Genitourinary Medicine

A McMillan
(Editor)

M Waugh
(Hon Sec.
MSSVD)

B A Evans
(President, MSSVD)

R S Pattman
(Assistant Editor, Abstracts)

A Meheus
EDITOR,
British Medical Journal

G D Morrison

P Pirot

D Taylor-Robinson

R N Thim

H Young

DEIRDRE SEYMOUR
(Technical Editor)

This Journal, founded by the Medical Society for the Study of the Venereal Diseases, publishes original work on the investigation and treatment of genitourinary and allied disorders, and review articles, correspondence, and abstracts.

Advice to authors Papers for publication, which will be accepted on the understanding that they have not been and will not be published elsewhere and are subject to editorial revision, should be sent in duplicate to Dr A McMillan, Department of Genitourinary Medicine, Royal Infirmary, Lauriston Place, Edinburgh EH3 9YW. All authors must give signed consent to publication. The editor should be notified of any change of address of the corresponding author. Manuscripts will only be acknowledged if a stamped addressed postcard or international reply coupon is enclosed.

Full details of requirements for manuscripts in the Vancouver style (Br Med J 1982; 284:1766-70) are given in Uniform requirements for manuscripts submitted to biomedical journals, available from the Publishing Manager, British Medical Journal, BMA House (50p post free). Briefly details are as follows:

(1) Scripts must be typewritten on one side of the paper in double spacing with ample margins. Two copies should be sent; if a paper is rejected, one copy will be retained.

(2) Each script should include, in the following order: a brief summary, typed on a separate sheet, outlining the main observations and conclusions; the text divided into appropriate sections; acknowledgements; tables, each on a separate sheet; and legends for illustrations.

(3) The title of the paper should be as brief as possible.

(4) The number of authors should be kept to the minimum, and only their initials and family names used.

(5) Only the institution(s) where work was done by each author should be stated.

(6) SI units are preferred. If old fashioned units are used SI units should be given in parentheses or, for tables and figures, a conversion factor given as a footnote.

(7) Only recognised abbreviations should be used.

(8) Acknowledgements should be limited to workers whose courtesy or help extended beyond their paid work, and supporting organisations.

(9) Figures should be numbered in the order in which they are first mentioned, referred to in the text, and provided with captions typed on a separate sheet. (Diagrams: use thick, white paper and insert lettering lightly in pencil. Photographs: should be marked lightly on the back with the author's name and indicating the top, and should not be attached by paper clips or pins. They should be trimmed to include only the relevant section (sizes 2¼" or 5¼" wide, maximum 5¼" × 7") to eliminate the need for reduction. Photomicrographs must have internal scale markers. X-ray films should be submitted as photographic prints, carefully prepared so that they bring out the exact point to be illustrated.

(10) Tables should be numbered, have titles, and be typed on separate sheets. Please avoid large tables.

(11) References should be numbered consecutively the first time they are cited and identified by arabic numbers in the text, tables, and legends to figures. Authors must take full responsibility for the accuracy of their references, and the list should be kept as short as practicable. It should be in the order in which references are first mentioned, and should include (in the following order), journals: author's name and initials, title of paper, name of journal (in full or abbreviated according to the list in Index Medicus, year of publication, volume number, and first and last page numbers; books: author's name and initials, full title, edition, place of publication, publisher, and year of publication. When a chapter in a book is referred to, the name and initials of the author of the chapter, title of the chapter, "In: " name and initials of the editor, and "ed" should precede book title, etc as above. In references to journals or books, when there are seven or more authors the names of the first three should be given followed by "et al."

Proofs Contributors receive one proof, and should read it carefully for printers' errors and check the tables, figures, legends, and any numerical, mathematical, or other scientific expressions. Alterations should be kept to a minimum.

Reprints 25 reprints will be supplied free of charge. A limited number of additional reprints may be ordered from the Publishing Manager when the proofs are returned.

Notice to subscribers This Journal is published six times a year. The annual subscription rates are available on request to the Subscription Manager, Genitourinary Medicine, BMA House, Tavistock Square, London WC1H 9JR. Orders can also be placed locally through any leading subscription agent or bookseller. (For the convenience of readers in USA, subscription orders, with or without payment, can be sent to: British Medical Journal, Box 560B, Kennebunkport, Maine 04046. All inquiries, however, must be addressed to the publisher in London.) All inquiries regarding air mail rates and single copies already published should be addressed to the publisher in London.

