SEPTRAN IN THE TREATMENT OF GONORRHOEA

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Summary

In this limited study conducted, Septran was able to give complete cure in 88% of the cases. This drug when used for the treatment of gonococcal infection did not mask syphilis. In two of the cases with chancroid and gonorrhoea, the ulcers responded well within 5–7 days of Septran therapy. Even mild reactions like nausea and vomiting were not encountered in any one of the fifty-eight cases treated with Septran.

Csonka and Knight[1] introduced the combination of trimethoprim with sulphamethoxazole in the treatment of gonorrhoea and reported results comparable to therapeutic results with penicillin and tetracycline. A five days course of four tablets daily in a single dose was tried on male and female patients suffering from gonococcal infection by Carroll and Nicol[2] and they reported 95.4% cure rate among men and 94.1% cure rate among women. However, they did not recommend the small single dose of 4 tablets daily in general use. Wright and Gimble[3] used one tablet (400 mgs of sulphamethoxazole plus 80 mgs of trimethoprim) four times daily for 5 days in 97 cases of uncomplicated gonorrhoea. They concluded that the sulphamethoxazole with trimethoprim combination gave unsatisfactory cure rate and that there was tendency for the above drug combination to produce a carrier state.

Evans et al[4] found that they could obtain a cure rate of only 82% and they also concluded that this drug combination was inadvisable in patients who fail to respond to penicillin.

Recent experience in the Institute of Venereology, Madras, showed that patients with gonorrhoea treated with 1.2 mega units of penicillin did not respond well and some of them relapsed. Hence it was decided to try an alternate drug like SEPTRAN (sulphamethoxazole 400 mg plus trimethoprim 80 mg). in a group of patients.

Material and Methods

During the period of six months from October 1973 to March 1974 fifty eight patients with uncomplicated gonococcal urethritis and cervicitis were studied.

They were given 800 mg of sulphamethoxazole and 160 mg of trimethoprim (septran) twice a day for 5 days. The patients were followed up for a period of 3 weeks. At the end of the 3rd week they were examined again for signs and symptoms of gonorrhoea and syphilis.

Before treatment the discharge from each patient was examined both by direct smear and culture. For the

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isolation of gonococci Chacko-Nair medium[5] was used. The sensitivity to gonococci was performed using Wellcotest Agar and Septran sensitivity discs and the results were recorded according to the method given by Burroughs Wellcome & Co (India) Private Ltd., along with the discs. At the end of 24 hours when the zone of inhibition was greater than 8 mm from the edge of the disc the organism was considered as very sensitive. If the zone of inhibition was from 4 to 8 mm from the edge of the disc the organism was considered moderately sensitive and if the zone of inhibition was less than 4 mm from the edge of the disc the organism was considered resistant. Wet preparation of the discharge was examined for Trichomonas vaginalis from female patients. Blood VDRL test was performed on all cases. When there were associated genital ulcers, dark field examination to detect the presence of T. Pallidum and tissue smears stained with gram, Leishman and Zeihl Neilson stains to detect H. ducreyi, Donovania granulomatis and A. F. B. were done.

Results

Of the 58 patients who were treated, 3 were females. 47 (81%) belonged to the age group 15–29 years.

In association with gonococcal urethritis two female patients had trichomoniasis, three male patients had chancroids, one had dark field positive chancre with reactive serology and one had genital warts. Another five patients had reactivity to blood VDRL test ranging from '0' to 16 dils. Of these four had previous history of syphilis for which they had received a complete course of treatment. The fifth was a case of latent syphilis.

In all the 58 cases, intracellular gram negative diplococci were seen in direct smear. Culture was positive for N. gonorrhoea in all the cases. Sensitivity test could be carried out only on 49 strains isolated since in 9 cases the strains were lost during subculture. Nineteen strains were found to be sensitive, twenty five strains moderately sensitive and five resistant to SEPTRAN according to the criteria used.

During the five day course of therapy, there was no untoward reaction to SEPTRAN, not even mild reactions like nausea and vomiting.

Out of 58 cases treated with septran, 51 (88%) cases responded well to therapy. They remained clinically and bacteriologically free of gonococcal infection throughout the post treatment follow up of 3 weeks. Among these 51 cases there were 3 cases who were also suffering from syphilis. One had a dark field positive lesion before starting septran therapy, the other was incubating syphilis and developed a dark field positive lesion at the end of 3 weeks and the third was a latent syphilitic. Septran did not mask the syphilis present. Out of 3 other cases who had chancroid in addition to gonorrhoea 2 responded well with Septran therapy given for the gonococcal infection. The third had to be given a higher dose of a sulphonamide. There were 7 cases of failure with Septran. Three relapsed during the 2nd week. The remaining four had persistent discharge inspite of therapy. Out of the 49 strains tested sensitivity, 42 belonged to the patients who responded well to therapy. These 42 strains consisted of 18 very sensitive, 23 moderately sensitive and one resistant strain. Of the other 7 strains isolated from the 7 failures, 4 strains were resistant, 2 moderately sensitive and one sensitive.

It is interesting to note that one of the strains isolated from these who had responded to therapy was found to be resistant to Septran in invitro-studies. This might be due to the fact that the patient was able to maintain a high

threshold level of the drug necessary for destroying the organism in vivo or perhaps a high level of immunity helped to eradicate the infection. Similarly among the strains isolated from the Septran failure cases, one strain was sensitive to Septran in invitro studies. In this case, the patient might have excreted the drug rapidly without maintaining the adequate levels necessary for complete cure, even though the organism was sensitive. More elaborate studies are necessary for elucidating these variations.

Acknowledgment

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TRUE or FALSE

Aquagenic urticaria is a rare type of cold urticaria which presents morphological lesions similar to those of cholinergic urticaria.

(Answer page No. 139)