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)
Chlamydial infections
Non-specific genital infection
Reiter's disease

Syphilis and other treponematoses (clinical and therapy)

Reversible penile leucoderma in a man with secondary syphilis: a case report

Leukoderma of secondary syphilis: two case reports

Is penicillin always infallible in syphilis?

Syphilis (pathology and experimental)

Serum regulation of in vitro lymphocyte responses in early experimental syphilis

Humoral immune response in human syphilis to polypeptides of Treponema pallidum

The role of immune complexes in early syphilis and in the Jarisch-Herxheimer reaction

Lymphocyte transformation and the effect of circulating immune complexes in humans with syphilis
JDFOLDS, SM MARET, AS RAUCHBACH (School of Medicine, University of North Carolina, Chapel Hill, NC, USA). Sex Transm Dis 1982; 9:109-14.

Acquired resistance of hamsters to challenge with homologous and heterologous virulent treponemes

Hamsters infected with Treponema pallidum Nichols (venereal syphilis), T pallidum Bosnia A (endemic syphilis), or T pertenue (frambesia or yaws) developed substantial resistance to homologous re-infection. Hamsters infected for 10 weeks developed no lesions, and their lymph nodes contained fewer treponemes after re-infection with the same strain. The degree of cross resistance among the treponemes correlated well with pathological changes occurring in infected hamsters and with the persistence of treponemal antigen during primary infection. Only hamsters infected with T pallidum Bosnia A developed substantial resistance to heterologous re-infection. These animals also had extensive chronic skin lesions and lymph nodes containing measurable numbers of treponemes.

Syphilis (serology and biological false-positive phenomenon)

Sodium deoxycholate-extracted treponemal antigen in an enzyme-linked immunosorbent assay test for syphilis

Gonorrhoea (clinical)

Detection of gonorrhoea by laparoscopic diagnosis of acute adnexitis
Abstracts

Gonorrhoea (microbiology)

Surface peptide mapping of protein I and protein III of four strains of Neisseria gonorrhoeae

Gonococcal strains from homosexual men have outer membranes with reduced permeability to hydrophobic molecules

Purification of pil and outer membrane vesicles of Neisseria gonorrhoeae by wheat germ agglutinin affinity chromatography
VY Perera, CW Penn, and H Smith (Department of Bacteriology, University of Birmingham, Birmingham, UK). J Gen Microbiol 1982; 128: 1613-22.

Pilus expression in Neisseria gonorrhoeae involves chromosomal rearrangement

Rapid evaluation of female patients exposed to gonorrhoea by use of the limulus lysate test
RB Prior and VA Spagna (Ohio State University College of Medicine, Columbus, Ohio, USA). J Clin Microbiol 1982; 16: 487-9.

Immune and non-immune precipitation of human sera with gonococci and meningococci
TO Rød and JA Maeland (Department of Microbiology, University of Trondheim, Norway). Acta Pathol Microbiol et Immunol Scand (C) 1982; 90: 223-8.

Characterisation of the immune response in subcutaneous chambers of guinea pigs immunised with a ribosomal preparation from Neisseria gonorrhoeae
MJ Wannemuehler, RD Miller, and MD Cooper (University of Louisville School of Medicine, Louisville, Kentucky, USA). Infect Immun 1982; 37: 469-73.

Factors affecting the performance of smear and culture tests for the detection of Neisseria gonorrhoeae

Gonorrhoea (therapy)

Single-dose treatment of uncomplicated gonococcal urethritis: a comparison of cefonicid and penicillin
WC Duncan and ME McBride (Baylor College of Medicine, Houston, Texas, USA). Sex Transm Dis 1982; 9: 93-5.

Penicillin and spectinomycin in treatment of gonococcal urethritis
AV Ratnam, MP Patel, SK Hira, and RC Mulenga (Department of Medicine, University Teaching Hospital, Lusaka, Zambia). Sex Transm Dis 1982; 9: 135-7.