Forthcoming meetings Notices of meetings should be submitted to the editor six months before the closing dates.

Notice to advertisers Applications for advertisement space and for rates should be addressed to the Advertisement Manager, Genitourinary Medicine, BMA House, Tavistock Square, London WC1H 9JR.

Copyright © 1985 by Genitourinary Medicine. This publication is copyright under the Berne Convention and the International Copyright Convention. All rights reserved. Apart from any relaxations permitted under national copyright laws, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission of the copyright owners. Permission is not, however, required to copy abstracts of papers or of articles on condition that a full reference to the source is shown. Multiple copying of the contents of the publication without permission is always illegal.
Notices

IUVDT—fourth regional meeting of the South East Asian and western Pacific region

The fourth regional meeting of the South East Asian and western Pacific region of the International Union against the Venereal Diseases and Treponematoses will be held in Bombay, India, from Friday 18 October to Sunday 20 October, 1985. The primary theme will be the complications of STD. Secondary themes will be: viral diseases and socioeconomic aspects of STD.

Further information can be obtained from: Dr J K Maniar, Organising Secretary, 69/51 Walkeshwar Road, Bombay-400 006, India.

Second world congress on sexually transmitted diseases (STDs)

The second world congress on sexually transmitted diseases (STDs) will be held at the Centre International de Congres de Paris (CIP), Porte Maillot, Paris, from 25 to 29 June 1986 under the patronage of the World Health Organisation and the International Union against Venereal Diseases and the Treponematoses. The general theme will be “STDs and their social and economic consequences”.

For further information concerning registration, travel arrangements, hotels, etc, please contact the Commissariat General, 4 Villa d’Orleans, 75014 Paris, France.

International meeting of dermatological research

The seventh meeting devoted to dermatological research will be held under the auspices of the Société de Recherche Dermatologique at Louvain University in Brussels on September 19 to 21, 1985. This meeting will be organised by the unit of occupational and environmental dermatology (director Professor J M Lachapelle).

Further information and application forms can be obtained from: Docteur D Van Neste, Unité de Dermatologie Professionnelle et de l’Environnement, Université Catholique de Louvain, UCL 3033, Clos Chapelle-aux-Champs, 30-B-1200 Bruxelles, Belgique.

Second Australian conference on sexually transmissible diseases

The second Australian conference on sexually transmissible diseases will be held from 16 to 18 August 1985 in Perth, Western Australia. It will be presented by the Health Department of Western Australia. For details please contact the Director, VD Control, PO Box 8172, Stirling Street, Perth, WA 6001, Australia.
### List of current publications

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

<table>
<thead>
<tr>
<th>Syphilis and other treponematoses</th>
<th>Candidosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhoea</td>
<td>Genital herpes</td>
</tr>
<tr>
<td>Non-specific genital infection and related disorders (chlamydial infections; mycoplasmal and ureaplasmal infections; general)</td>
<td>Genital warts</td>
</tr>
<tr>
<td>Pelvic inflammatory disease</td>
<td>Acquired immune deficiency syndrome</td>
</tr>
<tr>
<td>Reiter's disease</td>
<td>Other sexually transmitted diseases</td>
</tr>
<tr>
<td>Trichomoniasis</td>
<td>Genitourinary bacteriology</td>
</tr>
<tr>
<td></td>
<td>Public health and social aspects</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous</td>
</tr>
</tbody>
</table>

#### Syphilis and other treponematoses

**Inadequate treatment of syphilis in pregnancy**


**Double-conjugate enzyme-linked immunosorbertent assay for immunoglobulins G and M against Treponema pallidum**


**Characterization of monoclonal antibodies to Treponema pallidum**


#### Gonorrhoea

**Comparison of the effect of refrigerated versus room temperature media on the isolation of Neisseria gonorrhoeae from genital specimens**


**Urine as a holding medium for Neisseria gonorrhoeae**


**In vitro inhibition of growth of Neisseria gonorrhoeae by Neisseria meningitidis isolated from the pharynx of homosexual men**


**The systematic serology of Neisseria gonorrhoeae: antigens associated with pathogenesis in Neisseria spp from man**


The method used in this study is the micro-Ouchterlony double diffusion absorption assay, in which antigen and antibody placed in wells in agar slides display a positive reaction as precipitin lines that may be seen with the naked eye or stained by Crowle's method.

