Poster presentation

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Differential kinetics of plasma procalcitonin levels in cerebral malaria in urban Senegalese patients according to disease outcome Babacar Mbengue^{*1}, Bacary Diatta², Birahim Niang², Ngor Diagne¹, Mamadou Ndiaye², Laurence Marrama¹, Olivier Garraud³, Ronald Perraut¹ and Alioune Dieye¹

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P. falciparum malaria is directly responsible for near two million lives a year, and one is still on the quest for a prognostic marker of fatal outcome. This study analyses the association between serum levels of Procalcitonin (PCT), a marker of septic inflammation, and clinical outcome in 98 Senegalese patients, hospitalised with cerebral malaria.

Mean PCT levels were more elevated in patients with active infection, significantly higher on day 0 and onwards in the 26.5% of fatal cases, compared to that survivors (53.6 vs 27.3; P = 0.01). No clearly defined threshold level indicated an individual occurrence of fatality, however there was a clear different profile of evolution of PCT levels on the 3 days of observation: they significantly decreased by day 1 in surviving patients (P < 0.001), contrary to fatal cases, indicating that PCT level and kinetics could be of use to predict a reduced risk of fatality in patient with cerebral malaria.