

LINCOMYCIN IN ACUTE GONOCOCCAL URETHRITIS

By

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For years penicillin has been the antibiotic of choice in the treatment of infections caused by *Neisseria gonorrhoea*. However, during recent years the status of penicillin as the sheet anchor of the treatment of gonorrhoea is gradually becoming less secure. This is mainly due to (1) development of gonococcal strains resistant to penicillin (Davidson, 1964) and (2) the ever-increasing incidence of sensitivity reactions to penicillin, many of them often quite dangerous and difficult to manage in general practice. The use of broad spectrum antibiotics is hazardous and moreover it is desirable to keep them in reserve for treating more serious infections.

The need for a safe and effective antibiotic is thus becoming imminent and, therefore, the search continues.

Lincomycin, a newer antibiotic isolated from streptomyces lincolnensis has been found in laboratory tests, to possess considerable activity against gram positive cocci and exhibits a low order of toxicity in animals (Lewis et al, 1962; Mason et al, 1962). Clinical reports of the successful use of lincomycin in infections caused by gram positive microorganisms have appeared in medical literature.

Its use in the treatment of gonorrhoea however, has not been described so far. The object of the present study was to determine clinically the efficacy and safety of lincomycin in gonorrhoea.

MATERIALS AND METHODS

Included in this report are 10 cases of acute gonococcal urethritis. All the patients were males, ranging in age from 20 to 35 years and were admitted to the Skin and Venereal Disease Wards of Shree Sayaji General Hospital, Baroda. Criteria for inclusion in the study were: (1) history of exposure prior to onset of symptoms; (2) presence of frank purulent discharge from the urethrs (3) demonstration of gram negative cocci inside polymorphs on microscopic examination of fresh specimen of the urethral discharge.

Isolation of *Neisseria gonorrhoea* in pure forms and their *in vitro* sensitivity testing and gonococcal complement fixation tests could not be done for lack of facilities. Lincomycin was administered orally in the dose of 1.5 gm per day given in three divided doses. Duration of treatment varied from 7 to 11 days.

All patients were observed daily for changes in urethral discharge and were interrogated regarding their general well being and symptoms of burning micturition etc.

A close watch was also kept for any possible untoward effects due to lincomycin.

Moreover, pre- and post-treatment haemograms, urinalysis, blood urea nitrogen values, serum levels of oxalacetic and pyruvic transaminases and alkaline phosphatase were obtained on all patients receiving lincomycin.

RESULTS AND DISCUSSION

Nine out of the 10 patients treated with lincomycin failed to respond to the antibiotic. There was no evidence of any subjective or objective improvement at any time during the treatment period. All these patients responded well to subsequent administration of penicillin G in conventional doses.

In one case the urethral discharge ceased completely on the 5th day of lincomycin administration. This was accompanied with relief of symptoms.

Two of our patients developed diarrhoea on the 2nd day of treatment. However, this could be easily checked by giving a binding mixture and did not necessitate withdrawal of lincomycin. One patient developed fever on the second day; this lasted for 2 days and the maximum temperature recorded was 100 ° F.

Three patients complained of an increase in their illness on the 3rd or 4th day of treatment. This was accompanied by aches and pains in the trunk and extremities and nausea and chest pain in the precordial region.

Results of the various laboratory tests did not show any changes after a course of lincomycin.

It must be concluded from the results of this study that lincomycin is ineffective in the treatment of acute gonococcal urethritis and that penicillin with all its disadvantages is still the drug of choice.

SUMMARY

Lincomycin was tried in 10 cases of acute gonococcal urethritis but was found effective in only one case. Response to penicillin was good in all cases where lincomycin failed to improve the condition.

Lincomycin caused diarrhoea in 2 cases. Three cases had aches and pains in the trunk and extremities and nausea and precordial pain on the 3rd or 4th day following lincomycin.

It is concluded that lincomycin is ineffective in the treatment of acute gonococcal urethritis.

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