Antiserum to a representative strain of *Neisseria gonorrhoeae* was raised in rabbits. This was then tested against the immunising antigen and isolates of *N gonorrhoeae* from Calcutta and international sources. Five major precipitin zones were detected and given the notation 1 to 5. Three of these precipitin reactions, in zones 1, 3, and 4, showed complete identity in all gonococci; one reaction, in zone 2, was strain specific and occurred in most strains from Calcutta and one of the international strains. Strain specific components were also shown in the fifth zone, and this class of antigen may prove to be useful in serotyping systems. By absorption techniques it was shown that components of zones 1-4 were located internally in the cell of the reference strain, zone 5 had a cell surface location.

The system was then similarly tested against sonicates of *N meningitidis* and other *Neisseria* species. *N catarrhalis* showed no reaction. This agrees with current views on the classification of this organism, as it has now been allocated to the genus *Branhamella*. Zones 1 and 3 were present in all other *Neisseria* species tested, but zone 2 was missing. These antigens appeared to be intracellular and present in all the "true" *Neisseria* species examined, and are therefore group antigens at the generic level. Major components of zone 5, located at the cell surface, were common to *N gonorrhoeae* and *N meningitidis*, and are therefore subgeneric. Zone 4 was not only present in *N gonorrhoeae* and *N meningitidis* but was also seen in *N. flavescens*. This organism had been documented as the cause of an epidemic of meningitis, and the strain used in the study was known to have pathogenic ability. The authors discuss further the possibility that zones 4 and 5 may represent components that play a part in pathogenesis.

This paper analyses sonicates of eight *Neisseria* species from man by gel diffusion techniques. Five major precipitin zones were identified that comprised components specific for genus, species, and type. One antigen was found in all strains of three species with pathogenic ability and not in the other *Neisseria* species investigated.

---

M S Sprott

#### Miscellaneous

**Opsonophagocytosis of Neisseria gonorrhoeae: Interaction of local and disseminated isolates with complement and neutrophils**

Cloning of the gene for the common pathogenic Neisseria H.8 antigen from Neisseria gonorrhoeae

Red blood cells, a source of factors which induce Neisseria gonorrhoeae to resistance to complement-mediated killing by human serum

On the role of pili in transformation of Neisseria gonorrhoeae

Single-dose treatment of uncomplicated gonorrhoea: a comparison of cefonicid and penicillin

Moxalactam treatment of uncomplicated gonorrhoea in women

Non specific genital infection and related disorders (chlamydial infections)

Postabortal pelvic infection associated with Chlamydia trachomatis and the influence of humoral immunity

The epidemiology of chlamydial infections in childhood: a serological investigation

Infection with Chlamydia trachomatis in female college students

Analysis and detection of chlamydial DNA
T HYPPÄÄ, SH LARSEN, T STÅHLBERG, P TERHO (Turku, Finland). J Gen Microbiol 1984; 130: 3159-64.

Monoclonal antibody based ELISA for detecting Chlamydia trachomatis

Chlamydia trachomatis sampling during erythromycin treatment

Fifteen chlamydia positive patients with non-gonococcal urethritis were treated in Copenhagen, Denmark, with erythromycin 1 g daily for six days, and were subsequently monitored for chlamydia on days 2, 4, 7, and 14. All patients became chlamydia negative no later than four days after the start of treatment, and remained so at 14 days.

It is suggested that an erythromycin regime of shorter duration should be evaluated.

The activity of ciprofloxacin and other 4-quinolones against Chlamydia trachomatis and Mycoplasmas in vitro

Non-specific genital infection and related disorders (mycoplasmal and ureaplasmal infections)

The role of mycoplasmas in sexually transmitted vaginitis

Do mycoplasmas inhibit the human sperm fertilizing ability in vitro?

A prospective study of mycoplasma infection in the preterm infant

Serological cross-reactions between Mycoplasma genitalium and Mycoplasma pneumoniae

Non-specific genital infection and related disorders (general)

Spontaneous abortion—an infectious aetiology?

