plus 1 g. probenecid (Duncan, Knox, and Jackson, in press).

Yours faithfully,
W. CHRISTOPHER DUNCAN, M.D.

DEPARTMENT OF DERMATOLOGY,
BAYLOR COLLEGE OF MEDICINE,
TEXAS MEDICAL CENTER,
HOUSTON, TEXAS 77025, U.S.A.
November 14, 1974

I wish to acknowledge the technical assistance of Mr. Charles Brady, Mrs. Betty French, and Mrs. Minnie

Hickman, and to express my appreciation to Ann Gould for the MICs.

References

- BASCH, H., ERICKSON, R., and GADEBUSCH, H. (1971) *Infect. and Immun.*, **4**, 44
BECK, J. E., HUBSHER, J. A., and CALOZA, D. C., (1971) *Curr. therap. Res.*, **13**, 530
DUNCAN, W. C., KNOX, J. M., and JACKSON, T. H. *Sth. med. J.* (in press)
MCFARLAND, J. (1907) *J. Amer. med. Ass.*, **49**, 1176

Screening for treponemal infection

TO THE EDITOR,
British Journal of Venereal Diseases

SIR—With reference to the paper by Young, Henrichsen, and Robertson (1974), we have now screened by hand well over 20,000 sera with a combination of the *Treponema pallidum* haemagglutination assay (TPHA) and the rapid plasma reagin (RPR) card test. The former is carried out by the micromethod described by Johnston (1972) and the latter according to the manufacturers' instructions.

We find considerable saving in time and materials as compared with the screening methods we had previously used, as we neither separate nor inactivate the sera, but work 'off the clot' from the containers in which the samples are received. In this way two of us can screen 100 sera with ease in considerably less than a full morning.

The screening procedure picks up about 8 per cent. of sera requiring further evaluation, and all those showing positive or doubtful reactions in either or both tests are examined by the fluorescent treponemal antibody (absorbed) (FTA-ABS) test.

The relatively small numbers of cerebrospinal fluids we receive are all examined by the TPHA and the FTA-ABS test.

All sera positive or doubtful in either or both of the screening tests are titrated by the TPHA and RPR card methods. This has eliminated occasional technical false positives in the TPHA screen, and has confirmed the occasional occurrence of prozones in the RPR card test reported by Scrimgeour and Rodin (1973).

Until recently we carried out the VDRL slide test on all positives, but have now abandoned this, since we have found the RPR card tests consistently stronger by one doubling dilution.

We are still in some doubt about the place of the TPHA as a screening procedure. As an experiment, we are testing sera submitted by the consultants in the medical out-patients department at St. James's Hospital from patients in whom there is no clinical reason to suspect treponemal infection. Of the first 320 of these sera examined, 24 (7.5 per cent.) were positive and presented

diagnostic and therapeutic problems. The breakdown of screening test results on these 24 sera is shown in the Table.

TPHA test	R.P.R. Card Test		
	Positive	Negative	Total
Positive	12	6	18
Doubtful	Nil	6	6
Negative	Nil	296	296
Total	12	308	320

With this reservation, we find the combination of TPHA and RPR card tests a relatively rapid, simple, and reliable screening procedure.

Yours faithfully,

P. W. KIPPAX, F.R.C.PATH., and
R. C. OKOYE, F.I.M.L.T., L.I.BIOL.

DEPARTMENT OF MICROBIOLOGY,
ST. JAMES'S HOSPITAL,
SARSFELD ROAD,
LONDON, SW12 8HW
November 30, 1974

We are indebted to the consultant physicians at this Hospital for submitting sera from patients in whom treponemal infection was not suspected, and to Dr. A. E. Wilkinson and his Staff at the Venereal Diseases Reference Laboratory, London, E.1., for advice on techniques, for checking a proportion of our findings, especially in the early stages, and for examining numerous problem sera.

References

- JOHNSTON, N. A. (1972) *Brit. J. vener. Dis.*, **48**, 474
SCRIMGEOUR, G., and RODIN, P. (1973) *Ibid.*, **49**, 342
YOUNG, H. HENRICHSEN, C., and ROBERTSON, D. H. H. (1974) *Ibid.*, **50**, 341