CASE REPORT
PENICILLIN RESISTANT GONORRHOEA ?

By
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Emergence of resistant or less sensitive strains of Gonococci to penicillin is considered to be one of the most important causes of steady global rise of the incidence of gonorrhoea during the last few years. So long the treatment schedule for acute uncomplicated gonorrhoea in the Dept. of Venereology and Sexual Disorder, Medical College Hospital, Calcutta was one injection of 2 cc. of P. A. M. Of late one injection of P. A. M. 4 cc. is being given to some cases with a view to a comparative epidemiologic study on the incidence of N. G. U. occuring in post treatment cases of acute gonococcal urethritis. So far we have not come across any treatment failure except one very recently which may therefore be of some interest.

CASE REPORT

HB, male, 25 years, labourer, married 5 years, reported last December for investigation of sterility. Clinical and routine blood S. T. S., urine, prostate and prostatic smear examination revealed no abnormality. 4 days later he reported with frank urethral discharge which according to him started since the day of prostatic massage. Examination revealed inflammed external urethral meatus and profuse mucopurulent urethral discharge. He admitted extra marital contact three months previously but denied any episode of urethritis. Urethral smear on Gram's stain showed plenty of intra and extra cellular Gram negative diplococci resembling Neisseria Gonorrhoea. One injection of 4 cc. of P. A. M. was given with mist alkali et hyocyamus ml 30 three times daily.

On the third day there was no clinical improvement. Profuse purulent urethral discharge on gram's stain showed plenty of Gram negative intra and extra cellular organisms resembling N. Gonorrhoeae. Wet film–Plenty of pus cells, few epethelial cells and R. B. C. 4 to 5 per field of 1/6th objective.

Another injection of P. A. M. 4 cc. was given.

Sixth day-condition same as before both clinically and bacteriologically but some of the organisms looked some what larger.

Culture — no growth.

Patient emphatically denied any marital or extramarital contact during the period under treatment and his wife on repeated examination revealed clinically and bacteriologically normal. Unfortunately culture of urethral and cervical discharge was not done. However epidemiologic dose was given to her.

It was thought to be a possible case of penicillin resistant gonorrhoea. The treatment was switched over to inj. streptomycin 1 gm. daily. No improvement was seen clinically and bacteriologically even on the fourth day

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Inj. chloramphenicol 250 mgm. (Enteromycetin brand) I. M. b. d. was started and the urethral discharge stopped completely on the second day. However the treatment was continued upto sixth day with complete recovery with ,occasional painful erections at night. Both are at present under surveillance.

DISCUSSION

In this case clinical urethritis appeared after prostatic massage indicating dormant prostatic infection if we accept the statement of the patient. The clinical manifestations did not suggest prostatic involement.

The urethral discharge revealed plenty of intra-cellular Gram negative diplococci resembling N. Gonorrhoeae. There was no clinical and bacteriological improvement with 4 cc. of P. A. M. even on reinforcement by another 4 cc. on the third day. Nature of the organism could not be defintely established due to negative culture. Presence of somewhat larger organisms probably indicated some othe- pathogens. Unfortunately Crystalline penicillin could not be tried due to non-cooperation of the patient. Cure with heavy doses of crystalline penicillin in 2 cases of post treatment gonorrhoea which did not respond to 1.2 mega unit of P. A. M. has been reported by Singh (1963).

The organisms also failed to respond to Streptomycin. RINGERTZ (1961) has reported that out of 777 strains of gonococci isolated, 9 were highly resistant to Streptpmycin and less sensitive to penicillin but sensitive to tetracycline. However the condition responded dramatically to intramascular chloramphenicol. Ranade et al (1956) reported satisfactory results using 3 G of chloramphenicol injected intramascularly in divided doses on alternate days in 13 treatment failure cases of gonorrhoea with penicillin only or in combination with sulpha. streptomycin and tetracyciine. Favourable results were obtained by Willcox (1963) with single injection of 1 gm. chloromycetin succinate in uncomplicated acute gonorrhoea.

Failure to P. A. M. and Streptomycin and quick response to Chloramphenicol reminds us the possibility of bacillus Mimeae which are hardly differentiated from Neisseria by smear or by culture and oxydase reaction. Even the clinical features of urethritis caused by bacillus Mimeae are identical to gonococcal infections.

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