Abstracts

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

Syphilis and other treponematoses (clinical and therapy)  
Trichomoniasis
Syphilis and other treponematoses (clinical and therapy)  
Candidosis
Gonorrhoea (clinical; microbiology; therapy)  
Genital herpes
Chlamydial infections  
Other sexually transmitted diseases
Non-specific genital infection  
Public health and social aspects
Reiter's disease  
Miscellaneous

Essai d'une nouvelle méthode sérologique pour la détection de la syphilis active  

Prevention and diagnosis of congenital syphilis: immunological aspects  

Modern syphilis serology  

Modification of the system of screening for antisypilis antibodies in a blood transfusion centre featuring a miniaturisation of the Treponema pallidum haemagglutination assay  

Syphilis (pathology and experimental)

Transfusion syphilis: survival of Treponema pallidum in donor blood  

Studies on the pathogenesis of the Jarisch-Herxheimer reaction—development of an animal model and evidence against a role for classical endotoxin  
RJ Young, NM Weingarten, RE Baughn, and WC Duncan (Veterans Administration Medical Center, Houston, Texas, USA). Infect Dis 1982; 146: 606-15.

The authors investigated 19 men (aged 18-34 years; 10 black, nine white) with secondary syphilis. All had rashes and VDRL titres of 1/8 or more. Fever was measured using rectal thermocouples, and subjective reactions were recorded before and at minute intervals for 18 hours after an injection of penicillin while the subjects were in an air conditioned room. The first seven patients received 600 000 units of procaine penicillin and the remainder 2-4 million units benzathine penicillin. At the height of the fever one litre of plasma was taken from some patients and stored for 24-48 hours at 4°C.

Seronegative New Zealand white male rabbits were also infected intravenously with 4 × 10^7 Nichols strain Treponema pallidum. Their backs were shaved, and cutaneous lesions developed. At various times after infection they were treated with 250 000 units aqueous penicillin G or benzathine penicillin G or both. Fever was measured by a rectal thermocouple. Blood samples were taken from humans and rabbits for assays of pyrogen (by luminescence) and immune complexes; neither was found.

The reinfusion of plasma caused no febrile reaction. Skin biopsy specimens of the human rash lesions were taken before treatment and at the height of the fever and showed no abnormality using immunofluorescent stains.
Some infected rabbits were rendered tolerant to endotoxin (derived from E coli) before treatment with penicillin. These still had a febrile reaction after treatment. Other rabbits received endotoxin after treatment with penicillin when, if endotoxin were responsible, they should have been refractory to its effect. They gave a normal response to endotoxin.

Despite these elegant and thorough experiments, the exact cause of the Jarisch-Herxheimer reaction is still unknown.

G D Morrison

Leukoderma syphiliticum: ultrastructural observations on melanocyte function

Immune complexes in experimental syphilis. A methodologic evaluation

Fluorescent treponemal antibody absorption double staining test evaluation

Immune system responses towards *Treponema pallidum* infection

Molecular characterization of *Treponema pallidum* proteins responsible for the human immune response to syphilis

The placental lesions in congenital syphilis. A study of six cases

Placentas from six mothers with serological tests suggestive of recent syphilitic infection and whose babies were suspected of being or proved to be infected by *Treponema pallidum* were examined. One placenta from this series was large, bulky, and pale, while the other five were without remarkable gross features. In all cases the associated histological lesions were (a) hypercellular areas in the terminal and stem villi, and (b) a focal perivillous or intravillous polymorphonuclear concentration with or without necrosis or both. The former change which was the most frequent was characterised by an apparent increase of villous stromal cells, ultrastructurally identified as mesenchymal cells and Hofbauer cells. In addition numerous fetal monocytes were found in the villous vascular lumina. The findings described here and in the literature suggest that congenital syphilis is associated with a spectrum of placental changes. We believe that these changes depend on the immunological reaction of the fetus. According to the sequence of events described in untreated patients, we distinguished two morphological phases: (a) an inductive phase without placental changes and (b) a reactive phase characterised by a predominantly lymphocytic inflammatory infiltration of the villi followed by a reaction of mononuclear phagocytes.

Authors’ summary

Gonorrhoea (clinical)

Disseminated gonococcal infections

Gonorrhoea (microbiology)

Detection of *Neisseria gonorrhoeae* antigen with a solid phase enzyme immunoassay (Gonozyme®)

ELISA and IHA using two different gonococcal pili as antigens and GCFT using whole gonococcal as antigen.

Comparison of results obtained by testing sera from patients attending an STD clinic in Rotterdam and from control groups AP ORANJE, K REIMANN, RVW VAN EJIK, ET AL (Erasmus University, Rotterdam, Netherlands). *Antonie van Leeuwenhoek J Microbiol* 1982; 48: 501-2.

