

ACRODERMATITIS ENTEROPATHICA

Report of a Case Healed with Zinc Therapy

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Abstract. Report of a youth aged 20 years, with grave signs of acrodermatitis enteropathica. Oral therapy with zinc resulted in a complete cure within two months. The dramatic course is demonstrated by a series of photographs.

In another article in this number, Michaëlsson describes the result of zinc therapy in a patient with acrodermatitis enteropathica. The case was described for the first time in December 1973 at the Annual General Meeting of the Swedish Medical Association, Stockholm. At that time two patients were under treatment for the same condition at Karolinska sjukhuset, and it was therefore possible to test this new treatment and to confirm Michaëlsson's observations. A report of one of these two cases may serve to complement her paper. The dramatic course is shown in a series of photographs.

CASE REPORT

In a youth of 20 years the first skin lesions appeared at 3-4 months of age, and the diagnosis of acrodermatitis enteropathica was made when the patient was 1½ years old (Fig. 1). Since then, treatment has been given with 5-chloro-7-iodo-8-hydroxyquinoline, i.e. iodo-chlorhydroxyquin (Enterio-Vioform®; Ciba Basle, Switzerland), in a dose of 0.75 g to sometimes as much as 2.5 g per day. For many years the effect upon the skin lesions was fairly good. In 1969, however, the patient's condition started to deteriorate, with spreading of the skin lesions, increasing diarrhoea, lassitude, and apathy, and since then the patient has been admitted to this clinic several times for treatment. In 1970 Enterio-Vioform was replaced by 5-7-dichloro-8-hydroxyquinoline, i.e. chlorquinaldol (Sterosan®; Geigy, Basle, Switzerland), in a dose of 0.2-0.3 g daily. Owing to the risk of eye damage, however, the patient refused at times to take this preparation, and in April 1973 he stopped the treatment altogether. Ophthalmological examination has repeatedly failed

to disclose optic nerve or other eye damage, however. In October 1973 the patient was again admitted to the clinic owing to further deterioration of the skin, loss of weight, increased depression, and apathy. There was almost total loss of hair and there were severe skin lesions in the perioral, perianal, and perigenital regions and on the hands and feet, consisting of marked erythema and weeping, encrusted skin with some bullae (Fig. 1 c, e).

