Effectiveness of the treatment of sexually transmitted diseases instituted by local authorities of the Western Cape

C. J. ANDERSON

Summary

It is a strange paradox that now that the treatment of venereal diseases is comparatively painless, effective and easily available, there has been a considerable upsurge in the incidence thereof. A global picture of the success of preventive and curative measures is difficult to obtain since comprehensive statistics are not available. The single most important reason for this is that these diseases are not notifiable, whether treated in the clinics of local authorities or hospital environs or by private practitioners, making the detection of accurate epidemiological trends extremely difficult. Since patients often desire anonymity, there has been an increasing drift towards treatment at the last two sources mentioned above. This article studies the only available recorded information, and hence summarizes the effectiveness of the Cape Town City Council and Cape Divisional Council health departments in combating sexually transmitted diseases in the Western Cape.

Although during the past 5 years there has been a general decrease in the number of new cases of sexually transmitted diseases (STDs) seen each year, the incidence still remains alarmingly high.

Gonorrhoea and syphilis remain the two most prevalent diseases. Of the world population of approximately 4 300 million people, approximately 280 million (6,5%) are affected annually. In the USA approximately 1,79% of the population is affected. Based on the assumption that South African medical facilities compare favourably with those in the USA, it could safely be said that there are approximately 25 000 cases of gonorrhoea and syphilis each year in Greater Cape Town (population 1,5 million) — a rather frightening figure.

Many cases of STD are treated privately (particularly those occurring among the White population) and some not at all, and there is no compulsion to notify these cases to the local authorities unless patients refuse treatment. Accurate epidemiological trends are therefore difficult to detect, since the number of affected people making use of city health centres may be influenced by factors other than a real change in the pattern of occurrence (e.g. altered community affluence, changing social attitudes to the stigma attached to these diseases, and local availability of health services). Nevertheless, the number of patients seen at Municipal and Divisional Council clinics provides the only major epidemiological record of the occurrence of these diseases in Cape Town.

Structure of the control system

Primary prevention

Health education in these matters forms part of the general activity of health personnel. The agents of venereal disease cannot be eradicated from the environment, and the host cannot be naturally or artificially immunized. In fact, the only specific measures which can be taken are prevention of the agents from surviving transference to a new host (possibly by means of the use of condoms, intra-uterine devices, etc.) and by treating expectant mothers with serological evidence of syphilis so that the spirochaete does not infect the fetus (or, if it has infected the fetus, so that treatment may be curative).

Secondary prevention

The Cape Town City Council provides free facilities for the diagnosis and treatment of STD on a weekly basis at 14 venereal disease centres as well as at antenatal clinics. The 14 centres are based at: the City Hospital (males only), Salt River (females only), Wynberg (males only), Kensington, Guguletu, Heideveld, Silvertown, Retreat, Langa, Lavender Hill, Manenberg, Bonteheuwel, Hanover Park and Parkwood.

Municipal staff at the antenatal clinics are involved in providing routine health care for expectant mothers. Serological screening (VDRL tests) for syphilis are carried out at the State Laboratory on samples submitted from these clinics. Treatment is then applied accordingly.

The Divisional Council runs clinics on a weekly basis at: Elsies River, Grassy Park, Bishop Lavis, Matroosfontein, Ravensmead, Kasselsvlei and Durbanville. The clinics at Bishop Lavis and Matroosfontein are both new and were designed to relieve the last 3 clinics mentioned. At Elsies River up to 50 patients are seen each morning, and at Nyanga clinics are held twice a week with between 40-50 patients at a session.

Tertiary prevention

Support is offered to patients and the preservation of confidentiality is emphasized. Health education directed at preventing recurrence is attempted, but rehabilitative measures are not highly successful.

Investigation of patients

Many patients are investigated by their private medical attendants or by staff of other public health service facilities. Good liaison exists between the Day Hospitals Organization of the Cape Provincial Administration and the Municipal and
Divisional Councils; patients diagnosed at such hospitals are started on treatment and are referred to the clinics for continuation of therapy.

