutic interventions.