Rosoxacin in the treatment of uncomplicated gonococcal infection

Cefotaxime in the treatment of gonococcal urethritis in Nigeria

Non-specific genital infection

Studies on the etiology of non-gonococcal urethritis
Chlamydial infections

Toxic effect of human polymorphonuclear leucocytes on Chlamydia trachomatis

The effect of human polymorphonuclear leucocytes (PMNL) on Chlamydia trachomatis was studied. Both trachoma (B/TW-5/OT) and lymphogranuloma venereum (L2/434/Bu) biotypes were rapidly inactivated by exposure to human PMNL. A decrease of 3-3·5 logs in viable count was observed after 60 minutes' incubation at a chlamydial-to-PMNL ratio of 1:10. Both chlamydial biotypes were also rapidly inactivated by the cell-free myeloperoxidase-H2O2-halide system. A decrease in infectivity titre of 4-5 logs for TW-5 and complete inactivation of 434 were seen after 30 minutes' incubation. The microbicidal effect was prevented by the deletion of each component of the system or by the addition of the peroxidase inhibitors cyanide or azide. PMNL from myeloperoxidase-deficient patients inactivated chlamydiae normally, whereas PMNL from patients with chronic granulomatous disease, though strongly chlamydial, were less effective than 3-3·5-log drop. The chlamydial activity of PMNL from patients with chronic granulomatous disease and normal PMNL were comparable against the 434 biotype. These studies suggest that the myeloperoxidase system, or indeed oxygen-dependent antimicrobial systems, are not essential for the chlamydial activity of PMNL.

Authors' summary

Increased frequency of serum antibodies of Chlamydia trachomatis in infertility due to distal tube disease

Resources needed to culture Chlamydia trachomatis in laboratories of clinics for sexually transmitted diseases
LG RODRIGUES, BR BIRD, AND SJ KRAUS (Centers for Disease Control, Atlanta, USA). Sex Transm Dis 1982;9:79-83.

Endometrial infection in women with chlamydial salpingitis

Treatment of chlamydial urethritis in men and Chlamydia trachomatis-positive female partners: comparison of erythromycin and tetracycline in treatment courses for one week
JH SCHEIBEL, JK KRISTENSEN, B HENTZER, ET AL (Institute of Medical Microbiology, University of Copenhagen, Copenhagen, Denmark). Sex Transm Dis 1982;9:128-31.

Trichomoniasis

Host plasma proteins on the surface of pathogenic Trichomonas vaginalis

Serum free modified Trichosel medium for Trichomonas vaginalis
RF SMITH, RW WALCH, R STICKNEY, ET AL (Contra Costa County Health Department, Martinez, California, USA). Curr Microbiol 1982;7:153-6.

Polymorphonuclear cell chemotaxis to secretions of pathogenic and non-pathogenic Trichomonas vaginalis
PR MASON AND L FORMAN (Department of Medical Microbiology, University of Zimbabwe, Salisbury, Zimbabwe). J Parasitol 1982;68:457-62.

Trichomonas vaginalis: alternative pathway activation of complement

British Journal of Venereal Diseases

Candidosis

Differences in virulence of clinical isolates of Candida tropicalis and Candida albicans in mice
JR WINGARD, JD DICK, WG MERZ, ET AL (Johns Hopkins University Hospital, Baltimore, USA). Infect Immun 1982;37:833-6.

Genital herpes

Oral acyclovir in the treatment of genital herpes: preliminary report of a multicenter trial

Ninety-nine patients with genital herpes (24 initial and 62 recurrent episodes) were entered into a double blind randomised trial of oral acyclovir and placebo. Treatment consisted of 200 mg acyclovir five times a day for five days or matching placebo. Treatment was begun a mean of 2-8 days and 1-0 days after onset of lesions in initial and recurrent infections respectively. The 13 culture-positive patients with initial disease who received acyclovir had a shorter median duration in days of viral shedding (1·0), pain (3·5), combined symptoms (3·5), time to crusting (3·5), and time to complete healing (5·5) than the 11 culture-positive placebo recipients whose scores were 8·0, 4·5, 9·0, and 11·0 respectively (p<0·05 for all comparisons). Patients with recurrent disease receiving acyclovir also experienced a reduction in the median duration in days of viral shedding (0·5), time to crusting (men only) (3·0), and time to complete healing (5·0) compared with 2·5, 4·0, and 7·0 days respectively for control patients (p<0·01 for each variable).