Treatment programme

Complete consensus on the treatment of venereal diseases has been established between the two councils and the Day Hospitals Organization. The recommended treatment programme is given below.

**Gonorrhoea**

Intramuscular procaine penicillin G (aqueous suspension) 4.8 MU (8 ml into each buttock) is administered, plus probenecid 1 g (2 tablets swallowed at the clinic in the presence of staff). *Patients allergic to penicillin* are given tetracycline 2 g/d (2 capsules 4 times a day) for 4 days; vitamin B complex (1 tablet 4 times a day for 4 days) is optional.

**Syphilis**

A blood sample is taken for VDRL testing.

- **Primary syphilis**: Benzathine penicillin 2.4 MU (4 ml intramuscularly into each buttock) is given weekly for 2 weeks (2 doses).
- **Secondary syphilis**: Benzathine penicillin 2.4 MU (4 ml intramuscularly into each buttock) is given weekly for 3 weeks (3 doses).
- **Early latent syphilis**: Benzathine penicillin 2.4 MU is given in the same manner weekly for 4 weeks (4 doses).
- **Late latent and tertiary syphilis**: Benzathine penicillin 2.4 MU is given in the same manner weekly for 5 weeks (5 doses).
- **Syphilis in pregnant women**: Benzathine penicillin 2.4 MU is given in the same manner weekly for 4 weeks (4 doses).
- **Congenital syphilis**: Daily injections of aqueous procaine penicillin G are given for 10 days (daily dose calculation, 50 000 U/kg/d). Admit the patient to hospital if possible.

*Patients allergic to penicillin* are given tetracycline 3 g/d (3 capsules 4 times a day) for 10 days for primary syphilis, and the same but for 15 days for secondary syphilis. *Pregnant women* with primary syphilis receive erythromycin 2 g/d (2 capsules 4 times a day) for 10 days and for secondary syphilis the same but for 15 days with vitamin B complex (1 tablet 4 times a day for the duration of treatment).

**Treatment statistics**

The statistics from the Cape Town City Council Health Department used for this survey are those for the past 5 years. Documentation of results from the Divisional Council was obtainable only from 1979, hence making a full 5-year comparison impossible. Nevertheless, the data available give a satisfactory indication of trends.

**Cape Town City Council clinics for venereal disease**

1976: The number of new cases of STDs seen fell by 32 over the year, with a concomitant fall in the incidence per 1000 members of the population from 15.9 to 15.4. There was an increase of 0.77% in the number of new cases of acquired syphilis. Cases of congenital syphilis numbered 75, an increase of 108.3% over the 36 cases seen in 1975. There was a decrease of 1% in the number of new cases of gonorrhoea.

1977: The number of new cases rose by 195, with a concomitant fall in the incidence of these diseases from 15.4/1 000 to 15.2/1 000. There was a decrease of 1% in the number of new cases of acquired syphilis seen. There were 58 cases of congenital syphilis, a decrease of 22.7% from 1976. There was an increase of 6.4% in the number of new cases of gonorrhoea seen.

1978: The number of new cases fell by 196, with a concomitant fall in incidence from 15.2/1 000 to 14.5/1 000. There was a decrease of 2.1% in the number of new cases of acquired syphilis. The number of cases of congenital syphilis rose by 20.7% to 70, while new cases of gonorrhoea decreased by 0.7%.

1979: The number of new cases fell by 1201, with a concomitant fall in incidence to 12.8/1 000. There was a decrease of 31.8% in the number of new cases of acquired syphilis. Cases of congenital syphilis numbered 39, a decrease of 44.3%. New cases of gonorrhoea decreased by 2.24%.

1980: The number of new cases fell by 2 961 (25.13%), with a concomitant fall in the incidence (from 12.8 to 9.3). There was an increase of 9.2% in the number of new cases of acquired syphilis. There were 8 cases of congenital syphilis, a decrease of 80%. New cases of gonorrhoea decreased by 39.8%.

