URETHRO-GENITAL GONOCOCCAL SUPPURATIONS* OBSERVED DURING THE PAST 3 YEARS IN THE CHARLES NICOLLE HOSPITAL, TUNIS

BY

A. KHALFAT

Tunis

The control of venereal disease, like the control of other social diseases such as tuberculosis, trachoma, and tinea, is one of the daily preoccupations of the Tunisian Ministry of Health and Social Affairs. For over 4 years, national mass campaigns against these diseases have been conducted throughout the country, and these are now beginning to bear fruit. At the same time, health education through personal contacts is improving attendance at the clinics for examination and treatment.

An antisyphilis campaign, started in 1960 in selected areas, is being extended to the whole country. Gonorrhoea, being an adult disease spread by sexual intercourse, does not lend itself to mass campaigns since treatment varies with each case. Its frequency and the difficulty of sterilizing infected foci give some cause for anxiety because there are no rapid and effective methods of contact tracing.

At present, the Charles Nicolle Hospital, which is the only one with a dermatology-venereology service, provides consultations every morning with several medical specialists in attendance. Treatment and medicaments are entirely free of charge, particularly in cases of venereal disease.

In 1958 the out-patient medical services were decentralized and this has made it possible for a large proportion of venereal disease patients to be treated near their homes. For this reason the number of persons attending the central clinic has fallen.

The incidence of cases of urethro-genital suppurations in which the presence of the gonococcus has been clinically and bacteriologically determined by direct examination and culture is given below. It is not yet possible for us to submit a complete study of non-gonococcal infections.

Table I shows the total number of patients by sex and age, and Table II the number of urethro-genital

suppurations in men and women. It will be seen that the number of cases reported has fallen dramatically since 1957, and that the male cases are nine times more numerous than the female cases, but it should be noted that the prostitutes examined at a public health centre in the city of Tunis, who were the cause of a certain number of the male cases, are not included in these statistics.

TABLE I

INCIDENCE OF GONOCOCCAL INFECTION BY SEX AND AGE, 1957-60

Year	1957		1958		1959		First Half 1960	
	No.	Per-cent.	No.	Per-cent.	No.	Per-cent.	No.	Per-cent.
Total No. of Patients	844		498		592		282	
Men	716	85	437	88	538	91	255	90
Women	128	15	61	12	54	9	27	10
Patients under 20 yrs of Age	189	22	85	17	84	14	46	16

TABLE II

CASES OF URETHRO-GENITAL INFECTION, BY SEX, 1957-60

Sex	Condition		1957	1958	1959	First Half 1960
		No.				
Male	Acute Urethritis	No.	425	270	293	152
		Percent.	60	61.27	54.46	59.64
	Relapses and Complications	No.	61	45	50	15
		Percent.	8	10.27	9.29	6
Female	Gonorrhoea	No.	59	20	17	10
		Percent.	45	32/8	31	37

*Submitted to the European Symposium of the I.U.V.D.T. at Cracow, Poland, in September, 1960.

Clinical Symptoms

In men, the principal symptom is usually acute, less often sub-acute, urethritis. The interval between exposure to risk and the first consultation varies between 2 to 15 days.

The chief complications are re-infection urethritis, epididymitis, or prostatitis. The percentage of complications is fairly high because patients present themselves late for treatment or because unsuitable treatment has been applied, either by self-medication or by drugs obtained from a pharmacy. About three-quarters of our patients suffer from gonococcal urethro-genital infections, the rest being non-gonococcal cases.

There are two reasons why the number of women included in these figures is so small: we do not observe any acute cases, and the prostitutes are examined elsewhere. In so far as we succeed in persuading them to consult us, the women examined by us are generally the wives or partners of our male patients. Their symptoms are of the more ordinary type, frequently with leucorrhoea and sometimes with cervicitis or urethritis of which the patients are unaware. The bacteriological examinations are seldom positive for the gonococcus in spite of repeated direct examinations and cultures (one-third of the cases as a maximum), but we apply prophylactic treatment to negative cases also.

Treatment

Penicillin is our treatment of choice.

Acute Urethritis.—Intramuscular injection of 1,200,000 units "Extencillin" (benzathine penicillin), repeated at 72-hour intervals, or 1,200,000 units of an equal mixture of procaine penicillin and benzathine penicillin every 48 hours. The response to penicillin is very rapid. On the day after the injection the discharge ceases and the second injection is given more or less as a consolidation measure. These results are confirmed by the beer reactivation test or, for those whose religion prohibits this drink, by the urethral injection of a few ml. of 1/200 silver nitrate.

