

Case of Reiter's Disease Treated with Lincomycin Hydrochloride

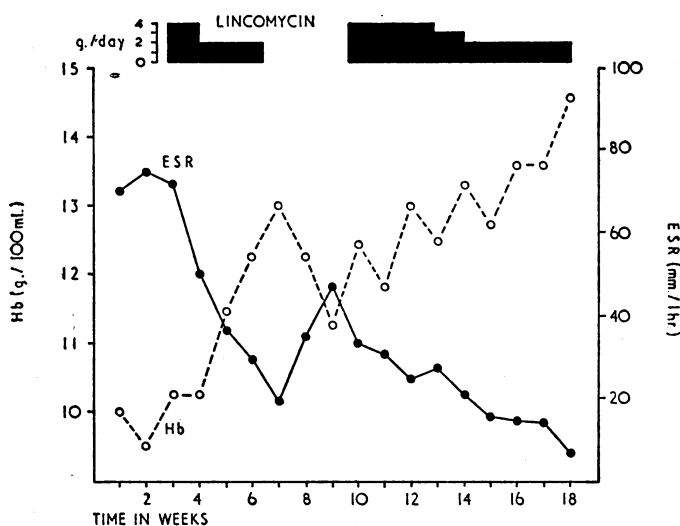
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A 33-year-old labourer, with no previous history of articular disease, was admitted to hospital complaining of general malaise and pain and swelling of the ankles and feet. He had also developed a pustular eruption on the soles of his feet, but had not had diarrhoea, urethral discharge, or conjunctivitis. His last sexual contact was stated to be six months previously.

On examination he was pale, sweating, and obviously in pain. Both ankles and the left first metatarsophalangeal joint were swollen, red, and tender. Keratoderma blennorrhagica was present on the soles of both feet. A small healing ulcer was present in the coronal sulcus on the dorsum of the penis but circinate balanitis was absent. On his admission the haemoglobin concentration was 11.4 g./100 ml. and the erythrocyte sedimentation rate (E.S.R.) was 61 mm. in one hour (Westergren). The total leucocyte count was 8,200/cu. mm., with a normal differential count. Wassermann and Kahn reactions and the gonococcal complement-fixation test were negative. The sensitized sheep-cell test was repeatedly negative. Serum uric acid was 2.6 mg./100 ml. Cultures of midstream urine and prostatic fluid yielded no growth. Radiographs of the knees, ankles, and feet showed rarefaction, but no erosive change. Radiographs of the sacro-iliac joints and of the chest were normal. A diagnosis of Reiter's disease was made.

He was treated with aspirin (4 g./day), supplemented by adrenocorticotrophic hormone (20 i.u./day), for four weeks, tetracycline (3 g./day) for four weeks, and dimethylchlortetracycline (1 g./day) for six days.

During this time he developed intermittent fever with general deterioration in his condition and involvement of both knees, which became swollen and acutely tender. Fluid aspirated from these joints was turbid and highly cellular, but yielded no growth on culture.



Haemoglobin and E.S.R. during treatment with lincomycin.

The patient was now so ill that it was decided to treat him empirically with lincomycin hydrochloride. Local and general improvement was observed within two weeks of starting treatment. The changes in haemoglobin and E.S.R. are shown in the Chart. During treatment the E.S.R. fell from 71 to 19 mm. in one hour and the haemoglobin rose from 10.2 to 13.0 g./100 ml. Articular pain and swelling subsided and a residual effusion aspirated from the left knee was clear and relatively acellular.

One week after stopping treatment the patient's symptoms and signs recurred. Two weeks later the E.S.R. had risen to 47 mm. in one hour and the haemoglobin fallen to 11.3 g./100 ml. Fluid aspirated from the left knee was once more turbid and cellular. Again no growth was obtained on conventional media, but a diphtheroid organism, sensitive to lincomycin, was isolated on enriched agar.

The patient was given a further course of lincomycin and during the eight and a half weeks of treatment made an almost full recovery. Three months after discharge from hospital no residual evidence of arthritis was present. The haemoglobin was maintained at 14.6 g./100 ml. and the E.S.R. was 7 mm. in one hour.

COMMENT

The diagnosis of Reiter's disease in this patient was based on the association of an acute arthritis, affecting the feet, ankles, and knees, with keratoderma blennorrhagica. Weinberger and Bauer (1955) thought that the diagnosis of Reiter's disease should be restricted to cases in which the triad of arthritis, conjunctivitis, and urethritis is present. However, it is recognized that the ocular and urethral symptoms may be minimal (Hancock and Mason, 1965), and Montgomery, Poske, Barton, Foxworthy, and Baker (1959) have stated that keratoderma blennorrhagica is an equally important diagnostic feature.

The response of this case to treatment with lincomycin seems unequivocal. The observation of a long period of deterioration followed by remission and relapse coinciding with administration and withdrawal of the drug provides good evidence that the course of this patient's illness was influenced by lincomycin.

The isolation of a diphtheroid organism sensitive to lincomycin is of doubtful significance, but may be of interest in view of the recovery of similar organisms from the synovial membrane and fluid of a proportion of patients with rheumatoid arthritis (Duthie, Alexander, Stewart, and Dayhoff, 1967).

A. G. MOWAT, M.B., CH.B.

T. M. CHALMERS, M.B., CH.B., M.R.C.P.ED.

W. R. M. ALEXANDER, M.B., CH.B., B.SC., F.R.C.P.ED.

J. J. R. DUTHIE, M.B., CH.B., F.R.C.P.ED.

Rheumatic Diseases Unit,
Northern General Hospital, Edinburgh.

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