15% and 28% of these patients had severe hepatotoxicity at 4 and 24 weeks, respectively. Serum levels of all enzymes increased significantly (p<0.05) with increased treatment duration. Univariate analysis revealed that the risk factor of developing severe hepatotoxicity was significantly (p<0.05) greater in patients<30 years, males, low BMI, low monthly income earners and patient on AZT+3TC +NVP regimen. While multivariate analysis at p<0.09 showed that age <30 years, Low BMI, low monthly income, or the use of AZT +3TC +NVP regimen were independent risk factors.

Conclusion Low BMI,<30 years, low monthly income and the use of AZT+3TC+NVP regimen were identifiable risk factors for the development of severe hepatotoxicity. As such, these factors should be considered as important for strategy by clinicians to prevent hepatotoxicity.

PO 8208 CYTOKINE PROFILES IN SUDANESE CHILDREN PRESENTED WITH SEVERE MALARIA, UNCOMPlicated MALARIA COMPARED TO HEALTHY COMMUNITY CONTROLS ACCORDING TO WHO CRITERIA

1Hamdan Hamdan*, 2Muna El-Masbah, 3Tasneem El-Awad. 4Al-Meelain University, Faculty of Medicine, Khartoum, Sudan; 5Sudan International University, Khartoum, Sudan

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Background Immune system response to Plasmodium falciparum (P. falciparum) malaria infection outlines the disease course and outcome. This is attributed to variable production of cytokines that either promote (pro-inflammatory) or curtail (anti-inflammatory) the inflammatory process. Elucidating underlying immunological disease interactions may direct development of effective treatment and provide better understanding of the disease process.

Methods A case control study was conducted in Mohamed Elamin Paediatrics Hospital (March- August 2016) in Omdurman in central Sudan, an area that is characterised by unstable malaria transmission. The study aims to investigate the role/interaction of cytokine profiles of gamma interferon (IFN-γ) and Interleukin-10 (IL-10) in children infected with P. falciparum malaria. Enzyme-linked immunosorbent assay was used to measure the concentrations of cytokines, IFN- γ and IL-10, in serum from Sudanese children. Thirty-five children with complicated P. falciparum malaria were enrolled to the study; well-matched 35 uncomplicated P. falciparum malaria and another 35 healthy children were controls. Informed written consent was obtained from the parents or guardian. Complete blood count, blood urea and random blood glucose were measured by using standard laboratory procedures.

Results The concentrations of IFN-γ and IL-10 levels were significantly higher in children with severe malaria compared to uncomplicated malaria and healthy control. There was a strong positive correlation observed between IL-10 and IFN-γ (r=0.688 p=0.001), as well as a strong positive correlation detected between IFN-γ and urea levels (r=0.73; p=0.010). There was moderate correlation between IL-10 and urea (r=0.386; p<0.001). While negative moderate correlation was observed between IL-10 and haemoglobin levels (r=-0.316; p=0.003), no correlation was detected between IFN-γ and haemoglobin levels. All patients were discharged home in good condition.

Conclusion These results indicate both IFN- γ and IL-10 are involved in shaping the course and outcome of the severe malaria in children.

PO 8239 BASELINE ASSESSMENT OF LYMPHATIC FILARIASIS IN 18 COMMUNITIES IN WESTERN GHANA BEFORE THE IMPLEMENTATION OF TWICE-YEARLY TREATMENT

Dziiedzom De Soza*, Collins Stephen Ahorlu, Joseph Otchere, Sedzro Mensah, Sudan Adumankwah, Daniel Boakye, Ngoguchi Memorial Institute for Medical Research, University of Ghana, Accra, Ghana

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Background Lymphatic filariasis (LF) is a neglected tropical disease targeted for elimination as a public health problem by