It is evident that during the last 3 years there has been a decrease of approximately 25% in the number of cases of STDs. This is the result of greater awareness and more effective treatment of these diseases, and a more concerted effort to control them.

**Divisional Council clinics**

1979: New cases of STDs numbered 4 196 in 1979, with a total of 1 255 new cases of acquired syphilis, 30 of congenital syphilis, and 556 of gonorrhoea.

1980: There were 6 513 new cases of STD, an increase of 55.2%, with 2 137 new cases of acquired syphilis (an increase of 70.2%), 58 of congenital syphilis (an increase of 93.3%) and 568 of gonorrhoea (an increase of 2.15%).

The data from the Divisional Council indicate a relatively large increase in the percentage of people contracting venereal diseases. This is largely attributed to decentralization during the past 5 years of industries which were initially located within the Cape City Council jurisdiction. Due to expansion, industries in places such as Goodwood, Paarden Eiland and Maitland have moved to areas such as Atlantis or Mitchell's Plain, which fall under Divisional Council jurisdiction (Atlantis is of particular importance with its present population of 180 000 — 10 years ago it was almost totally unpopulated). This has resulted in a massive extra load on the Divisional Council clinics.

**Problems and shortcomings**

On paper it is easy to be misled by the apparent success in combating venereal disease (particularly by the Cape Town City Council Health Department). Although numbers and percentages may seem satisfying, they must be viewed in the right perspective — there are still approximately 25 000 people in Greater Cape Town with venereal disease. Probably the most profound reason for the difficulty in controlling venereal disease is lack of attendance at the clinics. This is largely due to the fact that patients attending any one of them on a particular day are there for the treatment of a specific ailment. This is not the case at the day hospitals, where in the main specific clinics are not held; patients obviously prefer the anonymity of the latter situation. The answer to this problem is difficult. Treatment along statutory lines can be administered anywhere, but subsequent follow-up suffers if the patients are then treated elsewhere. Follow-up, as can be appreciated, is almost as important as the treatment of the active disease. This is an ongoing problem which requires urgent attention.
Kallmann's syndrome

A case report

K. R. HUDDLE, P. H. PORTEUS, S. L. HIRSCHOWITZ

Summary

A patient with hypogonadotrophic hypogonadism and anosmia (Kallmann's syndrome) presenting as delayed puberty is described. The clinical, hormonal and testicular histological features are noted. The basic principles of treatment are discussed.

Departments of Medicine and Urology, Baragwanath Hospital and University of the Witwatersrand, Johannesburg

K. R. HUDDLE, M.B. B.Ch., F.C.P. (S.A.)
P. H. PORTEUS, F.R.C.S., F.C.S. (UROL.)

Department of Histopathology, South African Institute for Medical Research and University of the Witwatersrand, Johannesburg

S. L. HIRSCHOWITZ, M.B. B.CH.

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When androgen deficiency develops in the male after fetal development but before the completion of puberty the following clinical features are found: lack of adult male hair distribution, high-pitched voice, infantile genitalia, poor muscular development and a eunuchoidal skeleton. The causes of androgen deficiency include primary testicular disorders such as Klinefelter's syndrome, and secondary testicular failure (hypogonadotropic hypogonadism) when there is disease of the pituitary or hypothalamus. We describe a case illustrating this latter group.

Case report

An 18-year-old Black youth was admitted to Baragwanath Hospital in September 1981 complaining of underdeveloped genitalia. He admitted to having anosmia on direct questioning. He has 3 siblings, 1 married sister who has children of her own, and 2 younger brothers aged 5 and 8 years.

His height was 164 cm (on the third percentile for age and sex) and his span was 9 cm greater than his height. He was of slender build with poor muscular development and his voice was high-pitched. The genitalia were infantile and scrotal testes were absent. His body was devoid of hair. The anosmia was confirmed but no other abnormalities were detected.