New lesion formation was effectively prevented by acyclovir in patients with both initial and recurrent infections (p<0·05).

Oral acyclovir therapy was well tolerated and shortened the course of both initial and recurrent genital herpes.

Authors' summary

A trial of topical acyclovir in genital herpes simplex virus infections
Abstracts

Acyclovir treatment of experimental genital herpes simplex virus infections
ER KERN (University of Utah School of Medicine, Salt Lake City, Utah, USA). Am J Med 1982; 73 suppl: 100-8.

Double blind controlled trial of topical acyclovir in genital herpes simplex virus infections
L COREY, JK BENEDETTI, CW CRITCHLOW, ET AL (Children’s Orthopaedic Hospital and Medical Center, Seattle, USA). Am J Med 1982; 73 suppl: 326-34.

Intravenous acyclovir in genital herpes: an interim report

Controlled trial of oral acyclovir in the therapy of recurrent herpes simplex genitalis: a preliminary report

Efficacy of oral acyclovir in the treatment of initial and recurrent genital herpes

Unusual serologic response of two patients to an early antigen of herpes simplex virus type 2
M ARSENAKIS AND JT MAY (Microbiology Department, La Trobe University, Bundoora, Victoria, Australia). Sex Transm Dis 1982; 9: 143-5.

Patient-initiated therapy for recurrent genital herpes infections

Ineffectiveness of topical idoxuridine in dimethyl sulfoxide for therapy for genital herpes
DL SILVESTRI, L COREY, AND KK HOLMES (Virus Laboratory, Children’s Orthopaedic Hospital, Seattle, USA). JAMA 1982; 248: 950-9.

Latency of herpes simplex virus in urogenital ligaments

The diagnosis and treatment of genital herpes
L COREY (Virus Laboratory, Children’s Orthopaedic Hospital, Seattle, USA). JAMA 1982; 248: 1041-61.

Other sexually transmitted diseases

Multiple sexually transmitted diseases

Rapid microbiological method for identification of Gardnerella vaginalis

Treatment of chancroid with clavulanic acid with amoxycillin in patients with β-lactamase positive Haemophilus ducreyi infection

One hundred men presenting to the special treatment clinic in Nairobi, Kenya, with genital ulcers were enrolled in the study. Haemophilus ducreyi was isolated in 68, and 50 strains available for investigation of antibacterial resistance all produced β-lactamase and all contained either a 5- or a 7-0 megadalton plasmid.

Of the 68 positive cases, 12 were treated with amoxycillin alone 500 mg three times daily for seven days with nine clinical failures (seven culture-positive for H. ducreyi) of nine followed; 33 received the same dose of amoxycillin plus 125 mg of clavulanic acid three times a day, with no clinical failure among 28 followed (although one was culture-positive), and 30 were given the same dose of amoxycillin plus 250 mg clavulanic acid three times a day with one clinical failure (culture negative) of 27 followed. It is considered that the results of this study accord with H. ducreyi as the primary pathogen of chancroid.

R R Willcox

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Co-existence of venereal infection and pediculosis pubis

Between 1974 and 1979 crab louse infestation was found in 69 women and 16 men admitted to the department of dermatology, Municipal Hospital, Copenhagen, all of whom were offered complete venereological examinations including cultures from tonsils, urethra, rectum and in women from the cervix for gonorrhoea. Fifty nine women and 139 men accepted examination and nine (15.3%) women and 10 (7.2%) men were found positive for the gonococcus. Of the 45 women and 133 men serologically tested for syphilis none of the women was sero-reactive but five (3.8%) men had a positive test, three of whom had known controlled infections but the remaining two (1.5%) were believed to have early syphilis.

