Abstracts

These selected abstracts and titles from the world literature are arranged in the following sections:

Syphilis and other treponematoses
(Clinical and therapy: serology and biological false positive phenomenon; pathology and experimental)

Gonorrhoea
(Clinical; microbiology; therapy)

Syphilis and other treponematoses (Clinical and therapy)

Secondary syphilis revealed by rheumatic complaints

Six patients (five men and one woman) are described, who consulted rheumatologists with varied rheumatic complaints. Four patients had subacute synovitis with effusion, frequently associated with vague arthralgias, and five had back pain which was more severe at rest. Most of the patients had some clinical signs of secondary syphilis, such as roseola, loss of hair, or lymphadenopathy, and the results of their serological tests for syphilis were strongly positive. As no other cause for these rheumatic complaints could be found, secondary syphilis was considered responsible for them. In all cases the rheumatic complaints cleared with specific treatment.

Syphilis in Australian aborigines in the Northern Territory

Syphilis (Pathology and experimental)

Anabolic potential of virulent Treponema pallidum
J. B. Baseman and N. S. Hayes (1977). Infection and Immunology, 18, 857–865

Non-specific genital infection
Reiter’s disease
Trichomoniasis
Candidosis
Genital herpes
Other sexually transmitted diseases

Public health and social aspects

Miscellaneous

Selective in vitro response to thymus-deprived lymphocytes from Treponema pallidum-infected rabbits
C. S. Pavia, J. D. Folds, and J. B. Baseman (1977). Infection and Immunology, 18, 603–611

Gonorrhoea (Clinical)

Gonorrhoea in women: Diagnostic, clinical and laboratory aspects

Examination of the case notes of all women seen at a large metropolitan clinic during 1976 showed 607 episodes of gonorrhoea (92.3% of all such cases seen in the hospital), of which three were in prepubertal girls. Gonorrhoea occurred more often and at an earlier age in Negroids than in Caucasians. In about 30% of patients gonococci could be found in only one of the sites tested (cervix 18%, urethra 6%, rectum 4.8%, and throat 1.5%). Microscopical examination of Gram-stained cervical and rectal samples was of value, but that of urethral samples made no significant contribution to the diagnosis. Of the gonococcal isolates 31% showed diminished sensitivity to penicillin, but none showed significant resistance to spectinomycin, kanamycin, or sulphamethoxazole. The complication rate was lower than that reported from the United States. Overall, 40% of patients were symptom-free. The presence of other infection significantly increased the probability of a patient with gonorrhoea having symptoms. 'Epidemiological' treatment would have led to the unnecessary treatment of 142 female patients and would have included only four of 16 patients with gonorrhoea who defaulted before treatment could be given.

Gonococcal peribehritis in a female adolescent

Gonococcal proctitis in a married woman

The incidence of gonorrhoea in urban Rhodesian black women

Containing gonorrhoea epidemic

Gonorrhoea (Microbiology)

Simple method for distinguishing gonococcal colony types

A new procedure for the identification of gonococcal colony types is described, which employs a dissecting microscope with a fluorescent lamp and concave mirror, critical adjustment of which produces a darkfield effect. This could be of use to anyone who wants to distinguish gonococcal colony types.

Brian Evans
Growth on Congo red agar: possible means of identifying penicillin-resistant non-penicillinase-producing gonococci

A standard growth medium (GC medium base plus 1% defined supplement) containing 0.01% Congo red dye was found to support the growth of gonococci only if the penicillin minimal inhibitory concentration (MIC) was 0.5 µg/ml or greater. Penicillinase-producing organisms and organisms more sensitive to penicillin, did not grow. In an earlier paper, the authors had reported that meningococci formed red colonies on an agar medium containing Congo red, whereas gonococci failed to grow. These observations are of potential value in the rapid identification of penicillin-resistant gonococci, unless they produce penicillinase.

