Postpartum Malaria: Can it be Prevented?

Paulo Campos1,2,3,4*

1Titular Professor of Gynaecology and Obstetrics at Agostinho Neto University, Angola
2Head of Department of Gynaecology and Obstetrics of Medical Faculty of Agostinho Neto University, Angola
3Co-founder of CAOL, Coordination of Obstetric Care in Luanda, Angola
4President of AGOA, Association of Gynaecologists and Obstetricians of Angola

*Corresponding Author: Paulo Campos, Department of Gynaecology and Obstetrics, Faculty of Medicine of Agostinho Neto University, Av. Hoji-Ya-Henda, CP, Luanda, Angola.

Introduction

Malaria causes serious obstetric, neonatal and medical complications in pregnancy and in the puerperium. In endemic malaria areas, the risk of pregnant women to develop a more severe form of illness persists beyond delivery, at least 60 to 70 days postpartum [1]. According to Ramharter, et al. (2005) there is some evidence that some women remain at high risk of contracting malaria in the puerperium. Postpartum malaria is postulated to be caused by a de novo infection with Plasmodium parasites or by parasites sequestered in the placenta during the pregnancy and then released into the bloodstream at delivery [2]. The genotyping P. falciparum by PCR (Polymerase Chain Reaction) enables the discrimination between the persistence of parasites acquired during pregnancy from those acquired in the postpartum period [3]. Subclinical infections as well as substandard treatment of malaria during pregnancy are factors to consider that may lead to an increased risk of recurrent infections in the postpartum period [4].

Discussion

Studies that investigate the increased susceptibility of malaria infection during the puerperium are few. A study carried out in Dielmo, Senegal, from June 1, 1990, to December 31, 1998, demonstrated highest incidence of episodes of clinical malaria during the first 60 days after delivery (75.1 episodes per 1000 person-months) [1]. Another unpublished study carried out in the District of Samba (Luanda – Angola), from June 16 to August 17, 2014, found a prevalence of 48.3% of postpartum asymptomatic malaria and a statistically significant association between malaria infection postpartum (p < 0.05) with age, parity and low birth weight [5]. Pregnant women living in endemic areas who have developed natural immunity (due to prolonged exposure to malaria) benefit from chemoprophylaxis against malaria [6,7], by using intermittent preventive treatment during pregnancy (IPTp). This is the preferred approach of antenatal treatment as it effectively provides fewer deliveries of low birth weight infants as well as less maternal anemia [8-10]. However the optimal anti-malarial agent, dose, and frequency for IPTp depend on the patterns of regional transmission severity of the disease, drug resistance patterns and HIV prevalence. The previous recommendations consisting of only two doses of SP one month apart during antenatal period and close to the time of delivery, resulted in many missed opportunities for providing IPTp which resulted in poorer pregnancy outcomes [11]. That’s why, the WHO advises administration of at least three or more doses of sulfadoxine-pyrimethamine (SP) for IPTp, during the antenatal care visits [12,13]. Each SP dose suppresses or clears asymptomatic infection from the placenta and provides up to six weeks of post-treatment prophylaxis.

Conclusion

Although the chemoprophylaxis of malaria during pregnancy with sulfadoxine-pyrimethamine has raised some concerns regarding the development of drug resistance [14], in our opinion, the prevention of postpartum malaria should be achieved by the adoption of latest WHO recommendations. Malaria chemoprophylaxis should be also continued for at least two month after delivery as stated by Diagne, et al (2000).
Postpartum Malaria: Can it be Prevented?

Bibliography


