ABSTRACTS

This section of the JOURNAL is published in collaboration with the two abstracting Journals, ABSTRACTS OF WORLD MEDICINE and OPHTHALMIC LITERATURE, published by the British Medical Association. The abstracts are divided into the following sections: Syphilis (Clinical, Therapy, Serology, Pathology, Experimental), Gonorrhoea, Non-Gonococcal Urethritis and Allied Conditions, Chemotherapy, Public Health and Social Aspects, Miscellaneous. After each subsection of abstracts follows a list of articles that have been noted but not abstracted. All subsections will not necessarily be represented in each issue.

SYPHILIS (Clinical)

The investigation herein described was designed to determine whether there has been an increase in the incidence of general paralysis of the insane (G.P.I.) which might be a sequel to the wartime increase in early syphilis and the difficulties of treatment at that time. Although there have been reports recently of significant numbers of new cases of G.P.I., the author found that between 1950 and 1961 in the Manchester area there was a decrease in the number of cases diagnosed. In 1960 the number of cases of G.P.I. diagnosed (51) was smaller than in any previous year of the decade.

[This survey is significant because it presents an analysis of the trend of this disease over a decade and the population studied numbered over 4,000,000.]

Robert Lees


SYPHILIS (Therapy)
Research into the Experimental Treatment of Syphilis. (Ricerche di terapia sperimentale dell’infezione sifilistica.) MUSUMECI, V. (1962). Minerva derm. (Torino), 37, 211. 5 refs.

SYPHILIS (Serology)

Of the three treponemal antibodies recognized in the past 15 years, namely, the Pangborn phospholipid-cardiolipin rea gin, the treponemal specific antigen, and the treponemal immobilizing protein of Nelson, the last-named has been shown to be present only in true cases of syphilis (except for pinta and frambesia).

Since immobilisin appears only late in the secondary stage of syphilis, the usual dark-field examinations and standard serological tests are of more use than the treponemal immobilization (T.P.I.) test in early cases, but the latter comes into its own in the consideration of latent syphilis, where it can be used to eliminate the numerous false positive results obtained with the more regularly employed Wassermann and complement-fixation tests. Similarly in the tertiary stage of syphilis occasionally encountered in the long-standing tabetic in whom both serum and spinal fluid tests are negative, the T.P.I. test is almost always positive in the untreated case. In all these forms of acquired syphilis it may be assumed that the reversion of an originally positive T.P.I. reaction to negative indicates cube of the infection. At the University Skin Clinic, Hamburg–Eppendorf, experience with the test in suspected cases of congenital syphilis underlines the fact that, since approximately one year is required for the full development of immobilisin, the presence of an initially positive test does not necessarily identify an infected infant, nor does a negative result rule out congenital syphilis. It is possible that there is a transplacental passage of immobilisin. Obviously the standard serological tests cannot safely be ignored, but the T.P.I. test serves a useful purpose in establishing the true diagnosis in the face of equivocal results from other investigations.

Allez Scott


Writing from the University Dermatological Clinic, Parma, the authors describe a serological test which is based on Pfeiffer's phenomenon and makes use of a treponemolistic antibody in syphilitic sera—the "Treponema pallidum immune disappearance" (T.P.I.D.) test. Nichols treponemata from rabbit orotic testes (storable at 20° to 25°C) are first incubated with the serum for 30 minutes at 37°C and then injected intraperitoneally into a guinea-pig. Peritoneal fluid is withdrawn after 4 and 7 hours and the presence or absence of treponemes indicates a negative or positive result respectively. As

killed treponemata are used, much of the difficulty of Nelson’s treponemal immobilization (T.P.I.) test is avoided.

Of 151 syphilitic sera examined by the standard tests for syphilis (S.T.S.), the T.P.I.D. test, and/or the T.P.I. test, there was complete agreement between the T.P.I.D. and the T.P.I. and S.T.S. in 25. In another 73 cases there was agreement with the S.T.S. results, the T.P.I. test not having been performed on these. In thirteen cases negative in the S.T.S., both the T.P.I. and T.P.I.D. tests were positive. In twelve cases there was disagreement between the T.P.I. and the T.P.I.D. tests and these cases are described in greater detail and discussed. Sera which gave a positive reaction in the S.T.S. and a negative reaction in the T.P.I. and T.P.I.D. tests were considered to be biological false positives. Tests of the sensitivity of the T.P.I.D. test carried out on sera in progressive dilutions showed that the T.P.I.D. test was slightly more sensitive than the Wassermann reaction.

The authors note that positivity of the T.P.I.D. test appears about 20 days after the primary chancre, that is, roughly about the same time as immobilisin appears. In their discussion they point out that the age, sex, or gravidity of the guinea-pigs does not matter, but that they should be about 200 to 250 g in weight. The level of immobilizing antibody is not parallel to the level of treponemolytic antibody. The result of the T.P.I.D. test was always clearly either positive or negative, a fact which the authors ascribe to the use of dilutions in geometric progression, adopted by them in conformity with French workers; dilutions in arithmetic progression may give transitional results. Storage of the serum does not affect the T.P.I.D. test and a repeatedly tested serum remained consistently positive for at least 6 weeks. This test is considered to be intermediate between the standard tests for syphilis and the T.P.I. test.

F. Hillman


GONORRHOEA


While there has been no fall in the morbidity from gonorrhea in the last 10 years, there are now signs that the gonococcus is becoming resistant to penicillin. That the resistance in vivo of this organism appears to be greater than the reaction in vitro may, the author suggests, be due to factors such as diagnostic confusion with other diplococci, inadequate treatment, complications connected with anatomical and functional peculiarities, re-infection, and the action of penicillinase-producing bacteria. In 1944 to 1950 the penicillin sensitivity range was 0-001 to 0-03 unit per ml., while in 1958 to 1962 it was 0-002 to 2-0 units per ml. In 1956 a penicillin concentration of 0-1 unit per ml. inhibited 100 per cent. of gonococcal strains, but in 1961–62 it inhibited only 84 per cent. The author, working at the University of Munich, conducted a comparative study with various strains of gonococcus (130 strains isolated in 1959–60 and 120 strains in 1961–62) and demonstrated a slow rise in the sensitivity range. In spite of these facts, penicillin remains the treatment of choice for most cases of acute and chronic gonorrhea with or without complications, since other antibiotics, such as streptomycin or those of the broad-spectrum group, have relatively little effect on this infection, are inadequate for the treatment of syphilis (which is a frequent accompaniment), and have more side-effects. Kopp, in 1959–60, using procaine penicillin, found a recurrence rate of 7 in 100 patients given 0-3 mega units and of 4 in 100 patients given 1-2 mega units. Other clinicians have made similar observations. It is therefore recommended that in uncomplicated gonorrhoea 1 mega unit of a depot penicillin preparation should be given daily on each of two or three successive days in males and three or four successive days in females, while patients with adnexal complications should receive up to 6 mega units. Since penicillin is the chief weapon against this disease, increasing resistance on the part of the infecting agent should be countered by adequate dosage.

Allene Scott


PUBLIC HEALTH AND SOCIAL ASPECTS

MISCELLANEOUS


Diagnosis and Treatment of Venereal Diseases. (Klinik und Therapie der Venenerkrankungen.) WIESENGHAL, R. (1962). Prophylaxe und Therapie, 1, 9. 23 refs.