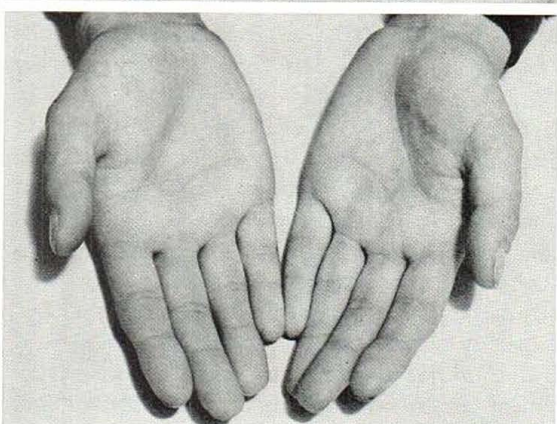
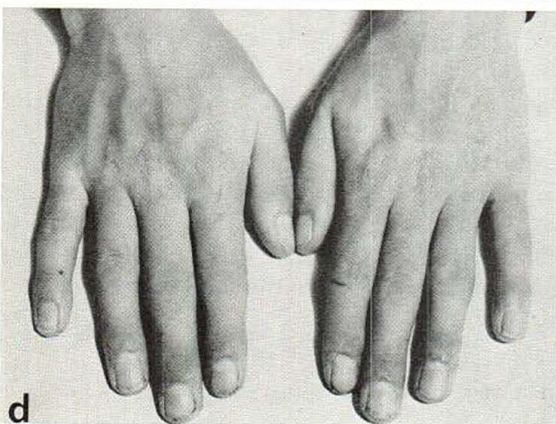
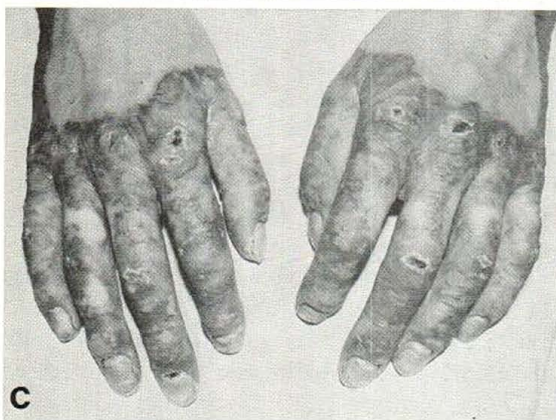
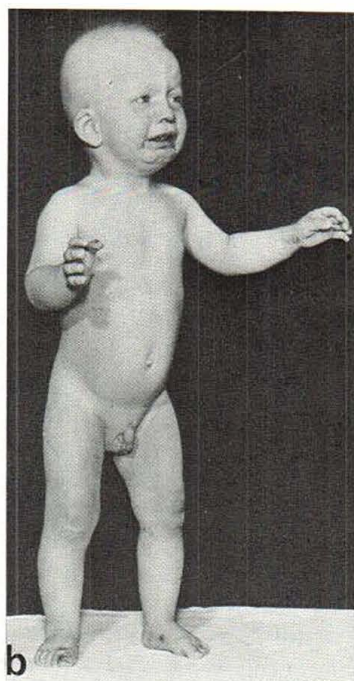
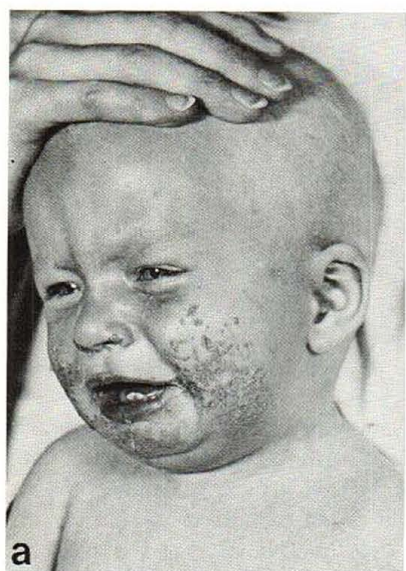
Laboratory investigations. During the past few years the patient has undergone repeated investigations for malabsorption (faecal fat, Schilling test, lactose tolerance test, xylose test, tryptophane tolerance test normal). X-ray examination, biopsy of small bowel and colon, and rectoscopy have given normal findings.

The serum zinc level (3-12-73) was 5 µmol/l (normal value using the same method, 11-15 µmol/l).

Treatment. Zinc therapy was started on 4.12.1973 in a dose of 45 mg Zn²⁺ thrice daily (tab. Solve-zinc®; Tika, Lund, Sweden). After only one week the skin lesions started to heal and the diarrhoea to cease, and the patient's appetite and spirits improved. Within three weeks new hair growth could be detected on the scalp. Two months after instituting therapy the skin showed complete healing, and no intestinal symptoms remained. The whole clinical course is illustrated by the photographs (Fig. 1 d, f-i), the last few of which show the patient's appearance 5 months after starting the treatment. The zinc dosage has so far been kept unchanged. Since 18.12.72, repeated determinations of the serum zinc have varied between 12.5 and 16.2 µmol/l.

