

Letter to the Editor

Neural tube defects and malaria

Beuy Joob (1), Viroj Wiwanitkit (2)

(1) Sanitation 1 Medical Academic Center, Bangkok, Thailand

(2) Visiting Professor, Hainan Medical University, China

Dear Editor,

We read the publication on “Clinical profile of neural tube defects in Sudanese children: Is malaria a risk factor?” with a great interest [1]. Sadik et al. [1] mentioned that “Anti-malaria Sulfadoxine/Pyrimethamine (Fansidar®) used by most in our cohort is an anti-folate drug and could be implicated in the aetiology.” We would like to share ideas and experience on this issue. In our setting, in tropical Indochina, the similar high prevalence of malaria exists and there is a wide use of the anti-malarial drugs. Nevertheless, there is no problem and there is no report on malaria related neural tube defect. According to the study on the congenital malaria cases [2], it is evident that there is no abnormal neural tube defect despite there is a clear data on prenatal exposure to anti-malarial drugs. Indeed, the folate deficiency is a common problem among pregnant mothers in tropical developing countries and this should be an explanation for neural tube defect.

REFERENCES

1. Sadik B, Babikir HE, Arbab MAR. Clinical profile of neural tube defects in Sudanese children: Is malaria a risk factor? *Sudan J Paediatr.* 2017; 17(1):36–41.
2. Wiwanitkit V. Congenital malaria in Thailand, an appraisal of previous cases. *Pediatr Int.* 2006; 48(6):562–5; <https://doi.org/10.1111/j.1442-200X.2006.02272.x>

Correspondence to:

Beuy Joob

Sanitation 1 Medical Academic Center, Bangkok, Thailand.

E-mail: beuyjoob@hotmail.com

Received: 22 December 2017 | **Accepted:** 06 May 2018

How to cite this article:

Joob B, Wiwanitkit V. Neural tube defects and malaria. *Sudan J Paediatr.* 2018;18(1):84–86. <https://doi.org/10.24911/SJP.2018.1.13>

Reply: Response to letters to the editor on neural tube defects and malaria

Basma Sadik (1), Haydar E. Babikir (2), Mohammed A. R. Arbab (3)

(1) Ministry of Health, Sudan

(2) Department of Pediatrics, Faculty of Medicine, University of Gezira, Sudan

(3) Department of Surgery, Faculty of Medicine, University of Khartoum, National Centre of Neurological Sciences, Khartoum, Sudan

Sir,

In response to the comments regarding our article on neural tube defects (NTDs) and malaria [1], raised by Adam [2], Joob and Wiwanitkit [3] from Thailand, we would first like to express our happiness to have these constructive comments from distinguished scientists in the field. We are sure that it adds a lot to the knowledge and research concepts. We hope these comments and our response will make our aim more clear to the readers.

In medical research and social science, a cross-sectional study or as synonymously used: cross-sectional analysis, transverse study, prevalence study; is a type of observational study that analyses data from a population, or a representative subset, at a specific point in time—that is, cross-sectional data definition we used. For the benefit of our colleagues, cross-sectional studies in research differ from case-control studies in that they aim to provide data on the entire population under study, whereas case-control studies typically include only individuals with a specific characteristic, with a sample, often a tiny minority, of the rest of the population.

Prof. Adam [2] is absolutely right in his comments. We used cross-sectional studies which are descriptive studies as well. However, let us jump over these statistical arguments to say that the risk factors were not one of our aims. We were specifically looking at the pattern. This is why we didn't use a case-control study when designing our work, which is the best test to look for risk factors. It is better to write in our conclusion that "Poor folate intake ... may be a possible risk." We just raise it as a question. We believe NTD is not uncommon in our country. In spite of that, very few works, less than four as far as we know, were published; all of them were descriptive. Adding to that, malaria is probably a holoendemic disease in Sudan where essentially every individual might be infected. Sulfadoxine is overused. This is why we recommend it to be further studied by interested colleagues.

These comments from such researchers will improve our research skills and it gives a good chance to exchange views. Thank you again Prof. Adam [2] and our friends from Thailand [3] for opening this door for such a healthy discussion. Please keep in touch.

Correspondence to:

Haydar E. Babikir

Consultant Pediatrician and Pediatric Neurologist and Dean, Faculty of Medicine, University of Gezira, Sudan.

E-mail: deanmed@uofg.edu.sd; haydar@uofg.edu.sd; haydarbabikir@yahoo.com

How to cite this article:

Sadik B, Babikir HE, Arbab MAR. Reply: Response to letters to the editor on neural tube defects and malaria. Sudan J Paediatr. 2018; 18(1).

REFERENCES

1. Sadik B, Babikir HE, Arbab MAR. Clinical profile of neural tube defects in Sudanese children: is malaria a risk factor? Sudan J Paediatr. 2017; 17(1):36–41.
2. Adam I. Comments on “Clinical profile of neural tube defects in Sudanese children: Is malaria a risk factor?”. Sudan J Paediatr. 2018;18(1):83.
3. Joob B, Wiwanitkit V. Neural tube defects and malaria. Sudan J Paediatr. 2018;18(1):84.