Post-Malaria Malaise: An Emerging Malaria Concept?

Emmanuel Oladayo Irek[1,*], *Odunayo Adebukola T Fatunla*[2]

[1]Department of Medical Microbiology and Parasitology, Afe Babalola University, Ado-Ekiti, Nigeria

[2]Department of Paediatrics, Afe Babalola University, Ado-Ekiti, Nigeria

***Corresponding author:**

Emmanuel Oladayo Irek

Department of Medical Microbiology and Parasitology, Afe Babalola University, Ado-Ekiti, Nigeria

E-mail: dj1irek@yahoo.com

Received : May 08, 2023
Published : May 20, 2023

EDITORIAL

For many centuries, Sub-Saharan Africa has been plagued with malaria which was relieved by the introduction of potent anti-malarial drugs. Despite the use of these medications, the mortality and morbidity accrued to this disease entity is still abysmally high with malaria cases rising to 241 million in 2020 from 227 million a previous year. In same year 2020, there was an estimated malaria deaths of 627 million, a 12% (69,000 deaths) increase from 2019 report. Reasons for these have been adduced majorly to treatment failure secondary to drug resistance especially to the first-line anti-malarial medication, poor drug compliance, poor drug quality, drug interactions etc. Over prescription of anti-malarial (especially artemisinins) has been said to be a drive for its drug-resistance with emergence of resistance patterns such as mutations in Pfkelch13. Treatment failures in malaria are defined as follow; early treatment failure is parasitaemia with symptoms of malaria occurring within three days of commencement of treatment while late clinical failure is presence of parasitaemia with symptoms of malaria occurring on any day between day 4 and day 28 in patients who did not meet criteria for early treatment failure. In addition, parasitaemia on any day between day 7 and day 28 on anti-malaria but without fever is termed late parasitological failure parasitaemia. We earlier published an article on malaria treatment failure identifying a case series of treatment failures in paediatric age groups (https://dx.doi.org/10.4314/ajcem.v24i2.12). However, there seem to be an undefined concept in patients (adults and paediatrics) who have some symptoms of malaria without parasitaemia after commencement of anti-malarial with genuine drug compliance. Naturally, these patients seem to assume a state of treatment failure without a blood film to assess parasitaemia and this leads to over-presecription of anti-malarial which as earlier stated can drive drug-resistance. This is what we propose to be "Post-malaria malaise". In post-malaria malaise, patients feel body weakness, joint pains, somnolence and even headaches but no fever. More so, there is clearance of parasites in the blood. The degree of this malaise is observed to be variable in patients based on the anti-malarial used, concomitant usage of analgesics

DOI: https://doi.org/10.35702/clinres.10014

and level of immunity as at time of the malarial episode. The peculiar anti and pro-inflammatory cytokines needed to regulate the immunity (such as TNF-α, IFN-γ, IL-6 and IL-10) during an infective episode of malaria is believed to serve as the mediators for post-malaria malaise. These become exaggerated during the dying phase of the parasitized red blood cells with anti-malarial and then cause post-malaria malaise. It shall be interesting to know the specific cytokines elaborated in this case.

Therefore, to avoid over prescribing anti-malarial and detect treatment failure in such patients, these patients are advised to have a blood film done to assess parasitaemia after confirming drug compliance. If blood film done for parasitaemia is negative, the clinician can re-assure patient and hence confirm post-malaria malaise. Patients can be prescribed analgesics and watched closely via a follow-up to identify a late clinical failure or a late parasitological failure parasitaemia if symptoms persist.

Citation: Irek EO, et al. (2023). Post-Malaria Malaise: An Emerging Malaria Concept? Clin Res. 4(2):14.

DOI: https://doi.org/10.35702/clinres.10014