Pelvic inflammatory disease

Pelvic inflammatory disease after hysterosalpingography associated with Chlamydia trachomatis and Mycoplasma hominis

The development of infections of the genitourinary tract in the wives of infertile males and the possible role of spermatozoa in the development of salpingitis

Reiter's disease

Is Reiter's syndrome caused by Chlamydia?

Candidosis

Oral yeast flora and antibiotics to Candida albicans in homosexual men
Genital herpes

Frequency and duration of patient-observed recurrent genital herpes simplex virus infection: characterization of the non lesonal prodrome

Serologic analysis of first-episode nonprimary genital herpes simplex virus infection. Presence of type 2 antibody in acute serum samples

The authors evaluated non-primary first episode genital herpes for the presence of type specific antibody to herpes simplex types 1 and 2 in patients who attended a medical centre between January 1981 and June 1982. Acute serum samples were obtained from 24 patients less than six days after the onset of genital ulceration. Type 2 herpes simplex virus was isolated from all genital lesions. A standard microneutralisation assay and western blot analysis, which identified the response to individual polypeptides of type 1 and type 2 herpes, were performed using both unadsorbed serum samples and serum samples adsorbed with either type 1 or type 2 antigens to remove cross reacting antibodies.

Of 24 samples studied, seven were found to have type 1 antibody alone, 11 had type 2 antibody alone, and six had both type 1 and type 2 antibody. Thus 17 of 24 patients with type 2 antibody could represent a group with reinfection or a group with previously subclinical or unrecognised type 2 infection. Remarkably, only four of 18 patients with non-primary disease could elicit a history of genital herpes infection in recent sexual partners.

The authors therefore advise that clinicians evaluating patients with first episode genital herpes should recognise the possibility of earlier acquisition of an unrecognised infection and the absence of herpes simplex virus infection in current sexual partners.

F M M Mulcahy

Polypeptide specificity of the early antibody response following primary and recurrent genital herpes simplex virus type 2 infections

Detection of virus-specific antigens of adenoviruses and herpes simplex virus in patients with malignant diseases of the genital tract

Alteration of lymphocyte transformation response to herpes simplex virus infection by acyclovir therapy

Augmentation of immunity to herpes simplex virus by in vivo administration of interleukin

Genital warts

Screening for wart virus infection in normal and abnormal cervices by DNA hybridisation of cervical scrapes

Human papillomaviruses (HPV) types 6, 11, 16, and 18 have been implicated in cancers of the female lower genital tract and carcinoma of the penis. Types 6 and 11 are associated with benign condylomata acuminata and the premalignant cervical intraepithelial neoplasias (CIN), whereas HPV16 is also associated with invasive carcinomas, and HPV18 almost exclusively detected in malignant disease. Infection with a particular type of HPV may increase the risk of a progressive disease leading to invasive carcinoma. If this is the case it would be important to diagnose the type of HPV infection.

This paper attempts to use the technique of DNA/DNA hybridisation to diagnose the HPV infection in cells from a cervical smear rather than from a colposcopically directed biopsy. The technique involves transferring extracted DNA from cervical cells, taken in a similar manner as those for a Pap stain, to nitrocellulose filters and hybridising with radiolabelled HPV probes. This method is preferable to using biopsy material because it is less invasive, and smears can be taken from a wider range of women who are at risk for CIN. The authors used HPV type 6 probes only, but interestingly detected in two of 19 women HPV6 DNA sequences even though they had a normal Pap smear. These women were attending a genitourinary medicine clinic and had no history of genital warts or CIN, but were a high risk group. HPV6 was also detected in two of 20 women who had been treated for CIN but had a history of recurrent disease, and in two of four women with cytological evidence of HPV infection. The numbers in the latter group are very small and it is difficult to draw any conclusions about how sensitive this technique will be in screening women for particular HPV infections, especially when 16% of the smears were rejected because the amounts of DNA extracted from cervical smears were too small.

Although this technique in its present form would not be available for diagnostic purposes, the substitution of radio-labelled probes with non-radio-labelled probes may speed their use as a diagnostic tool. Their use would certainly be warranted if infection with particular HPV types is shown to increase a woman's risk of developing malignant disease of the cervix.

