LYMPHOGRANULOMA VENEREUM*

A REVIEW OF 61 CASES

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It was feared that the increased coloured population in Great Britain might lead to an increase of lymphogranuloma venereum, but this has probably not occurred. The total number of cases reported in the annual returns to the Ministry of Health for England and Wales from 1951–1957 averaged about seventy per year throughout this period, apart from a slight increase in 1955 and 1956 to 89 and 86 cases respectively.

This is a review of 61 male cases of lymphogranuloma venereum treated in the Seamen's Hospitals, London, between 1950 and 1957; a further sixteen cases have been excluded as unassessable. With a few exceptions, all these patients were admitted to hospital for treatment. Most of them presented in the venereal diseases department with a swelling in the groin; only a few were referred from the casualty department or from the surgeons, and consequently we did not see the divers manifestations of this condition.

In only four cases were transitory primary lesions detected. With one exception all our cases were probably infected overseas, although not all gave a history of risk of infection, and they would often have passed the initial phase before presenting to us with a bubo. In some cases language difficulty, and in others the patient's lack of observation, may account for the comparative absence of the reported initial lesions. How many of our cases diagnosed as genital herpes, balanitis, and non-specific urethritis went on elsewhere to present as a bubo is not known. In this respect it is interesting to record one patient who reported with three tiny erosive ulcers in the coronal sulcus of 3 days' duration; there was no glandular enlargement, and a diagnosis of genital herpes was made because routine investigations were negative (the Frei test was in fact a doubtful negative). The serological complement-fixation test

was reported positive to dilution 1 : 96 after he had left the clinic cured of his herpes a few days later. He returned 3 months later with a recurrence of the genital herpes, and on this occasion the left inguinal glands were enlarged. The Frei test was then strongly positive and the lymphogranuloma complement-fixation test was positive to dilution 1 : 144.

In a check on twenty consecutive white patients with other conditions, we found only one positive Frei test, but in this one case the serological reaction was positive in a dilution of 1 : 284, although there were no signs or history of lymphogranuloma venereum. King, Barwell, and Catterall (1956) obtained 206 positive Frei tests in 1,317 tests of new cases attending a V.D. Clinic; in only 23 of these cases was lymphogranuloma venereum considered probable on serological grounds. These observations suggest the possibility of the existence of asymptomatic or latent infection.

In our series, lymphogranuloma venereum was considered in the presence of enlarged glands in one or both groins when there was no traumatic or infected lesion on the feet or legs and no genital or urinary infection. In these cases the Frei test was performed using 0.1 ml. Lygranum antigen intradermally, together with the control test, and a positive reaction was recorded when a dome-shaped papule appeared at the test site 48 hrs later with no reaction at the control site. This was considered as a possible support for the diagnosis, but final proof depended on a positive reaction to the psittacosis complement-fixation reaction in dilutions of serum greater than 1 : 32 (often up to 1 : 596).

It seems that a positive Frei test may be slower in developing than the serological reactions, and one doubtful or negative test should not be considered final in the early stages of suspicious lesions. In our series, the incubation period of the bubo averaged 5 weeks, and patients presented with symptoms at varying intervals, but averaging 3 weeks, after their

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appearance. The incidence of glandular involvement in the left or right groin only was approximately equal and twice as common as a bubo in both groins. When the glandular enlargement had been present for a short period, usually only one gland was involved, but in cases of longer duration, *i.e.* several weeks, there was usually a mass of glands with periadenitis and adhesion to the skin. Only a few cases presented with fluctuation.

The localities most commonly blamed for infection were the West Indies, Bermuda and Cuba, South America, India, and the Far East. Occasionally patients claimed to have been infected at European ports; in many cases the source of infection was not recorded, and sometimes not admitted, and in only one of the 61 cases was infection considered to have taken place in Great Britain (Table I).

