

## Malaria Menace in Pregnancy; Hard to Ignore

**Authors :** Nautiyal Ruchira, Nautiyal Hemant, Chaudhury Devnanda, Bhargava Surbhi, Chauhan Nidhi

**Abstract :** Introduction: South East Asian region contributes 2.5 million cases of malaria each year to the global burden of 300 to 500 million of which 76% is reported from India. Government of India launched a national program almost half a century ago, still malaria remains a major public health challenge. Pregnant women are more susceptible to severe malaria and its fetomaternal complications. Inadequate surveillance and under-reporting underestimates the problem. Aim: Present study aimed to analyze the clinical course and pattern of malaria during pregnancy and to study the feto-maternal outcome. Methodology: This is a prospective observational study carried out at Himalayan Institute of Medical Sciences - a tertiary care center in the sub-Himalayan state of Uttarakhand, Northern India. All the pregnant women with malaria and its complications were recruited in the study during 2009 to 2014 which included referred cases from the state of western Uttar Pradesh. A thorough history and clinical examination were carried out to assess maternal and fetal condition. Relevant investigations including haemogram, platelet count, LFT, RFT, and USG was done. Blood slides and rapid diagnostic tests were done to diagnose the type of malaria. The primary outcomes measured were the type of malaria infection, maternal complications associated with malaria, outcome of pregnancy and effect on the fetus. Results: 67 antenatal cases with malaria infection were studied. 71% patients were diagnosed with plasmodium vivax infection, 25% cases were plasmodium falciparum positive and in 3% cases mixed infection was found. 38(56%) patients were primigravida and 29(43%) were multiparous. Most of the patients had already received some treatment from their local doctors and presented with severe malaria with the complications. Thrombocytopenia was the commonest manifestation seen in 35(52%) patients, jaundice in 28%, severe anemia in 18%, and severe oligohydramnios in 10% and renal failure in 6% cases. Regarding pregnancy outcome there were 44 % preterm deliveries, 22% had IUFD and abortions in 6% cases. 20% of newborn were low birth weight and 6% were IUGR. There was only one maternal death which occurred due to ARDS in falciparum malaria. Although Plasmodium vivax was the main parasite considering the severity of clinical presentation, all the patients received intensive care. As most of the patients had received chloroquine therapy hence they were treated with IV artesunate followed by oral artemesinin combination therapy. Other therapies in the form of packed RBC's and platelet transfusions, dialysis and ventilator support were provided when required. Conclusion: Even in areas with annual parasite index (API) less than 2 like ours, malaria in pregnancy could be an alarming problem. Vivax malaria cannot be considered benign in pregnancy because of high incidence of morbidity. Prompt diagnosis and aggressive treatment can reduce morbidity and mortality significantly. Increased community level research, integrating ANC checkups with the distribution of insecticide-treated nets in areas of high endemicity, imparting education and awareness will strengthen the existing control strategies.

**Keywords :** severe malaria, pregnancy, plasmodium vivax, plasmodium falciparum

**Conference Title :** ICOG 2015 : International Conference on Obstetrics and Gynaecology

**Conference Location :** Bangkok, Thailand

**Conference Dates :** December 17-18, 2015