THE USE OF TRIAMCINOLONE* IN THE TREATMENT OF SEVERE *LEPRA REACTIONS*

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Introduction

The large variety of drugs and the great number used in the treatment of lepra reactions indicate that there does not exist a drug of choice for the treatment of a condition which has gained increased importance in leprosy since the introduction of efficacious chemical therapeutics.

Drugs which show anti-inflammatory and anti-allergic properties are usually tried out in lepra reactions. Optimistic reports are often published on drugs which later prove to be without value because of the fact that patients were not well selected and reactions were treated which would have disappeared in a short time by themselves.

The majority of leprologists nowadays agree with COCHRANE that cortisone is considered to be the drug of choice in the treatment of lepra reactions but there are also other opinions of authorities who find the use of cortisone in lepra reactions contra-indicated.

At the Princess Zenebework Memorial Hospital corticosteroids and the anterocorticotrophic hormones were used in complicated lepra reactions for more than 5 years with satisfactory results, but it must be admitted that the success depends on the right dosage which varies from individual to individual. In what follows, the results of the trials made with one of the recent corticosteroids, 'Triamcinolone' will be reported. A preliminary study was made on 12 cases with encouraging results and then used on 30 patients suffering from erythema nodosum leprosum.

Chemistry

Triamcinolone is a new corticosteroid synthesised by BERNSTEIN which has an anti-allergic and anti-rheumatic activity. This compound is said to have considerably less sodium-retaining properties than earlier agents and at the same time is also said to possess good gluco-corticoid activity. Studies in human beings demonstrated a potency of 4 mg. of Triamcinolone as being equivalent to 5 mg. of Prednisolone.

Triamcinolone diacetate has the generic formula 9 alpha-fluoro, 16 alpha-hydroxy, d^1 -hydrocortisone or 9 alpha-fluoro, 16 alpha-hydroxy prednisolone.

*LEDERCORT—American Cyanamid Company.

