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Inositol for prevention of neural tube defects: a pilot randomised controlled trial - CORRIGENDUM

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Abstract

Although peri-conceptional folic acid (FA) supplementation can prevent a proportion of neural tube defects (NTDs), there is increasing evidence that many NTDs are FA non-responsive. The vitamin-like molecule inositol may offer a novel approach to preventing FA-non-responsive NTDs. Inositol prevented NTDs in a genetic mouse model, and was well tolerated by women in a small study of NTD recurrence. In the present study, we report the Prevention of Neural Tube Defects by Inositol (PONTI) pilot study designed to gain further experience of inositol usage in human pregnancy as a preliminary trial to a future large-scale controlled trial to evaluate efficacy of inositol in NTD prevention. Study subjects were UK women with a previous NTD pregnancy who planned to become pregnant again. Of 117 women who made contact, ninety-nine proved eligible and forty-seven agreed to be randomised (double-blind) to peri-conceptional supplementation with inositol plus FA or placebo plus FA. In total, thirty-three randomised pregnancies produced one NTD recurrence in the placebo plus FA group (n 19) and no recurrences in the inositol plus FA group (n 14). Of fifty-two women who declined randomisation, the peri-conceptional supplementation regimen and outcomes of twenty-four further pregnancies were documented. Two NTDs recurred, both in women who took only FA in their next pregnancy. No adverse pregnancy events were associated with inositol supplementation. The findings of the PONTI pilot study encourage a large-scale controlled trial of inositol for NTD prevention, but indicate the need for a careful study design in view of the unwillingness of many high-risk women to be randomised.

Reference

1. Greene NDE, Leung K-Y, Gay V, Burren K, Mills K, Chitty LS, Copp AJ. Inositol for prevention of neural tube defects: a pilot randomised controlled trial. *Br J Nutr.* 2016 Mar 28; 115(6):974–83. [PubMed: 26847388]

The number of further pregnancies that were documented for women who declined randomization, as given in the Abstract of the paper by Greene et al (1), was incorrect. The correct value is given here. The authors apologize for this error.