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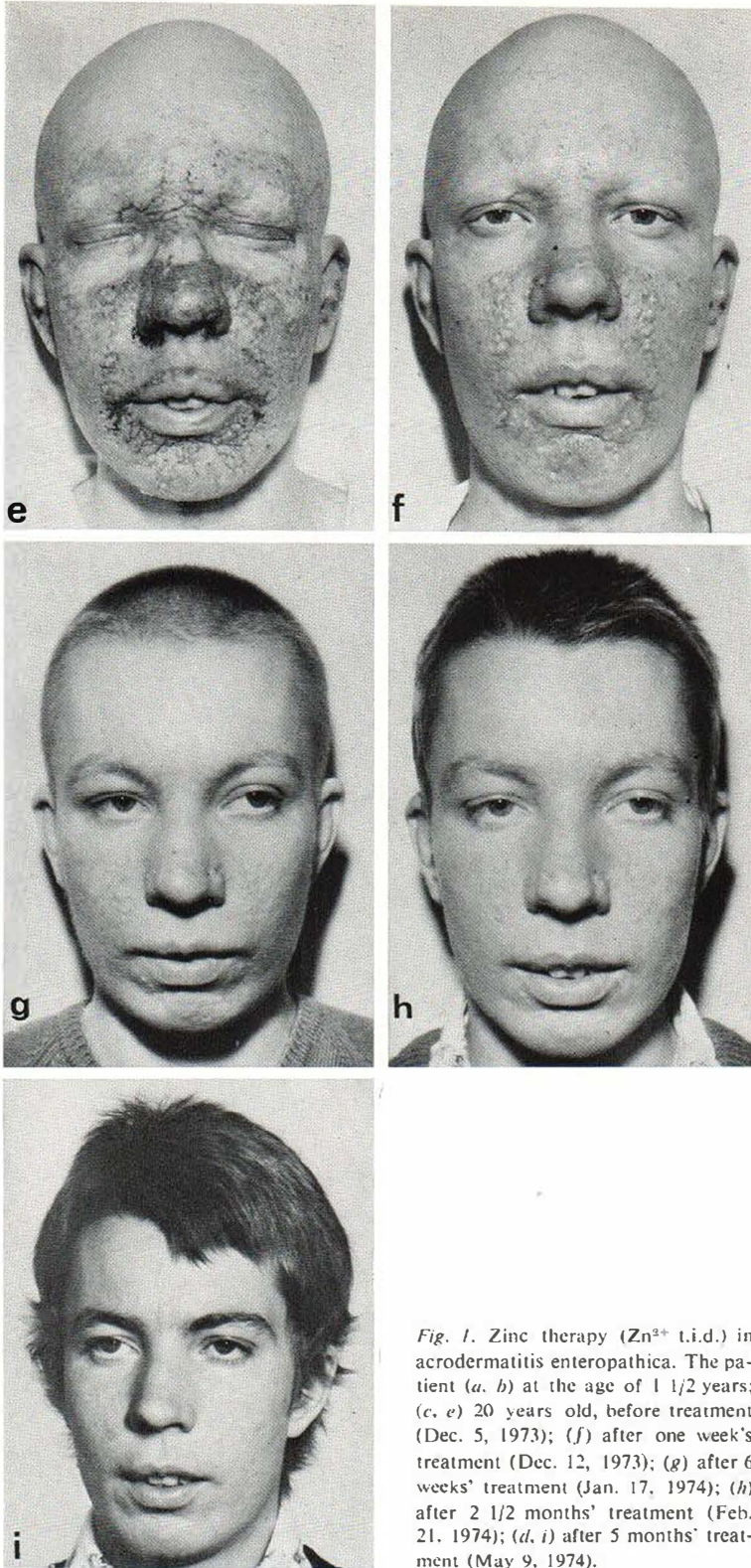


Fig. 1. Zinc therapy (Zn^{2+} t.i.d.) in acrodermatitis enteropathica. The patient (a, b) at the age of 1 1/2 years; (c, e) 20 years old, before treatment (Dec. 5, 1973); (f) after one week's treatment (Dec. 12, 1973); (g) after 6 weeks' treatment (Jan. 17, 1974); (h) after 2 1/2 months' treatment (Feb. 21, 1974); (d, i) after 5 months' treatment (May 9, 1974).