Abstracts

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Eight years experience of cephradine in the treatment of syphilis
A THEODORIDIS, A VAGENA, A VARELZIDIS, AND J CAPETANAKIS (University of Athens School of Medicine, Athens, Greece). Current Therapeutic Research 1984; 35:184-7.

Secondary syphilis mimicking systemic lupus erythematosus

Transverse myelitis due to meningoovascular syphilis
EP HARRIGAN, TJ MCLAUGHLIN, AND RG FELDMAN (Boston University School of Medicine, Boston, Massachusetts, USA). Arch Neurol 1984;41:337-8.

The authors describe the case of a 51 year old woman admitted to hospital with a one month history of constipation, urinary retention, and overflow, and a two week history of numbness in the buttocks extending gradually down each leg. She had painful tingling in her feet when walking, and midline lumbar pain that was worse when lying supine. Five months before admission she had a non-itchy dry rash on her trunk and extremities, with lesions between five and 15 mm in diameter.

Clinical findings on admission were of diminished position sense in the lower extremities and increased pinprick sense below the T5 dermatome. Muscle tone in the legs was also diminished. She had an extensor plantar response on the left. The cranial nerves and arms gave normal results to neurological tests.

A sample of cerebrospinal fluid was obtained, and test results showed: total cells 259 × 10^6/l with 74% lymphocytes; protein concentration 2-34 g/l. For some reason no tests for syphilis were performed. Her leg weakness became a flaccid paraplegia, and only then was a rapid plasmid reagin test performed, which gave a positive result. A Venereal Disease Research Laboratory test on the CSF then gave a positive result with a titre of 1/16.

She was given intravenous penicillin (but no quantity or duration is stated or whether any steroids were given to cover a possible Hexheimer reaction) and made a partial recovery, her position sense remaining impaired. The authors also discuss different treatment regimens for neurosyphilis.

G D Morrison

Syphilitic enteritis

The authors report the history of a 40 year old man who complained of passing four to six watery stools a day and of fever, nausea, and vomiting. The stools did not contain blood or mucus. Barium studies showed prominent folds in the upper small bowel and a prolonged transit time. The illness subsided without treatment after four days.

Similar episodes occurred during the following year at four to eight week intervals.

After one year he was found to have perianal and mouth ulcers, hair loss, hearing loss with tinnitus, and blurred vision with papilloedema. A Venereal Disease Research Laboratory (VDRL) test gave a positive result at a titre of 1/64. His cerebrospinal fluid (CSF) showed: cells 124 × 10^6/1 (all lymphocytes), protein concentration 0-39 g/l, and a positive VDRL test result. A biopsy of a perianal ulcer showed treponemes on silver staining, but no intestinal biopsy, although showing villous atrophy and inflammatory cells in the lamina propria, showed no treponemes either by silver or fluorescent staining.

He was given 20 MU penicillin a day for 10 days with steroid cover initially. After 10 days’ treatment his CSF cell count was normal but the VDRL test result remained positive. Two months after treatment a small bowel biopsy had reverted to nearly normal. Further questioning disclosed that he had a cold sore in a nasolabial fold two months before his illness began, which had healed spontaneously. This is a very rare manifestation of secondary syphilis.

G D Morrison

Syphilis (pathology and experimental)

Immunisation of rabbits with Spirochaeta australis does not induce resistance to Treponema pallidum
Abstracts

Rabbits were immunised with viable Spirochaeta aurantia, a free living, facultative anaerobic spirochaete that is similar in some biochemical characteristics to Treponema pallidum, a parasitic, microaerophilic spirochaete. Single and multiple immunisations with living S aurantia, with or without Freund's incomplete adjuvant, Freund's complete adjuvant, or heat killed T pallidum, were carried out over a four month period. Living S aurantia was neither toxic nor virulent for rabbits. Immunised rabbits produced a high level of agglutinating antibody to S aurantia but no antibody to T pallidum, as assessed by the T pallidum hemagglutination test. Immunised rabbits were challenged with multiple intradermal inoculations of 100 viable T pallidum (Nichols strain) and compared with unimmunised rabbits similarly infected. Immunisation with S aurantia did not protect against T pallidum infection. Thus S aurantia appears not to be suitable as a potential vaccine against infection with T pallidum.