R R Willcox

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Public health and social aspects

Repeated infections with Neisseria gonorrhoeae in a population of Alaska natives
Venereal disease in the United States Army 1775-1900
R H KAMPMEIER (Vanderbilt University School of Medicine, Nashville, Tenn, USA). Sex Transm Dis 1982; 9: 100-3.

Evaluation of an advertising program on sexually transmitted disease

Analysis of a recent epidemic due to penicillinase-producing Neisseria gonorrhoeae: epidemiologic and medical considerations

Sexually transmitted diseases in general practice

During an 18 month period 30,000 patients were seen in a general practice in Birmingham, England, of which 511 female patients and 38 male patients were checked for sexually transmitted disease. The tests performed in the included urine analysis, Gram-stained smear for gonococci, and wet film examination for candida and trichomonads; cultures for gonococci, trichomonads, and candida, serum samples for tests for syphilis, and in women cervical cytology smears were sent to the laboratory.

Of 338 asymptomatic women, 272 had no disease, none had gonorrhea, 19 had trichomoniasis, 49 had candidosis, two had herpes, and two had warts. Of 173 symptomatic women, 75 had no sexually transmitted disease, six had gonorrhea, 23 trichomoniasis, 65 candidosis while nine had herpes and eight warts. Of 38 symptomatic men, only one had no infection, one had syphilis, five had gonorrhea, 11 had non-gonococcal urethritis, 11 had candidosis, one had herpes, and 11 had warts. R R Willcox
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Penicillinase-producing Neisseria gonorrhoeae in Great Britain, 1977-81; alarming increase in incidence and recent development of endemic transmission

The annual numbers of isolated penicillinase-producing Neisseria gonorrhoeae have increased exponentially from 15 in 1977 to 31, 104, and 211 between 1978 and 1980 and 443 in 1981. Between 1978 and 1980, 62-68% of isolates were directly imported by the consort and in 20-26% the consort was in Great Britain, but a fundamental epidemiological change occurred in 1981 when only 48% were directly or indirectly imported and in 37% the consort was in this country.

Most areas of Great Britain have a low prevalence (<1%) and control is directed at high risk groups (for example, travellers from endemic areas, consorts of known cases, penicillin failures). Isolates from such cases should be immediately screened for penicillinase production, and anogenital gonorrhea treated with spectinomycin 2·0 g intramuscularly or alternatively probenecid 1 g orally followed by cefoxitin 2·0 g, cefuroxime 1·5 g, or cefotaxime 0·5 g, all given intramuscularly and diluted in 4-0·5% lignocaine to decrease pain. R R Willcox
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Hepatitis B in homosexual men: prevalence of infection and factors related to transmission
MT SCHREEDER, SE THOMPSON, SC HADLER, ET AL. (Centers for Disease Control, Atlanta, Georgia, USA). J Infect Dis 1982; 146: 7-15.

In an American cooperative serological study of 3816 homosexual men attending sexually transmitted disease clinics in Atlanta, Chicago, Denver, San Francisco, Los Angeles, and St Louis 6-1% had hepatitis B surface antigen, 52-4% had antibody to hepatitis B surface antigen, and of the men who had no other indicator of infection with hepatitis B virus (HBV), 3·0% had antibody to hepatitis B core antigen. Seropositivity to HBV with one or more of these markers was 61·5%, which was significantly related to duration of homosexual activity, number of non-steady male sexual contacts in the previous four months, anogenital and oroanal intercourse, and also rectal douching but not orooral and orogenital contact. Other risk factors not significantly related included foreign travel, shared razors, and various parenteral exposures to blood, blood products, or other vehicles thought to transmit HBV. Trauma to the rectal mucosa was, however, a feature common to the practices related to seropositivity. R R Willcox
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