British Journal of Venereal Diseases, 1977, **53**, 146–147

Correspondence

TO THE EDITOR, *British Journal of Venereal Diseases*.

Sir,

I wish to answer the letter in the *British Medical Journal*, 1976, **4**, 883 and the letter in *British Journal of Venereal Diseases*, 1976, **52**, 355.

The specialty was built upon a major clinical disease of outstanding biological interest and to a lesser extent upon a bacterial infection at a time when these were serious problems. Like other infectious diseases, syphilis has declined in numbers and like other specialties devoted to infectious disease we must reflect upon the situation.

Previously the specialty had a broad outlook and if we turn to the reports of meetings of the Medical Society for the Study of Venereal Diseases in its early years, it can be seen that eminent physicians and surgeons were speakers—for example, Sir Thomas Horder (Lord Horder) (vol. **2**, 117). In the opening address (vol. **1**, 5) Sir Humphrey Rolleston, PRCP, said: 'The study of venereal diseases has passed through various stages . . .'; first he observed that the subject was taboo; then that it was a surgical interest mainly of urologists, then dermatologists moved in with their interest in syphilis. 'It is clear', he said, 'that the study of venereal disease is not a subordinate subsection of medical science and practice, and indeed any attempt in this direction would endanger its full development and inevitably lead to a narrow view'; yet the President of the Royal College of Physicians observed that only some degree of specialisation would allow full scope to a specialty that must take the whole man for its study and be a part of general medicine itself.

The decline in numbers of all infectious diseases as clinical problems has meant a revaluation for those interested in these conditions. The decline in serious clinical problems is also reflected in narrowly viewed venereal diseases, but not in genital and urinary infections and disorders as a whole. This problem must be seriously appraised. The situation may be compared with infectious disease. Those with special interest in tuberculosis, for example, are now chest physicians, just as those with a special interest in the clinical and biological aspects of syphilis have to be genitourinary physicians. The analogy is significant and important.

The need for a clinical specialty in genitourinary medicine to include all relevant infectious disease, is apparent for several reasons: to develop patient care in response to their needs; to recruit physicians of the necessary high quality into this area of special-interest medicine; to gain proper perspective of the sexual background to many genitourinary disorders in medicine as a whole. The limited field of venereology will not attract sufficient consultants of good quality. There is even now a decline in the number and quality of those attracted to the 'limited' specialty.

In his clinical practice the genitourinary physician manages infective and non-infective conditions and, apart from operative and oncological work, there is little difference between the conditions managed by him and by his colleagues in urology and gynaecology. The genitourinary physician must also collaborate closely with the epidemiologist. However one problem in this relationship is that epidemiologists, like some community physicians and non-specialist practitioners, take a simple view of conditions. It is important for the genitourinary physician to maintain the viewpoint of a hospital outpatients consultant physician with a wide clinical acumen and rigorous clinical methods.

If a journal purporting to serve such a broad clinical specialty wishes to do so, should it not have a suitable title? *The British Journal of Venereal Diseases* shows little concern with clinical subjects today, and attracts, it seems, fewer and fewer papers that would stand comparison with the urological and gynaecological journals. Why is this? Compare the 1976 index with that of 1926. In 1926 the contents could be said to have a wide interest among the profession, judging from the titles and from the speakers at the Society's meetings. How does the 1976 volume of the *BJVD* compare with a volume of a journal of gynaecology or of urology, or a volume of the *Journal of Infectious Diseases*? This needs reflecting upon.

Perhaps few people read any journal thoroughly today, but the *BJVD* is opened by only a narrow coterie. Yet there is a comparatively large clinical expertise that needs recording as do the pathology, microbiology, and natural history of many disorders starting or localised in the genitourinary region, let alone those insights into ocular and rheumatic disorders. This knowledge will, inevitably, be lost to later generations unless a powerful and clinical specialty with a journal devoted to clinical medicine succeeds in becoming established.

There are changes occurring in many fields, not least in medicine. The future of the specialty and the journal now known as the *British Journal of Venereal Diseases* must measure up to these changes to survive and to make important contributions. For this to be done, the title must reflect its wide interests; and the Editorial Board must comprise interested parties—such as, a general physician, urologist, gynaecologist, immunologist, microbiologist, and serologist.

Those who wish to be infectious disease experts and epidemiologists only should be so; those who can serve the greater needs of broader medicine in the clinical specialty should try to do so.