TABLE I

Sources of infection in 61 cases					
West Indies	..	..	..	..	8
Bermuda	..	..	..	..	2
Cuba	..	..	..	..	1
South America	..	..	..	..	7
India	..	..	..	..	5
West Africa	..	..	..	..	5
Canaries	..	..	..	..	4
Far East	..	..	..	..	3
Europe	..	..	..	..	5
Great Britain	..	..	..	..	1
Sundry	..	..	..	..	7
Unrecorded or denied	..	..	..	..	13
Total	..	..	..	..	61

Early in the series, one course of treatment was prescribed for the patients, with either sulphapyridine 30 g. in 7 days, or aureomycin 20 g. in 10 days. Response to treatment was poor and it appeared to

us that whichever drug was used it turned out to be the wrong one, and that in any particular case the other drug was needed to obtain clinical cure. It was then realized that what was needed was two courses of whichever drug was chosen, and (because of lower incidence of side-effects) two courses of terramycin, each of 20 g. in 10 days, with a 7-day interval between the courses, became our routine. The slow response to treatment and the difficulty of assessing absolute cure, even though the clinical response was satisfactory, convinced us of the necessity for this relatively high dosage (Table II).

Clinical response to treatment is not always associated with early reversal of the serological reactions, but it is interesting to note that, when it was possible to make subsequent tests, full serological reversal was found to have occurred in thirteen of 32 patients (40 per cent.) who received two courses of treatment. This serological improvement was not seen with any other dosage scheme. It is claimed that an estimation of the serum proteins with a clearance of the excess gamma globulins is a more satisfactory assessment of cure, but this test was not carried out on our cases.

Only ten out of 39 patients failed to respond clinically to two courses of antibiotics; of these, seven had three courses of treatment, but serological reversal was not achieved in spite of delayed clinical improvement.

Any treatment which tended to make the bubo point was considered to be contraindicated, and for this reason the short-wave diathermy and hot fomentations which were used in the early cases were discontinued. Incision or aspiration was avoided as far as possible, and local treatment, if

TABLE II
ANALYSIS OF TREATMENT

Drug	No. of Courses	No. of Cases	Results			Aspirated etc.	Serology			
			Clinical Cure	Failure	Unrecorded		Resolved	Improved	Static	Unrecorded
Terramycin	One	11	7	—	4	1	—	2	1	8
	Two	21	19	—	2	3	8	1	3	9
Aureomycin	One	5	4	1	—	1	—	—	—	5
	Two	2	2	—	—	1	2	—	—	—
Sulphonamide	One	6	6	—	—	2	—	2	1	3
	Two	3	3	—	—	1	1	—	1	1
Aureo/Sulph	One of each	6	5	—	1	3	2	—	2	2
Three Sundry Courses		7	5	1	1	1	—	—	4	3

Terramycin or aureomycin: 20 g. in 10 days, with interval of 7 days between courses.

Sulphonamides: Sulphapyridine 30 g. in 7 days.

RESOLVED serology = from a high titre to below 1/32 (often to negative)

IMPROVED serology = significant drop in titre.

any, was limited to the daily application of an ichthyol and glycerine dressing. In several cases the bubo fluctuated; sometimes it absorbed during treatment, sometimes it ultimately pointed and aspiration was necessary in ten of our 61 cases, and three other buboes discharged after surgical procedure. Aspiration was carried out with a wide-bore needle and a 20-ml. syringe, the needle entering healthy skin at the side of the abscess; occasionally loculation of the pus caused difficulty. In most cases healing was not protracted but in some further aspiration was needed. We found that incision or surgical interference, as, for example, the removal of a gland for diagnostic purposes, resulted in a breakdown of the wound with a large, deep, crater which was slow and difficult to heal; this occurred in three of our cases.

In this series, 32 patients (52 per cent.) were treated with terramycin which we considered to be

the drug of choice, 21 with two 10-day courses, separated by a 7-day interval (total 40 g.), and eleven with one course (20 g.). Nine patients were treated with sulphonamides alone, six with sulphonamides and aureomycin, seven with aureomycin alone, and seven with three courses of various combinations of sulphonamides and tetracyclines.

The clinical response was satisfactory in 51 of the 61 cases. The significance of this clinical cure in relation to absolute cure is difficult to assess. The reversal of the serological reaction was delayed, although, when it was possible to check the complement-fixation test a year or so later, convincing reversal was found in the majority of cases in which two or more courses of treatment had been given.

REFERENCE

King, A. J., Barwell C. F., and Catterall R. D., (1956). *Brit. J. vener. Dis.*, 32, 209.