ASSOCIATED GONORRHOEA and LYMPHOGRANULOMA VENEREUM

"The early stages of these diseases often cause little disability and the sufferers put off seeking medical advice because they think the condition is trivial and will clear up by itself. Sometimes they try some sort of quack remedy—although it is illegal to sell such remedies nowadays. This sort of delay and these irregular methods of treatment bring disaster in their train. If sufferers wait till the later stages of the illness have shown themselves—when they can no longer manage without medical help—all hope of cure may have gone.

"We cannot afford—especially at such a time as this—to have a single person off work on account of diseases that are readily diagnosed and amenable to treatment. So let's decide here and now that we shall no longer tolerate this hush-hush attitude regarding venereal disease. With the help of an enlightened public opinion we could easily reduce these diseases to insignificant proportions, and I hope you will lend your support to our efforts to rid this country of yet another of its social plagues."

ASSOCIATED GONORRHOEA and LYMPHOGRANULOMA VENEREUM URETHRAL INFECTION IN MALES

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Venereologists during the present decade have shown an increasing interest in lymphogranuloma venereum. Infections associated with syphilis and soft chancre have been reported frequently and studied in great detail. Mixed infections of gonorrhoea and lymphogranuloma venereum have also been recorded, some with a chancre and inguinal adenopathy and a few with urethral penetration of the virus. These are not uncommon owing to the fairly high incidence of the carrier state of lymphogranuloma venereum in women.

The problem of associated gonorrhoea and lymphogranuloma venereum infection has interested me ever since the suggestion by P. L. Gibson (1931) that the virus of lymphogranuloma venereum might invade the posterior urethra. The association of the infections was seen more frequently before the advent of modern chemotherapy. Nowadays the cases are fewer but nevertheless of considerable importance. I shall refer only to the acute manifestations of cases of simultaneous urethral infection by the virus of lymphogranuloma venereum and the gonococcus.

Forms of simultaneous mixed infection

J. May (1938) paid special interest to simultaneous conditions of gonorrhoea and lymphogranuloma venereum and considered that an associated gonorrhoea-lymphogranuloma venereum infection may present itself as (1) a simultaneous infection in which the symptoms of gonorrhoea appear first and three to four weeks later those of lymphogranuloma venereum (marked oedema of the prepuce, infiltration of the lymphatics of the coronal sulcus or of the dorsum penis and nodular growths in the dorsal lymphatics); (2) a simultaneous infection with a latent primary lymphogranulomatous period and the appearance of syndromes (genital oedemas, genital changes, rectal stricture) years later; (3) a simultaneous infection with urethritis and lymphogranulomatous chancre; (4) lymphogranuloma-neisserian biotropism.

Clinical course

In my experience the incubation period of lymphogranuloma venereum is shortened (three to six days) by the simultaneous invasion, and in most cases the symptoms appear early, often at the same time as the discharge begins. There may be oedema of the external urinary meatus and the prepuce, thickening of the

lymphatics of the coronal sulcus and dorsum penis, and in some cases these signs are so marked in relation to the scanty urethral discharge that attention is drawn to the condition. Small nodules may also appear over the skin of the dorsum penis in relation to the superficial lymphatics (W. E. Coutts, 1935). In the pure urethrogonous cases I have never recorded an accompanying inflammation of the inguinal lymph glands. The deep iliac glands, on the contrary, are always involved. This sign, which is pathognomonic of lymphogranuloma venereum infection, should always be sought and confirmatory evidence awaited from the Frei skin-test, which rapidly shows positive reaction (five to seven days). Ocular findings appear later, although in some cases I have noticed them even before the skin-test reactions became positive (C. Espildora and W. E. Coutts, 1942). In these mixed infections malaise with slight, and occasionally high, fever is not uncommon.

Treatment

Sulphonamides.—At present, such a clinical course is not commonly observed. When, after a prompt diagnosis, gonorrhoea is treated with sulphanilamide, sulphathiazole or sulphadiazine the effect on both infections is simultaneous. Nevertheless, there are a certain number of recorded cases in which the above drugs only act on the neisserian infection. A slight serous urethral discharge that does not contain gonococci persists. If, in these cases, a search is made for involvement of the deep iliac lymph glands this can usually be found. Preputial oedema or involvement of the coronal sulcus and dorsum penis lymphatics will persist if pre-existent or, what is more perplexing, may appear shortly after the discharge has completely disappeared. The urine will show the existence of numerous small light filaments in the first specimen glass. The condition may be complicated by an acute epididymitis. The spermatic cord is slightly enlarged and the epididymis engorged, but not very painful. The process evolves slowly. The globus minor commonly adheres to the skin and not infrequently breaks down (W. E. Coutts and R. Vargas, 1936). Notwithstanding the fact that both prostate and seminal vesicles appear normal on digito-rectal palpation, a tuberculous lesion is suspected. Many patients have been subjected to operation, but histological confirmation has not been obtained. The search for visible forms of the virus in sections of these epididymi is very often successful (W. E. Coutts and J. Martini, 1938).