Authors' summary

Gonorrhoea (microbiology)

Antigen detection for the diagnosis of gonorrhoea

Rapid confirmatory identification of Neisseria gonorrhoeae with lectins and chromogenic substances

Antigenic variation during infection with Neisseria gonorrhoeae: detection of antibodies to surface proteins in sera of patients with gonorrhoea

Serum sensitivity of Neisseria gonorrhoeae: the role of lipopolysaccharide
WM SHAFER, K JOINER, LF GUYMON, ET AL (Emory University School of Medicine, Atlanta, Georgia, USA). J Infect Dis 1984; 149: 175-83.

Gonococcal infections in Gabon (Haut-Ogoovo)

Arthritis in rabbits induced by killed Neisseria gonorrhoeae and gonococcal lipopolysaccharide
DL GOLDENBERG, JJ REED, AND PA RICE (Boston University School of Medicine, Boston, USA). J Rheumatol 1984; 11: 3-8.

Lipopolysaccharide banding patterns of Neisseria meningitidis and Neisseria gonorrhoeae

β-lactamase producing Neisseria gonorrhoeae

Binding of Neisseria gonorrhoeae by lectin like receptors on human phagocytes

Validity of an enzyme immunoassay for detection of Neisseria gonorrhoeae antigens

Inhibition of anion transport in human erythrocytes by piloted Neisseria gonorrhoeae

Conservation of peptide structure of outer membrane protein-macro molecular complex from Neisseria gonorrhoeae
MV HANSEN AND CE WILDE III (Indiana University School of Medicine, Indianapolis, Indiana, USA). Infect Immun 1984; 43: 839-43.

Gonorrhoea (clinical)

Efficacy of aztreonam in treatment of experimental syphilis in rabbits

Cutaneous gonococcal abscess: a case report
NJ FIUMARA AND R EISEN (Massachusetts Department of Public Health, Boston, Massachusetts, USA). Sex Transm Dis 1984; 11: 34-5.

Disseminated gonococcal infection
Lancet 1984;i: 832.
Common β-lactamase specifying plasmid in *Haemophilus ducreyi* and *Neisseria gonorrhoeae*

Antimicrobial susceptibility of strains of *Neisseria gonorrhoeae* isolated in Rome

Gonorrhoea (treatment)
A comparison of roxocain and ampicillin and probenecid in the treatment of uncomplicated gonorrhoea
AI COHEN, MR REIN, AND RC NOBLE (University of Kentucky, College of Medicine, Lexington, Kentucky, USA). *Sex Transm Dis* 1984; 11:24-7.

Laboratory acquired gonococcal conjunctivitis: successful treatment with single-dose ceftriaxone

Ceftizoxime (FK-749) is effective therapy for urethritis caused by penicillinase-producing *Neisseria gonorrhoeae*
WO HARRISON, PL SANCHEZ, DJ LANCaster, ET AL (US Naval Hospital, San Diego, California, USA). *Sex Transm Dis* 1984; 11:30-1.

Roxocain in the therapy of uncomplicated gonorrhoea

Polymorphonuclear leukocytes (PMNs) in the Gram stained urethral smears of 236 consecutive sexually active men without gonorrhoea were analysed quantitatively. The frequency distribution of the highest count of PMNs per high power field showed a count of four PMNs to be the cut off point separating men with urethritis from those without urethritis. This cut off point correlated well with the presence of Chlamydia trachomatis as well as with tuburis. However, the PMN count in the Gram stained urethral smear was found to be more sensitive than the appearance of the urine in the diagnosis of urethritis among those with minimal symptoms and signs and not harboring C trachomatis. This study also showed a close similarity as regards clinical features and PMN count in Gram stained urethral smears between those harbouring Ureaplasma urealyticum and those with no organisms.

Authors' summary

Characteristics of a Gram-negative anaerobe isolated from men with non-gonococcal urethritis

Epididymitis: studies on its aetiology and pathogenesis with special consideration of Chlamydia trachomatis and Ureaplasma urealyticum

Diagnosis of urethritis: role of polymorphonuclear leukocyte counts in Gram-stained smears
OP ARYA, H MALLINSON, BE ANDREWS, AND M SILLIS (Royal Liverpool Hospital, Liverpool, UK). *Sex Transm Dis* 1984; 11:10-7.

Reinfecion of the mouse genital tract with Chlamydia trachomatis: the relationship of antibody to immunity

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Chlamydial infections

Non-specific genital infection

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Gonorrhoea (treatment)
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AI COHEN, MR REIN, AND RC NOBLE (University of Kentucky, College of Medicine, Lexington, Kentucky, USA). *Sex Transm Dis* 1984; 11:24-7.