Brian Evans

Trends and seasonality of antibiotic resistance of Neisseria gonorrhoeae

An overall increase in sensitivity to penicillin G, ampicillin, tetracycline, and spectinomycin is reported for pretreatment gonococcal isolates in the United States between 1972 and 1975. This reverses the trend towards greater resistance to penicillin and tetracycline recorded between 1955 and 1970. Furthermore, resistance to penicillin and tetracycline proved highest in the winter months when the incidence of gonorrhoea was lowest, which the authors suggest may be due to increased general usage of antibiotics removing the more sensitive strains fortuitously.

Brian Evans

Studies on gonococcus infection. XI. Comparison of in vitro and in vitro association of Neisseria gonorrhoeae with human neutrophils

Studies on gonococcus infection. XII. Color colony and opacity variants of gonococci

Studies on gonococcus infection. XIII. Occurrence of color-opacity colonial variants in clinical cultures

Acrylamide gel electrophoresis of proteins of Neisseria gonorrhoeae as an epidemiological tool

Antigenococcal IgA in gonorrhoea

Cell envelope of Neisseria gonorrhoeae: penicillin enhancement of peptidoglycan hydrolysis

Sensitivity of gonococci to penicillin G in the Canton of Berne, 1972–1977

Chlamydia trachomatis infection and venereal disease

Chlamydia trachomatis was isolated by the irradiated McCoy cell technique from 44 out of 103 men with nongonococcal urethritis and from 11 out of 15 patients with postgonococcal urethritis. In women attending the venereal diseases clinics, chlamydial infection was observed in 49 (38% of 130 patients, an infection incidence of the same order of magnitude as the one noted for gonococcal infection (40%). In 19% both infections occurred simultaneously. Treatment with tetracycline eliminated symptoms and chlamydial infection in almost all cases. The significance of the findings is discussed.

Authors' summary

Chlamydia trachomatis infant pneunonitis. Comparison with matched controls and other infant pneumonitis

We determined the prevalence of Chlamydia trachomatis infection in 30 consecutive hospitalised infants less than six months of age with pneumonitis and in 28 matched controls (nine of 30 compared with one of 28, P<0.05).

In comparing 16 cases of pneumonitis due to C. trachomatis with 27 not due to
that agent, we found several distinguishing clinical and laboratory features: *C. trachomatis* was highly correlated with radiographic hyperinflation, prolonged cough, and congestion; more than 400 eosinophils/mm³, and serum IgG greater than 500 mg/dl and IgM greater than 110 mg/dl. *C. trachomatis* was responsible for 13 of 21 cases seen at 3–11 weeks compared with three of 22 seen at other ages. Antibody to *C. trachomatis* in tears (13 of 14 compared with two of 27), nasopharynx (12 of 14 compared with one of 27) and blood (16 of 16 compared with two of 23) was specific for *C. trachomatis* pneumonia.

*C. trachomatis* is prevalent among hospitalised infants with pneumonia. Conjunctival infection precedes *C. trachomatis* pneumonitis more commonly than has previously been thought.

**Authors' summary**

**Isolation of chlamydiae in untreated and cytochalasin B treated McCoy cells**


A comparison was made between untreated McCoy cells and McCoy cells treated with cytochalasin B for the isolation of chlamydiae of subgroup A. Chlamydiae were isolated in both cell systems from 125 specimens, whereas six agents were isolated only in untreated cultures, and seven agents were isolated only in cytochalasin B treated cultures.

**Authors' summary**

**Antichlamydial antibody in genital exudates of men and women with non-gonococcal genital infections**


The role of antibody estimation in chlamydial infections is controversial. This letter reports the findings of a study to compare chlamydial isolation with single estimations of antichlamydial antibodies in the discharges of men and women with genital infections. In the men, duplicate alginute urethral swabs were taken. One was cultured on HeLa 229 cell monolayers for chlamydial isolation, and the other placed in phosphate buffer; after shaking with glass beads, the supernatant was titred for immunofluorescent antibody against standard serotypes of *C. trachomatis*.