Re-infection Urethritis and Complications.—Penicillin is combined with streptomycin. Some patients are subsequently passed to the urologist for treatment of the foci, and in a few rare cases cultures and antibiogramme tests with the isolated gonococcus have shown penicillin-resistance and streptomycin-resistance. However, other antibiotics, in particular tetracyclines, are effective, and chloramphenicol often gives good results.

The doses for women are double those for men, and their treatment is prolonged until the specimens

give negative results, particularly after menstrual reactivation.

In cases of vulvo-vaginitis in prepubertal females, cultures have shown that these are due to catarrhal infection associated with common germs; a cure can be effected by repeated antibiotic treatment or by varying the antibiotics.

The difficulty of detecting the gonococcus in women is confirmed by the gynaecologists of the Charles Nicolle Hospital who have detected it in only 2 to 3 per cent. of hundreds of specimens. The same thing is noted in prostitutes because they treat themselves indiscriminately with penicillin or other antibiotics. When they are placed under observation as a result of some complaint about contamination, the gonococcus is detected in only one case out of three.

Prostitution

The Tunisian regulations covering prostitution, which date from 1942, constitute the only preventive legislation. Clandestine prostitution is prohibited; women operating on their own and attached to brothels are entered in a special police register and are subjected to medical supervision at the city's public health clinic. This supervision includes a fortnightly clinical examination, a bacteriological examination at least once a month, and a serological examination every 3 months. The gonococcus was found in only 6 per cent. of 2,000 specimens taken in 1959. This tallies with our results for acute urethritis, about one case in ten being due to a supervised prostitute and the other nine to clandestine prostitutes, even though the latter are officially prohibited. Controlled prostitution is gradually decreasing in Tunisia: there is a regular drop of 10 per cent. each year, and in 1960 such prostitutes numbered only 250. This situation has been brought about by the emancipation of Tunisian women, and it is thought that this form of prostitution will shortly disappear altogether. The prophylactic service of the Ministry of Health and Social Affairs is studying the question of suppressing recognized brothels, and new legislation concerning the prevention of venereal disease is being prepared.

Summary

The control of venereal disease in Tunis is the responsibility of the Ministry of Health and Social Affairs. The mass campaigns of the past 4 years are now beginning to bear fruit, although the presence of asymptomatic chronic gonorrhoea, especially in

women, makes contact-tracing difficult. Free treatment is given at the special V.D. clinic of the Charles Nicolle Hospital, and since 1958 at outlying clinics. Diagnosis is carried out by means of cultures. Penicillin is chiefly used for treatment, but streptomycin and other antibiotics are used in difficult cases. Cases of gonorrhoea in registered prostitutes, who are given separate medical examinations at regular intervals, are not included in the general statistics. Licensed brothels are gradually becoming fewer as the economic status of women in Tunis improves. Legislative measures to prevent venereal disease are being prepared by the Ministry of Health.

**Les suppurations uréthro-génitales à gonocoques observées
à l'hôpital Charles Nicolle de Tunis durant les trois
dernières années**

Résumé

La lutte contre les maladies vénériennes est un des soucis du Secrétariat de la Santé Publique et des Affaires Sociales.

Depuis plus de 4 ans des campagnes de masse commencent à porter leurs fruits, tandis que surtout chez les femmes le gonocoque est souvent asymptomatique et les foyers de contagion sont difficile à découvrir.

Les soins et les médicaments sont entièrement gratuits à l'hôpital Charles Nicolle où se trouve le service de dermato-vénérologie le plus complet, et depuis 1958 il y a eu une décentralisation dans des dispensaires de quartier.

Le diagnostic se fait par les examens bactériologiques. La pénicilline est le traitement de choix, mais nous employons aussi la streptomycine, et les autres antibiotiques donnent souvent de bons résultats dans les cas difficiles.

Les cas de gonococcie chez les prostituées enregistrées, qui sont soumises aux examens médicaux réguliers, sont exclus des statistiques générales.

La prostitution réglementée diminue de plus en plus en Tunisie; ceci est dû à l'émancipation de la femme tunisienne.

Les services du secrétariat d'état étudient actuellement le problème d'élaborer une législation moderne en matière de prévention des maladies vénériennes.