

LETTER TO THE EDITOR

Oral Zinc Sulphate Therapy for Acne Vulgaris

We are grateful to Drs Weismann, Wadskov and Søndergaard for letting us comment on their results of oral zinc treatment of acne (Vol. 57, pp. 357–360), demonstrating no effect of zinc as compared with placebo. From the literature on acne it seems to be a common finding that the treatment effects obtained with one and the same drug differ from one study to another. Thus, despite the extensive use of tetracyclines, the value of this therapy is still a matter of controversy. An ad Hoc committee (1) found that only 6 of 12 studies on the effects of tetracycline in acne revealed a significantly positive effect.

In our first study on the effects of oral zinc treatment of acne the effect was good—and better than that of placebo (2). Recent comparative studies with zinc and tetracyclines have confirmed the good results (to be published). There are certain differences between our studies and those made by Dr Weismann which might have contributed to the differences in results. One factor is the season: the majority of our patients were seen in February–April and were therefore not exposed to the sun to the same extent. Another factor is the high frequency of dropouts in Dr Weismann's study; if 30% of the 39 patients were not seen again it would be hard to evaluate the results. It should also be stressed that "spontaneous" variations in the acne process makes it necessary to have a fairly large number of patients in order to ascertain an effect. There is no doubt that there can be a certain effect of placebo in patients with acne. In our study the "placebo" patients had a score reduction of about 25% after 4 weeks. When treatment with placebo is combined with sunny weather the effect on acne can be very

good and the effect of any other acne therapy will be masked.

The fact that low or subnormal serum zinc concentrations were not seen does not preclude a zinc deficiency, as it is not known if the concentration of serum zinc reflects that of the tissue zinc. We have found that boys with acne grades III–IV have significantly lower levels of serum zinc than healthy males of the same age, whereas we did not find this difference in girls with acne (3). In spite of this we have noted a good effect on the acne by zinc in both boys and girls.

The reported rise in the serum zinc levels of the placebo group in Dr Weismann's study is puzzling. We found no change at all of the serum zinc in our placebo patients. The only rise in serum zinc we have observed has been induced by zinc treatment.

Our present opinion on zinc and acne is that zinc is valuable in the treatment, that in young people it rarely has any side effects, and that it affords an interesting insight into the pathogenesis of acne.

References

1. Ad Hoc Committee Report. Systemic antibiotics for treatment of acne vulgaris. *Arch Dermatol* 111: 1630, 1975.
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3. Michaëlsson, G., Vahlquist, A. & Juhlin, L.: Serum zinc and retinol-binding protein in acne. *Br J Dermatol* 95, in press, 1977.

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