ECRONICON OPEN ACCESS

EC GYNAECOLOGY
Editorial

Postpartum Malaria: Can it be Prevented?

Paulo Campos[1,2,3,4]*

[1]*Titular Professor of Gynaecology and Obstetrics at Agostinho Neto University, Angola*

[2]*Head of Department of Gynaecology and Obstetrics of Medical Faculty of Agostinho Neto University, Angola*

[3]*Co-founder of CAOL, Coordination of Obstetric Care in Luanda, Angola*

[4]*President 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. Hojy-Ya-Henda, CP, Luanda, Angola.

Received: February 13, 2017; **Published:** February 18, 2017

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 Another unpublished study carried out in the District of Samba (Luanda – Angola), from June 16 to August 17, 2014, found a prevalence of 48.3% of postpartum asymptomatic malaria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).

Bibliography

1. Diagne N., *et al.* "Increased susceptibility to malaria during the early postpartum period". *New England Journal of Medicine* 343.9 (2000): 598-603.

2. Ramharter M., *et al.* "Clinical and parasitological characteristics of puerperal malaria". *Journal of Infectious Diseases* 191.6 (2005): 1005-1009.

3. McGready R., *et al.* "Parasitological efficacy of antimalarials in the treatment and prevention of falciparum malaria in pregnancy 1998 to 2009: systematic review". *British Journal of Obstetrics and Gynaecology* 118.2 (2011): 123-135.

4. WHO: World Health Organization. "Postpartum care of mother and newborn: a practical guide". *Geneva* (1998).

5. Antónia Mendes. "Prevalence of postpartum asymptomatic malaria in the Samba District Hospital from June 16 to 17 August 2014". *Monograph presented to the Faculty of Medicine of Agostinho Neto University in November* (2014).

6. Greenwood BM., *et al.* "The effects of malaria chemoprophylaxis given by traditional birth attendants on the course and outcome of pregnancy". *Transactions of the Royal Society of Tropical Medicine and Hygiene* 83.5 (1989): 589-594.

7. Radeva-Petrova D., *et al.* "Drugs for preventing malaria in pregnant women in endemic areas: any drug regimen versus placebo or no treatment". *Cochrane Database of Systematic Reviews* 10 (2014): CD000169.

8. McClure EM., *et al.* "A systematic review of the impact of malaria prevention in pregnancy on low birth weight and maternal anemia". *International Journal of Gynecology and Obstetrics* 121.2 (2013): 103-109.

9. Menéndez C., *et al.* "Malaria prevention with IPTp during pregnancy reduces neonatal mortality". *PLoS One* 5.2 (2010): e9438.

10. Taylor SM., *et al.* "Antenatal receipt of sulfadoxine-pyrimethamine does not exacerbate pregnancy-associated malaria despite the expansion of drug-resistant Plasmodium falciparum: clinical outcomes from the QuEERPAM study". *Clinical Infectious Diseases* 55.1 (2012): 42-50.

11. Kayentao K., *et al.* "Intermittent preventive therapy for malaria during pregnancy using 2 vs 3 or more doses of sulfadoxine-pyrimethamine and risk of low birth weight in Africa: systematic review and meta-analysis". *Journal of the American Medical Association* 309.6 (2013): 594-604.

12. World Health Organization Global Malaria Program. Updated WHO Policy Recommendation (October 2012): Intermittent Preventive Treatment of Malaria in Pregnancy Using Sulfadoxine-Pyrimethamine (IPTp-SP). Geneva, Switzerland: *World Health Organization* (2012).

13. World Health Organization. "Guidelines for the treatment of malaria, 3rd ed". *WHO, Geneva* (2015).

14. Campos PA., *et al.* "Plasmodium falciparum infection in pregnant women attending antenatal care in Luanda, Angola". *Revista da Sociedade Brasileira de Medicina Tropical* 45.3 (2012): 369-374.

Volume 4 Issue 3 February 2017