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Genital herpes

The use of monoclonal antibodies to differentiate isolates of herpes simplex types 1 and 2 by neutralisation and reverse passive haemagglutination tests

Detection of herpes simplex virus in clinical specimens by an enzyme linked immunosorbent assay

An enzyme linked immunosorbent assay for the detection of herpes simplex virus is described. The test can be performed in four hours, does not require specialised equipment, and uses relatively inexpensive and commercially available reagents. It detected herpes simplex virus (HSV) in 51% of specimens found to be positive by cell culture. In contrast direct immunofluorescence detected HSV in only 1% of cell culture positive specimens. It also has the advantage of detecting non-viable virus.

G D MORRISON

A double blinded study of medium to long term safety of Inosiplex in the treatment of recurrent genital herpes virus disease

Genital herpes infection in pregnant women near term

Syndrome d’immunodéficience acquise (AIDS) révélé par un herpès génital sévère. A propos de deux cas

Prevalence of genital herpes simplex virus in pregnancy

Incidence of herpes simplex virus types 1 and 2 in penile lesions of college men

Other sexually transmitted diseases

Human papilloma virus type 16 and early cervical neoplasia

Flat warts (condylomata) of the uterine cervix are sometimes cytologically atypical and have abnormal mitotic figures; they are thought to be possible precursors of cancer of the cervix. Flat warts are caused by any of a number of types of human papillomavirus (HPVs), one of which (HPV 16) has been previously associated with invasive cancer of the cervix. To determine whether HPV 16 is also associated with flat warts with abnormal mitoses, we analysed 23 flat warts by DNA-hybridisation techniques for the presence of HPV 16 and other HPV types, and correlated the results with the histology. Of 10 lesions with abnormal mitotic figures, seven contained HPV 16, and one contained another type of HPV. Of 13 lesions without abnormal mitotic figures, only one contained HPV 16, and seven contained other types of HPV.

We conclude that the presence of HPV 16 correlates with the presence of abnormal mitotic figures in flat warts of the cervix, and that this type of flat wart is a precursor of invasive cancer of the cervix.

Authors’ summary

Genital wart virus infections: nuisance or potentially lethal?

Comparison of media for the primary isolation of Haemophilus ducreyi
H NSANZE, FA PLUMMER, ABN MAGWAA, ET AL (Department of Medical Microbiology, University of Nairobi, Nairobi, Kenya). Sex Transm Dis 1984;11:6-9.

Monoclonal antibodies reactive with all strains of Haemophilus ducreyi
EJ HANSEN AND TA LOFTUS (University of Texas Health Science Center, Dallas, Texas, USA). Infect Immun 1984;44:196-8.

Cluster of cases in the acquired immune deficiency syndrome. Patients linked by sexual contact.

Public health and social aspects

General considerations on endemic treponematosis in the rural Sahel region of Upper Volta

Four village populations in Upper Volta were studied by the authors. Three villages were in the Sahel region and one in the Sudan region. The Sahel region villages of Oursi (inhabited by Songhais farmers and their families) and Bouiel (inhabited by Rimibés farmers and their families) were contrasted with the village of Timbolol Gargassa, inhabited by the semi-nomadic Bellahs (who are somewhat related to the Warawarag Touaregs). These latter villagers live 10 km from their water supply. The Sudan region village of Donès is occupied by Mossi tribespeople who are also farmers.

Of 895 people examined, 373 lived at Oursi, 144 at Bouiel, 118 at Timbolol.
Gargassa, and 260 at Donsé. An indirect immunofluorescent test for antitreponemal antibody was carried out along with a clinical examination for signs of venereal or endemic syphilis.

The Oursi villagers had a prevalence of positive tests of 12.6% overall, being low up to 9 years old, but reaching a peak at 40. The overall prevalence at Boulel was 42.6%; after the age of 40 it was 72.5%. The village with the worst incidence was Timbolo Gargassa, where 66.6% of 3 year old children (the number examined at that age is not stated) were positive but by 24 years 97% were positive. Congenital syphilis was rare (one 6 month child in Timbolo Gargassa). No cases of yaws were found in the Sahel region. Clinical signs of bejel were found in 4% of positive patients at Oursi, 20% at Boulel, and 39% at Timbolo Gargassa. No clinical evidence of bejel was found at Donsé where the prevalence of positive serology was only 3.4%. The authors wonder whether the communal use of drinking water skins at Timbolo Gargassa may be a cause of the high incidence of infection. A neighbouring village of the same nomadic tribe who do not use this practice had a prevalence of 38% positive serology.

G D Morrison

Prostitution and sexually transmitted disease

Gonorrhoea in a Sydney house of prostitution