

**O1155 Congenital malaria in newborns from Blue Nile state, Sudan**Samia Ali Omer\*<sup>1</sup>, Ali Noureldein<sup>2</sup>, Hadeel Eisa<sup>3</sup>, Israel Molina<sup>4</sup>

<sup>1</sup> Tropical Medicine Research Institute, Khartoum , Sudan, <sup>2</sup> Faculty of Medicine, University of Khartoum, Khartoum , Sudan, <sup>3</sup> Tropical Medicine Research Institute,, Khartoum , Sudan, <sup>4</sup> Vall de´Hebron institut de Reserca (VHIR), Barcelona, Spain

**Background:**

Diagnosis of congenital malaria is complicated by low density of the parasites in peripheral blood of newborns. Molecular techniques are significantly more sensitive than blood smears in detecting low-level parasitemia.

The aim of the present study was to determine the prevalence of congenital malaria, defined as malaria infection in newborns´ peripheral blood, in 102 babies born to mothers with placental malaria diagnosed by thick smear in Blue Nile state, Sudan by the use of the real time-PCR

**Materials/methods:** At delivery time, placental, maternal peripheral and cord blood samples in addition to samples collected from the newborn peripheral blood were examined for malaria infection using Giemsa stained thick smear and parasite DNA detection by real time PCR.

**Results:**

Even though all the newborns were aparasitaemic by microscopy, nineteen (18.6%) had congenital malaria detected by real time PCR. Fifteen (78.9%) of the babies with congenital malaria were born to women with both placental and peripheral blood infections detected by both microscopy and real time PCR. Congenital malaria was significantly associated with cord malaria infections and maternal age and hemoglobin level ( $P < 0.001$ ).

**Conclusions:** This first study investigating congenital in Blue Nile state, Sudan shows that malaria infected placenta resulted in infants and cord blood infections

**Key words:** Congenital malaria, Newborn, Blue Nile State, Sudan

