Reviewer's report

Title: Vitamin B6 Reduces Hippocampal Apoptosis in Experimental Pneumococcal Meningitis

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Reviewer: Joerg R Weber

Reviewer's report:

Basically this is well written manuscript representing mostly a hypothesis. The most solid and new observation is that a vitamin, vitamin B modulates bacterial meningitis. These date are shown in fig. 2. Technically the authors have used the affimetrx genechip system in order to dissect potential mechanisms of the above findings. Several relations between the observed hippocampal apoptosis and some of the suggested genes are proposed in fig 5.

Most of the paper remains hypothetical. Eventually the used model (although well established) is a relevant limitation in order to dissect involved pathways.

Major:
It would make sense to follow the NAD pathway in detail. Apoptosis in BM or due to bacterial encounters on several cells has been linked to mitochondria and energy metabolism previously.

Minor:
scaling in fig 2c needs to be adapted.

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
no competing interests