A CASE REPORT OF GONOCOCCAL URETHRITIS RESISTANT TO MOST COMON ANTIBIOTICS TREATED WITH CHLORAMPHENICOL & FEVER THERAPY

By

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Gonorrhoea a Greek derived word, means a berry like organism which increases flow of semen. Even though Neisser described the causative organism in 1879, as an intra-cellular reniform Gram-negative diplococci, with concave surfaces apposing together, and the discharge that occurs is pus but not semen, still the disease enjoys its old name.

The organism usually invades succeptable mucous-membrane-colomnar or immature-cuboidal-epithelium, the common mode of spread being venerial. The commonest part of body affected in male, is urethra, in adult female cervix, and immature female vulva and vagina. The infection if not properly treated leads to local and systemic complications.

Usually the diagnosis is made by demonstration of the organism by Gram's stain, from smear made from discharge and is confirmed by culture, Florescence-Antibody test, and serological tests where fecilities are available.

The apparent high incidence of disease in males, is due to heavy suffering, who report in greater number to clinics, while females higher percentage are asymptomatic and carry the infection.

As regards treatment of gonorrhoea, it went to various phases with advancement of antibiotics. Before the advent of antibiotics and sulfa group of drugs, the treatment consisted of local irrigations with antiseptic lotions, resulting in more damage and more complications. Later the era of sulfa group of drugs which enjoyed a cure rate of 75 to 85% in early days, but later the recovery rate fell to 14% due to rise in resistance of organism to the drug. Even though as many as nine out of 17 antibiotics are lethal to the organism, still penicillin is the drug of choice, even though partial resistance to the tune of 13% were reported from West. Even in vitre sensitivity of the organism, which was 0.3 units of Penicillin per ml of serum, rose now to 1 Unit.

CASE REPORT

C. R. a male 29 years old, unmarried reported to out-patient department of S. V. R. R. Hospital, on 27th April 1965, with a complaint of urethral discharge, and burning sensation while passing urine for five months.

The complaint started seven days after exposure. He took daily injection of Strepto-Penicillin for fifteen days. The discharge reduced, but did not completely disappear. After four weeks, he developed painful swelling of right testis, for which he took daily injection of 5 lakhs of Crystalline-Penicillin for 5 days. Discharge never

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completely disappeared, but swelling and pain of right side of scrotum subsided, Later he took daily injections of 2 cc. of Oil Penicillin for 18 days with no relief. Later he took Achromycin–Capsules for 15 days, with no relief, when he reported to the above department.

Previously, he had similar urethral–discharge, once five years ago, and again eight months ago, for which he took a course of Procaine–Penicillin, each time with complete relief.

On examination, purulent urethral–discharge, with moderate oedema and erythema of external urethralmeatus was present. Inguignal–lymph glands were palpable, non–tender and discrete.

LABORATORY INVESTIGATIONS

1. Gram's stain of fixed urethral smear, showed typical intra–cellular Gram negative displococci resembling "N" Gonorrhoea.
2. Urine :—Hazy, Acedic.
3. V. D. R. L.—Negative.

He was treated as out–patient, and was given 4 lakhs of Procaine–Penicillin B. D. for 5 days. Still urethral–discharge persisted, and urethral smear showed Grams negative diplococci. From 2–5–1965 he was given 1 gram of Streptomycin daily for 5 days with no relief. He was admitted on 7th May 1965 as an in–patient, and was started chloramphenicol 1 gram daily (250 gms. 6th hourly) for five days. On the next day he was given I. V. Injection of curative T. A. B. (25 million organisms). He developed maximum temperature of 103°F, and maintained for two days. He has been given another dose of T. A. B. (50 million organisms) on third day for which he developed temperature of maximum 102.8°F for 1 day. Chloramphenicol was continued for five days along with fever therapy. The discharge subsided on the next day of admission, and urine was clear on 5th day, except urine deposit showed few pus–cells. He was kept till 19–5–1965 as in–patient during which period he had no urethral discharge, and urine was clear and showed no pus–cell. During the entire period of treatment, he was keeping good health, with no complaint, except mild headache and Backache, when he had peak temperature during fever therapy.

DISCUSSION

A case of gonorrhoea in male, resistant to treatment with most of the commonly used antibiotics is reportnce. Resistance of Gonococcus to antibiotics and sulpha group of drugs, in increasing frequency, is reported in west, though less commonly in our country. The resistance of Gonococcus to Penicillin is more a relative type, hence the recommendation of high doses of Procaine–penicillin which give initial high serum peak concentration.

Chloramphenicol is the first broad spectrum antibiotic for oral use, usually held considerable promise for treatment of Gonorrhoea. Various dose schedules from one to three grams initial single dose were used, with a cure rate exceeding 90%.

Credit of initial use of fever therapy for treatment of Paretic–symphilis goes to Wonger jauregg in 1887. Various methods of induction of fever are used and intravenous T. A. B. is one of them. Even though fever therapy was used mainly for treatment of Neurosyphilis, it was also used for resistant and complicated Gonorrhoea in combination with specific antibiotic. Even though various theories were given how the fever therapy acts, the exact mechanism how it acts is not clear, and its use even in Neuro–syphilis now a days after the advent of Penicillin, is strongly disputed from many corners of the world.

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