Sulphathiazole.—At other times active untreated gonorrhoea will be complicated by acute epididymitis. Under sulphathiazole treatment acute symptoms will subside promptly but the epididymis remains hard and nodular, adheres more and more to the skin and occasionally opens externally to form a sinus. Spermoculture is negative for gonococci. From the clinical picture there is a temptation to accept the diagnosis of a tuberculous graft in a 'locus minoris resistentiae.' Epididymectomy is then performed and culture of the material on adequate media is negative both for gonococci and for tubercle bacilli. Sections will show the existence of typical visible forms of the lymphogranuloma virus. The existence in such cases of hard engorged deep iliac lymph glands and of other associated clinical signs, such as persistent oedema of the prepuce or lymphangitis of the dorsum penis, as well as a positive Frei skin-test reaction should not be underestimated as evidence for differential diagnosis.

Sulphapyridine.—As regards the treatment of such associated simultaneous infections, in cases in which the common sulphonamides have been successful in curing gonorrhoea but unsuccessful for lymphogranuloma venereum, my colleagues and I have then given sulphapyridine which, in our opinion, acts more energetically on the lymphogranuloma virus.

Lymphogranuloma venereum virus can be demonstrated in smears of urethral and prostatic discharges by staining for thirty to sixty minutes with a freshly prepared 2 per cent aqueous solution of nigrosine (counterstain magenta 2 per cent). It may be seen also in filaments by the use of the same staining method, or by using victoria-blue or Mann's classic method. The viruses appear free or in the cytoplasm of epithelial cells.

ANTI-VENEREAL MEASURES IN THE SOVIET UNION

Conclusion

The most important finding from these observations is that in the urethral type of mixed infection the incubation period of the lymphogranuloma venereum virus is considerably shortened and that the signs (preputial oedema, lymphangitis of the coronal sulcus and dorsum penis and marked involvement of the deep iliac lymph glands) usually appear at, or a few days after, the onset of the urethral discharge.

REFERENCES

- Coutts, W. E. (1935) *Ann. Mal. vénér.*, **30**, 26.
— and Martini, J. (1938) *Z. Urol.*, **32**, 439.
— and Vargas, R. (1936) *Ann. Mal. vénér.*, **31**, 895.
Espildora, C., and Coutts, W. E. (1942) *Amer. J. Ophthalm.*, **25**, 916.
Gibson, P. L. (1931) *Brit. J. vener. Dis.*, **7**, 243.
May, J. (1938) *Rev. Uruguay Dermat. y Sifil.*, **3**, 320.

ANNOTATIONS

ANTI-VENEREAL MEASURES IN THE SOVIET UNION

Report from the Anglo-Soviet Medical Council

Venereal diseases were very widespread in Tsarist Russia, especially among the population of the national minorities; it is estimated for instance that 30 per cent of the Yakut population were infected with syphilis. In Moscow in 1914 there were for every 10,000 of the population approximately 388 patients with venereal diseases of whom 56.9 per cent had been infected by prostitutes. On the other hand, in the rural areas, although the number was less, many persons were infected extra-genitally through what was known as "custom syphilis," that is, syphilis spread by customs such as kissing ikons, feeding babies on chewed bread, smoking communal water-pipes, or drinking from the same cups. During and after the war of 1914-18, soldiers returning to their homes increased the incidence of gonorrhoea in particular. Professor Sysin and others state that even according to incomplete data, in 1913 there were 76.8 cases of syphilis per 10,000 of the population of the country as a whole.

The Soviet anti-venereal campaign

With the advent of Soviet power, the medical authorities were faced with an almost overwhelming problem with regard to the epidemic diseases such as typhus. Notwithstanding this, one of the earliest measures was to institute a campaign against venereal disease. There were two main directions of attack—against venereal diseases as such, and against prostitution as an institution.

A series of medical institutions were set up. Registration of venereal diseases had officially been compulsory since Tsarist days. In addition two new laws were passed in 1927, one making the infecting with venereal diseases of a sexual partner punishable by up to three years' imprisonment, and the other making treatment compulsory. The authorities state, however, that the latter law has to be applied but rarely, largely as the result of popular education regarding the importance of treatment.

With regard to rural areas, one of the health duties of the village Soviets, which number about 70,000, is to take all necessary steps for the organization of the fight against venereal diseases.

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Organization of treatment

The basic unit for the prevention and treatment of venereal diseases, as of tuberculosis, is the local dispensary. This may be one of the departments of the polyclinic or it may be a separate institution. In 1937 there were 1,476 dispensaries in the cities. In rural areas, where the population is widely scattered, use is made of travelling dispensaries and of "flying squads" of doctors and nurses.

In Moscow the following provisions were available in 1937: the Bronner Institute (named after Professor Bronner who organized the campaign) which has 440 beds, twelve smaller institutes elsewhere in the city, and thirty dispensaries affiliated to the Institute.