Dear Editor,

We read with interest the article by Tan et al (1) on the use of low dose oral propranolol in infantile haemangioma (IH). We commend the authors on documenting their clinical experiences of 44 patients from their Vascular Anomalies clinic, however we have concerns about their methodology and findings. The study did not state whether it was prospective or retrospective, which has clear implications for the strength of the data and the inferences that can be drawn from the study conclusions, such as ‘a very highly significant improvement’ following low-dose propranolol treatment.

In addition, the treatment protocol in the abstract differed to that in the body of the paper. The abstract described the propranolol increasing from 0.5mg/kg/day initially to 1mg/kg/day at 24 hours, then 1.5mg/kg/day at one week. The methods section described increasing from 0.5mg/kg/day directly to 1.5mg/kg/day at 24 hours, a significant protocol discrepancy. Furthermore, the interval for review and dosage adjustment was not stated. The case studies that were provided seemed out of place in the article, adding no particular value to the study.

We question the objectivity and reliability of the outcome measure. Clear definitions were not provided for the study outcomes for IH’s including “problematic proliferating”, “accelerated involution” and “involution underway”. No measurements were undertaken of the lesions and only pre and post treatment photographs were analysed by six unknown research students in a timeframe of 45 seconds, an interesting choice of time period. A concordance value of W = 0.343 indicates a lesser degree of agreement between raters and the small p-value derived is simply evidence against the null hypothesis for lack of agreement.

A recently published randomised, double-blind, placebo controlled trial (2) analysed two doses of propranolol, either 1mg or 3mg/kg/day for 3 or 6 months against placebo, concluding that 3mg/kg/day was most effective when given for 6 months. This higher dose was not associated with a significant increase in adverse events. Overall, Tan et al (1) have provided an interesting case series for review but without enough objective measures or a control arm in the analysis to support their claim that low dose propranolol is effective for treatment of IH.

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