**Antibiotic susceptibility of *Chlamydia trachomatis***


The antibiotic susceptibility of *Chlamydia trachomatis* isolates was determined in a tissue culture system. Representatives of all currently recognised serotypes of trachoma-inclusion conjunctivitis agents were tested. Tetracycline and erythromycin yielded similar results, with 1·0 μg/ml preventing chlamydial replication. Rifampin was the most active antibiotic, with 0·25 μg/ml completely suppressing inclusion formation of all strains. Fifty per cent end points were usually achieved at one-fourth to one-eighth of the suppression level. Penicillin was not as effective, and the assays were often irregular. Antibiotic susceptibility of these chlamydiae was essentially the same, regardless of serotype, anatomical site infected, geographic origin, or antibiotic use in the community.

**Authors' summary**

**The incidence of tetracycline-resistant strains of ureaplasma urealyticum**


Ureaplasma strains isolated from the urethras of men with non-gonococcal urethritis were investigated for decreased sensitivity to oxytetracycline and minocycline. Of the 141 strains isolated, 14 (9·9%) were deemed resistant. The strains were found to belong to most of the known serotypes. Resistance was defined as a minimal inhibitory concentration of equal to or greater than 0·6 μg/ml to oxytetracycline, and equal to or greater then 0·16 μg/ml to minocycline. Attempts were made to induce resistance to minocycline in four sensitive strains by a multiple passage technique. While decrease in sensitivity was demonstrable, it did not attain the degree of resistance found in the naturally occurring strains. During these experiments the organism remained fully sensitive to erythromycin. Attempts to transfer natural resistance to sensitive strains were not successful. In their general discussion the authors comment that in the metabolism-inhibition test, which is widely used to detect serum antibody, tetracycline in serum may inhibit the test organism. They recommend that naturally occurring resistant strains should be used in this test, as many patients will be receiving tetracyclines when serum samples are collected.

**G. L. Ridgway**

**Chlamydia infections (first of three parts)**


**Chlamydia infections (second of three parts)**


**Chlamydia infections (third of three parts)**


**Infections due to Chlamydia**


**Reiter's disease**

**Role of *Chlamydia trachomatis* and HLA-B27 in sexually acquired reactive arthritis**


Inflammatory arthritis, tendinitis, and fasciitis after non-specific urethritis,
Acute retention of urine in anogenital herpetic infection


In 17 patients, 15 women and two men, acute retention of urine developed in association with an attack of anogenital herpes. Constipation, blunting of sensation over the second and third sacral dermatomes, and neuralgic pains in the same area (with absence of the bulbocavernous reflex in some individuals) suggested localised lumbosacral meningomyelitis with involvement of mainly sacral nerve roots. The urinary dysfunction persisted on average for 10 days, and in four patients was severe enough to warrant catheterisation. Anogenital herpes should always be considered as a possible cause of acute retention of urine in sexually active young people, and the possibility of occult herpetic infection of the cervix and rectum should be investigated.

Authors' summary

Treatment with aqueous procaine penicillin G and spectinomycin hydrochloride


Vaginal colonisation with Corynebacterium vaginale (Haemophilus vaginalis)


Vaginal cultures for Corynebacterium vaginale and confidential questionnaires were obtained from unselected young women who consulted a gynaecologist in a student health service. In all, 466 women...
were studied, 150 (32.2%) of whom were colonised with *C. vaginale*. Logit analysis defined four factors that were significantly associated with colonisation with *C. vaginale*: non-white race, use of oral contraceptives, no history of marriage, and a history of pregnancy. Sexual experience had little influence on colonisation; *C. vaginale* was isolated from 16 (29%) of 56 sexually inexperienced women and from 40 (41%) of 98 women who had had sexual intercourse with six or more men. After a few patients with trichomoniasis were excluded, there was no association between colonisation with *C. vaginale* and an abnormal vaginal discharge, either as reported by the participant or as noted by the examining physician.