Yours faithfully,

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Changes in the susceptibility of the golden hamster to cutaneous treponemal infection after transfer of lymphoid cells from infected donors*

TO THE EDITOR, *British Journal of Venereal Diseases*

Sir,

There is continuing disagreement about the respective role of humoral and cellular immunity in treponemal infections (Morton and Harris, 1975). We have therefore studied the effect of transferring

*Work realised with technical assistance of Mrs Saldana and Mrs David and financial support of World Health Organisation.

lymphoid cells from male golden hamsters* infected with *Treponemia Fribourg Blanc* to isogenic recipients which were then challenged with the same organism. Cutaneous lesions appeared in all 56 control animals with a mean incubation period of 44 days (range 28–49). The lesions disappeared spontaneously in only 16% of the animals. The mean reciprocal titre of serum antibodies, estimated by the immunofluorescence technique, was 2400 (range 1600–3201) on the seventy-fifth and 4800 (range 1600–6400) on the ninetieth day after inoculation. Lymphoid cells were prepared from the spleen and lymph nodes of these animals at different times after the appearance of the lesion as a suspension in Eagle's medium containing penicillin (3 mg/ml) and streptomycin (0·05 mg/ml) to prevent any possible transfer of living treponemes, or accidental bacterial contamination.

The 63 recipient animals received 1×10^8 cells intraperitoneally, then were challenged with *T. Fribourg Blanc* by lateral inguinal scarification eight days later. In each case cutaneous lesions appeared at the challenge site with a mean delay of 40·3 days (range 24–44) after inoculation; however spontaneous remission of the lesions occurred in more than 60% of these animals compared with only 16% of the controls. Circulating antibodies were present in the challenged animals but all, with the exception of two animals which had received cells from donors in whom lesions had regressed three months before the cell transfer, had titres below those observed in the control group.

These experiments suggest that the transfer of lymphoid cells from a donor who has made an immune response to *T. Fribourg Blanc* results in an improved recovery by the recipient from cutaneous lesions caused by this agent, but does not confer protection from the initial development of the lesion. We therefore attempted to produce more strongly stimulated cells for transfer to the recipients. Cells were transferred from animals whose lesions had spontaneously regressed into recipients which were challenged as above. All these animals produced lesions, and were killed 60 days after the appearance of the lesion. Their lymphoid cells were then transferred to fresh recipients which were challenged 8 days later with *T. Fribourg Blanc*. In none of the five animals so treated was there any sign of a skin lesion at the challenge site, whereas all the control animals treated with the same *T. Fribourg Blanc* preparation produced lesions as usual. The protected animals produced only low titres of circulating antibody: the mean reciprocal titre at 75 days after challenge was 400 (range 200–800) and at 90 days it was 600 (range 400–800).

We believe that these results show that a resistance to the formation of cutaneous treponemal lesions can be transferred using sufficiently stimulated immune lymphoid cells, as the antibody titres in the resistant animals were particularly low. Further experiments have begun using populations of lymphocytes specifically depleted in T or B cells by treatment either with antithymocytic serum or with anti-immunoglobulin serum in the presence of complement. Preliminary results indicate that while B cell enriched populations do not alter the evolution of the lesions, T cell enriched population can transfer resistance.

*Breeding of inbred hamsters of CNRS Villejuif (Mrs Caubel).

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Yours faithfully,

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Early TPHA response in primary syphilis

TO THE EDITOR, *British Journal of Venereal Diseases*

Sir,

It is well known that the *Treponema pallidum* haemagglutination (TPHA) test is among the last of the tests for syphilis to become positive in early syphilis (Johnston, 1972; Young *et al.*, 1974; Sequeira and Eldridge, 1973). We wish to report an occasion on which this test was the first to convert to positive and so to prompt the diagnosis in a case of primary syphilis.

The patient was a male homosexual. He was a sero-negative cured case of primary syphilis, who, because of multiple repeated exposures had been undergoing regular serological testing, including the TPHA test, for several years. Two months after one particular new exposure the TPHA test was observed to become positive. This prompted repeated clinical examinations which eventually revealed spirochaetes of *Treponema pallidum* in the rectum. He was immediately treated with erythromycin but sequential blood tests during the ensuing weeks demonstrated gradual conversion of the previously negative Venereal Disease Reference Laboratory (VDRL) test. An initial FTA test carried out 10 days later as a result of finding the positive TPHA reaction was only weakly reactive. The time interval between first positive TPHA and the development of a positive cardiolipin test was three weeks. All sera were inactivated before testing and the TPHA test was carried out in accordance with the method of Tomizawa and Kasamatsu (1966), and Tomizawa *et al.* (1969). This patient's immune state was not normal. Five years previously he had been treated for primary syphilis. Treatment had been given so early that all tests performed had remained negative. The rapid TPHA response after the repeat infection must have been the secondary immune response of a 'primed' immune system, but it is worthy of note that this response preceeded those of the other equally 'primed' antibodies.

This report makes it clear that a positive TPHA reaction with no confirming FTA or cardiolipin reactions should not be summarily dismissed either as indicating very late inactive syphilis or as a false positive reaction.

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Yours faithfully,

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