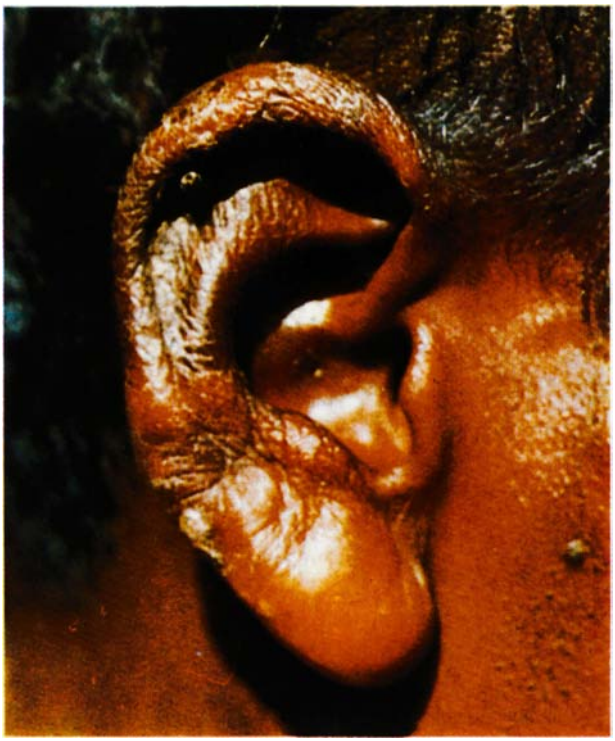


Fig. I

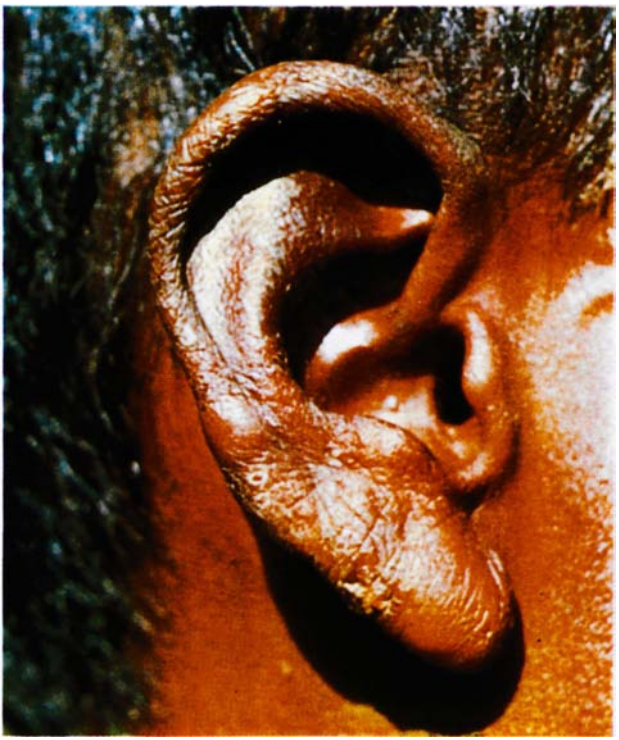


Fig. II

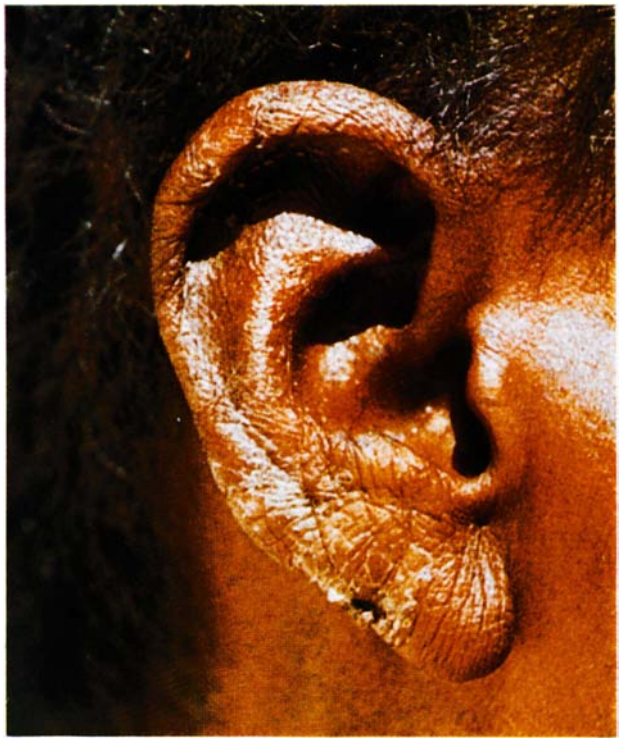
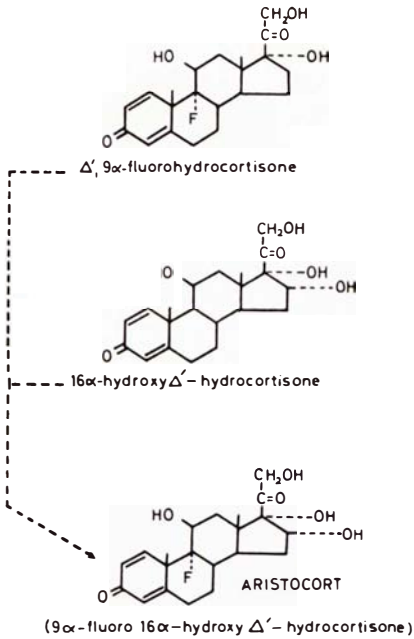


Fig. III

I. Before treatmemt with Triamcinolone.

II. 24 hours after the inception of treatment.

III. 48 hours after the inception of treatment.



Choice of Patients

Only patients suffering from recurrent and longstanding erythema nodosum leprosum were taken for this trial. Nearly all the patients showed severe impairment of their health and all of them had had previous treatment with DDS (diamino diphenylsulfone) ranging from six months to five years. Eighteen patients were males, between 18 and 45 years of age and with a leprosy history of one to eight years. The female patients ranged in age between 24 and 42 years, had been ill from two to nine years and had been under treatment for periods ranging from eight months to four years. The course of the reactions in all selected cases lasted longer than 15 days. This was easily demonstrated by stopping the drug, such a procedure being almost immediately followed by recurrence of the temperature, pains and other signs characteristic of continuing activity.

Dosage

Triamcinolone was used in tablets of 4 and 2 mg. starting with daily doses of 24 up to 32 mg., being given 4 hourly or in 3 divided doses. The reduction of the dose then was made by 6 or 4 mg. daily until the maintenance dose was reached. This could be easily assessed by observing the conditions of the patients carefully. In most of the cases (18), the maintenance dose was 4 mg., being reached in 6 to 7 days. In 4 cases 8 mg. was necessary for keeping suppressed the signs of reaction. Six cases required only 2 mg. daily

as a maintenance dose. In 3 cases the results were uncertain and higher doses had to be given for longer periods. The treatment on an average lasted for 12 days with a total dose of 92 up to 140 mg. of Triamcinolone. The 3 cases which had to be treated for 15 up to 22 weeks were not included in the statistics.

Clinical Results

Out of the 30 patients only 3 did not show marked improvement, which was usually observed within 12 to 24 hours after the treatment started. Often the response was dramatic; the patients were relieved from their pains; the temperature dropped to normal or below and part of the lesions disappeared within 12 hours. The earlobes which were oedematous and glossy appeared soft and wrinkled after one day.

Figure II shows the ears of a patient taken 24 hours and Fig. III 48 hours after the inception of the treatment.

Within 3 to 6 days in most instances, the erythema nodosum lesions became flat and appeared less indurated accompanied by an improvement of the patient's general health. The 3 patients who required prolonged treatment did not react favourably and exacerbations occurred during the long course of their condition. Also clinically no improvement was observed but the patients complained less of pains when Triamcinolone was given. The red blood sedimentation rate remained high and the temperature could not be influenced by the doses of Triamcinolone given to them. In the other cases, as mentioned before, the temperature dropped within a few hours and remained normal whilst taking the drug. The blood sedimentation rate decreased with the general improvement.

Side Effects

The patients under treatment up to 24 days did not show any significant side effects. One of the 3 patients who required longer treatment showed Cushingoid changes. In 6 patients the raised temperature suddenly dropped within a few hours to below normal and could not be measured by the thermometers used in the ward. This effect did not give rise for complaints from the patients' side.

Summary and Conclusion

Out of 30 patients suffering from severe *erythema nodosum leprosum*, 27 showed marked improvement of their symptoms when treated with Triamcinolone. The starting dose, ranging from 24 to 32 mg. daily, could be quickly reduced to the maintenance dose which varied between 2 and 8 mg. a day. The average length of treatment in 27 severe cases was 12 days by the end of which time the reaction had generally completely subsided.

The administration of Triamcinolone is indicated in severe *lepra reactions*, since it suppresses the constitutional symptoms and complications and makes the patient feel more comfortable.

Further studies employing long-acting corticosteroids, especially those of the repository type, should be of interest. Trials with triamcinolone diacetate, 40 mg. per cc., administered intramuscularly in once-weekly doses are being carried out at present and the results will be reported on in the near future.

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