**Authors' summary**

**Hepatitis B surface antigen (HBsAg) and antibody to HBsAg. Prevalence in homosexual and heterosexual men**


The prevalence rates of serum hepatitis B surface antigen (HBsAg) and antibody to HBsAg (anti-HB) were 5.6% and 34%, respectively, in 144 homosexual men in Seattle. Prevalence rates were only 0.9% and 3.6%, respectively, in 111 heterosexual male venereal disease clinic patients with nongonococcal urethritis, and also 0.9% and 3.6%, respectively, in 111 healthy men undergoing routine physical examinations. Thus previous exposure to hepatitis B virus (HBV) was estimated to be 8.8 times greater for homosexual men than for heterosexual men. Four of four HBsAg positive sera from homosexual men were subtyped as 'ad', whereas subtype 'ay' is preponderant in intravenous drug abusers. Future public health measures to control HBV infection should be directed to the prevention of sexually transmitted HBV infection among homosexual men.

**Authors' summary**

**Sexually transmitted enteric pathogens in a male homosexual population**


A review is made of reported cases of faecal-oral transmission of enteric pathogens in male homosexuals attributed to anilingus and, less commonly, to fellatio. Difficulties in making diagnoses lie in the recognition of the male homosexual patient, of the asymptomatic carrier state, and of the symptoms mimicking functional bowel syndromes or mild ulcerative colitis. Casual cold stool examination is considered insensitive, and repeated tests of multiple fresh purged stools are recommended. The danger of homosexual food handlers and waiters who are carriers passing on infection to patrons of restaurants is pointed out.

In a series of 89 stools examined from 100 middle-class homosexuals Giardia lamblia was found in nine, *Entamoeba histolytica* in seven, and non-pathogenic protozoa in 14. The suggestion is made that in New York City the majority of cases of amoebiasis and viral hepatitis in some areas are homosexually transmitted. In the lower West Side (Greenwich Village) the case rate (1975) for hepatitis B in men and women was 23.9 and 4.7 per 100 000, respectively, and for hepatitis non-B 45.8 and 10.2 per 100 000, respectively. Furthermore, in two health areas with the greatest homosexual congregation, case rates in men for hepatitis B were 66.3 and 24.7 per 100 000, no cases occurring in women; case rates of hepatitis non-B were 119.4 and 148.2 as against 60.3 and 11.5 per 100 000 for women. In these areas men were 11 times more likely to contract hepatitis than women living in the same areas.

**John Hunter’s alleged syphilis**


The allegation that John Hunter suffered from syphilis is challenged. It is suggested that he was the subject of non-letuc vascular disease, evidence for which may be found by a study of his symptoms and necropsy report. It is further suggested that John Hunter’s famous inoculation experiment was performed...
not on himself but on another subject. It is claimed that there is in fact no scientific evidence for attributing John Hunter's illness to syphilis, and it is urged that the stigma of this diagnosis should be expunged from his image.

*Author's summary*

**Male urethritis in King County, Washington 1974–75. I. Incidence**

**Male urethritis in King County, Washington 1974–75. II. Diagnosis and treatment**
*American Journal of Public Health*, 68, 26–30

**The virus of hepatitis B, a new dimension in the diagnosis of sexually transmitted diseases**
*New Zealand Medical Journal*, 87, 44–47

**Behçet's syndrome in 32 patients in Yorkshire**
*Annals of the Rheumatic Diseases*, 36, 491–499

**HLA antigens associated with Behçet's syndrome**
*Archives of Dermatology*, 113, 1720

**Bowen's disease of genital areas**
*Journal of Cutaneous Pathology*, 4, 266–274

**Assessing clinical practice in genitourinary medicine**
*British Medical Journal*, 1, 740