Comparative in vitro activity of norfloxacin and selected antimicrobial agents against urinary tract pathogens and *Neisseria gonorrhoeae*

Characteristics of pathogenic *Neisseria* spp isolated from homosexual men

Sequence specific DNA uptake in transformation of *Neisseria gonorrhoeae*

Penicillinase-producing gonococci in the Netherlands in 1981

Phagocyte recognition of *Neisseria gonorrhoeae*

Peptidoglycan biosynthesis in *Neisseria gonorrhoeae*-strains sensitive and intrinsically resistant to β-lactam antibiotics
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Non-specific genital infection

Isolation of Branhamella (Neisseria) catarrhalis from men with urethritis
GV DOERN and NM GANTZ (University of Massachusetts Medical Center, Worcester, Massachusetts, USA). Sex Transm Dis 1982; 9: 202-4.

Urethritis in men: benefits risks and costs of alternative strategies of management

Measurement of antibody to Ureaplasma urealyticum by an enzyme-linked immunosorbent assay and detection of antibody responses in patients with non-gonococcal urethritis

Chlamydial infections

Growth of host cells and Chlamydia trachomatis in medium containing serum from 16-week-old calves
NJ LEVY, S BENES, WM MCCORMACK (Brigham and Women’s Hospital, Boston, Massachusetts, USA). J Clin Microbiol 1983; 77: 68-71.

Structural analysis of chlamydial major outer membrane proteins

Localising of distinct surface antigens on Chlamydia trachomatis HAR-13 by immune electron microscopy with monoclonal antibodies

Analysis of human serological response to proteins of Chlamydia trachomatis
WJ NEWHALL, VB BATTEIGER, AND RB JONES (Indiana University School of Medicine, Indianapolis, Indiana, USA). Infect Immun 1982; 38: 1181-9.

Ultrastructural studies of chlamydial infection in guinea pig urogenital tract
BL SOLOFF, RG RANK, AND AL BARRON (Veterans Administration Medical Center, Little Rock, Arkansas, USA). J Comp Pathol 1982; 92: 547-58.

Asymptomatic urethral infections due to Chlamydia trachomatis in male United States military personnel

Chlamydia trachomatis infections in women with urogenital symptoms

Simplified methods for Chlamydia trachomatis isolation using a multwell plate

The in vitro activity of Chlamydia trachomatis serotype LGV2 determined on a monolayer of HeLa cells

Ultrastructural effect of penicillin and cycloheximide on Chlamydia trachomatis strain HAR 13

Role of cytoskeleton in natural cell-mediated cytotoxicity against Trichomonas vaginalis
MG MARTINOTTI, MA GALLIONE, P MARTINETTO, AND S LANDOLFO (University of Turin, Turin, Italy). Microbiologica 1982; 5: 389.

Antigen specific proliferation responses of peripheral blood lymphocytes to Trichomonas vaginalis antigen in patients with trichomonas vaginitis
A YANO, F AOSAI, K YUI, ET AL (Shinshu University School of Medicine, Nagano, Japan). J Clin Microbiol 1983; 17: 175-80.

Sensitivity of Trichomonas vaginalis to metronidazole in medium with various concentrations of iron and ascorbate

Purine and pyrimidine metabolising activities in Trichomonas vaginalis extracts

Candidosis

Patient compliance and the short-term treatment regimen

Three-day therapy of vaginal candidiasis with clotrimazole vaginal tablets and econazole ovals: a multicenter comparative study

Efficiency of various therapeutic concepts in genital mycoses
Results of single-dose treatment of vaginal mycoses with 500 mg Canesten® vaginal tablets

One-dose therapy of candida vaginitis. I Results of an open multicentre trial

Combined activity of ketoconazole and sulfamethoxazole against Candida albicans
WH Beggs (Veterans Administration Medical Center, Minneapolis, Minnesota, USA). J Antimicrob Chemother 1982; 10: 539-42.

Epidemiology, pathology and clinical features of genital mycoses—1981 status

On the action kinetics of clotrimazole

In vitro antibacterial activity of different clotrimazole formulations

Pharmacokinetic fundamentals of vaginal treatment with clotrimazole

Vaginal secretion levels after six days, three days and one day of treatment with 100, 200 and 500 mg vaginal tablets of clotrimazole and their therapeutic efficacy

Effect of phosphonoformate on symptomatic genital herpes simplex virus type II infection of guinea pigs
Dr Mayo, HL Lucia, and GD Hsiung (Veterans Administration Medical Center, West Haven, Connecticut, USA). Inter-virology 1983; 19: 26-32.

British Journal of Venereal Diseases

Inapparent genital herpes simplex virus infection in college women

Arabinosyladenine monophosphate in genital herpes: a double blind placebo controlled study

Effects of genetic resistance against herpes simplex virus in vaginally infected mice

Typing of clinical herpes simplex virus isolates with mouse monoclonal antibodies to herpes simplex virus type 1 and 2: Comparison with type-specific rabbit antiserum and restriction endonuclease analysis of viral DNA

Detection of genital herpes simplex infections by a tissue culture—fluorescent antibody technique with biorin-avidin

Restriction endonuclease analysis of DNA from genital isolates of herpes simplex virus type 2

Other sexually transmitted diseases

Haemophilus ducreyi infections—time for reappraisal
MG Menteart, S Hafiz, and GR Kinghorn (Royal Infirmary, Sheffield, UK). J Hyg 1982; 89: 467-78.
Abstracts

In their most recent study in Sheffield H ducreyi was isolated from 46 of 161 patients with genital ulceration (80 men and 81 women) (including those with herpes genitalis infections). These gave rise to typical entire, brownish, lenticulate colonies with the characteristic coherency which made them easy to push about but difficult to film or prepare a smooth suspension. The general features (scanning electron microscope photographs provided) correspond to those studied in Seattle and Manitoba as indicated by an exchange of strains (for details of three-part medium used see original). With the addition of strains previously isolated the total number now studied in Sheffield is 72, of which only three were β-lactamase producers, two being imported and the third a contact of one of those cases. Attempts to grow the organisms in a liquid medium have so far failed.

It is postulated that some strains of H ducreyi may be less pathogenic and so give rise to symptomatic infections which may be diagnosed only when they subsequently infect already damaged tissue as secondary invaders. Once established in damaged tissue the organisms contribute to the persistence of lesions until specific treatment is given.

R R Willcox
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The enzymatic profile of Haemophilus ducreyi

Urethral condylomata acuminata: a new topical treatment

Non-specific vaginitis. Diagnostic criteria and microbial and epidemiologic associations

Using the laser to treat vulvar condylomata acuminata and intraepidermal neoplasia

Public health and social aspects

Repeated gonorrhoea in Sheffield: the size of the problem, epidemiologic significance and personal characteristics of repeaters
GR KINGHORN, D PRYCE, AND RS MORTON (Royal Infirmary, Sheffield, UK). Sex Transm Dis 1982; 9: 165-70.

Ophthalmia neonatorum in the 1980's—incidence, aetiology and treatment

Ophthalmia neonatorum (ON), defined as the presence of an acute overt ocular discharge together with conjunctival hyperaemia, was diagnosed in 54 out of 450 consecutive neonates observed for two weeks. In 42 of these cases swabs from the inferior palpebral conjunctiva were cultured using standard techniques for pathogenic (including Chlamydia trachomatis) and non-pathogenic bacteria and matched with 42 controls. Pathogens were isolated from only 15 controls compared with four controls and non-pathogens from 14 cases compared with 20 controls. Strep tococcus viridans (six cases), but not Staphylococcus aureus, was found significantly more often among cases than controls. Neisseria gonorrhoeae was not isolated. There was one isolate of C trachomatis. Antibiotic sensitivity tests showed all bacteria associated with ON to be susceptible to tetracycline and all except C trachomatis to chloramphenicol. Sulphonamides were not usually effective and streptococci were resistant to gentamicin and neomycin.

A survey of 105 local general practitioners found that the majority treated ON with chloramphenicol but only 4% used chlortetracycline; only 18% said they would refer or treat the parents of neonates with chlamydial ON.

The authors postulate that initial inadequate treatment may lead to ON and thus explain the 30% of cases from which no organism was isolated.

R R Willcox
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The profile of early infectious syphilis in Denmark

Using the Danish syphilis index, which contains clinical and serological information on most, if not all, treponemal infections diagnosed since 1920, 33% of early episodes of early (primary, secondary, and early latent) syphilis diagnosed since 1972 were studied. Excluding 32 cases in which the sex orientation was unknown, 159 were men in male homosexuals (including bisexuals) of 95 in heterosexual men, and 47 in women, all of whom were believed to be heterosexual: 65 (41%) of the homosexually acquired infections were reinfections which corresponded to 77% of the total number of reinfections in the series; 41% of the male homosexuals had had more than one attack of syphilis compared with 13% in both the male heterosexuals and the women. Half of the homosexuals were aged 33 or more compared with approximately one fourth of heterosexual men. Sixty-eight per cent of all early syphilis in Denmark and 86% of homosexually acquired infections were diagnosed in Copenhagen.

R R Willcox
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Notice

International symposium on medical virology

The third international symposium on medical virology, sponsored by the Medical Microbiology Division, University of California, is to be held from 19 to 22 October 1983 at the Disneyland Hotel, Anaheim, California, USA. For further information, please contact: Dr Luis M de la Maza, Department of Pathology, University of California, Irvine Medical Center, 101 City Drive, Orange, California, 92668, USA.