D J McCance

Identification of human papilloma virus in cervical swabs by deoxyribonucleic acid in situ hybridization

Transcription of episomal papillomavirus DNA in human condylomata acuminata and Buschke-Lowenstein tumours

Immunoperoxidase staining for identification of human papilloma virus in cervical epithelium

Comparison of 5-fluorouracil and CO₂ laser for treatment of vaginal condylomata
The management of warts of the oral cavity

Acquired immune deficiency syndrome

Hepatitis B virus in the acquired immunodeficiency syndrome

Enteric coccidiosis among patients with the acquired immunodeficiency syndrome

Meningoencephalitis due to Listeria monocytogenes in a patient with AIDS

Persistence of Pneumocystis carinii in lung tissue of acquired immunodeficiency syndrome patients treated for pneumocystis pneumonia

Nucleotide sequence of the AIDS virus, LAV

Complete nucleotide sequence of the AIDS virus, HTLV-III

Characterization of long terminal repeat sequences of HTLV-III

Sequence homology and similarity of HTLV-III and visna virus, a pathogenic lentivirus

Inactivation of lymphadenopathy-associated virus by heat, gamma rays and ultraviolet light

Needlestick transmission of HTLV-III from a patient infected in Africa

Risk of nosocomial infection with human T-cell lymphotropic virus III (HTLV-III)

Eighty five hospital workers who had been in regular clinical contact with patients with acquired immune deficiency syndrome (AIDS) over a two year period were examined for evidence of antibody to HTLV-III, the causative agent of AIDS. Thirty had reported needle stick injuries, and thus parenteral exposure to small quantities of blood contaminated with HTLV-III. Employees included endoscopists (nine), morbid pathologists (eight), nurses, laboratory technicians, and research workers. The duration between exposure and serology testing ranged from two weeks to 20 months (mean eight months). Serum samples were tested for viral antibody by enzyme linked immunosorbent assay and electrophoretic (western blot) techniques.

Whereas 100% of patients with AIDS who were tested by the above methods were seropositive for antibody to HTLV-III, all the exposed hospital workers gave negative results. The authors conclude that hospital exposure to AIDS carries a low risk of nosocomial infection, and that needle stick injuries appear to carry little additional risk. By contrast the incidence of acute hepatitis B infection after needle stick exposure is 10-15%.

This paper must be viewed in the light of a leading article in the Lancet (Lancet 1984;ii:1433-5), which describes a nurse who seroconverted to HTLV-III seropositivity (by radioimmunoassay) at 42 days after a needle stick injury with micro inoculation from a patient with AIDS of African origin. It is also germane to note that the duration between infection and seroconversion is unknown, as are the numbers of infected people who may be seronegative, and that no hospital or health care worker has developed AIDS as an unequivocal result of professional exposure. It is therefore reasonable to state that the risk to health workers is genuinely small, and considerably less than with hepatitis B. All needle stick injuries or mucosal contamination must, however, be avoided at all costs. Although this paper is reassuring, it is by no means the final word on this issue.

J N Weber

Screening test for HTLV-III (AIDS agent) antibodies: specificity, sensitivity, and applications
SH WEISS, JJ GOEDERT, MG SARGADHARAN, ET AL (Bethesda, USA). JAMA 1985;253:221-5.

HTLV-III in symptom free seronegative persons

HTLV-III serology distinguishes atypical and endemic Kaposi's sarcoma in Africa

The incidence rate of acquired immunodeficiency syndrome in selected populations

Mothers of infants with the acquired immunodeficiency syndrome: evidence for both symaptomatic and asymptomatic carriers

Ribavirin suppresses replication of lymphadenopathy-associated virus in cultures of human adult T lymphocytes

Other sexually transmitted diseases

Infectious antecedent of immunoblastic lymphoma. Progressive immunosuppression in a patient with lymphogranuloma venereum

The authors describe a previously healthy 21 year old woman admitted for the investi-
Hepatitis B core antigen synthesised in Escherichia coli: its use for antibody screening in patients attending a clinic for sexually transmitted diseases

Adhesion of group-B streptococci to vaginal epithelial cells

The penetration of antibiotics into the prostate in chronic bacterial prostatitis

Risk factors for prematurity and premature rupture of membranes: a prospective study of the vaginal flora in pregnancy

Should the risk of acquired immunodeficiency syndrome deter hepatitis B vaccination?

Are we failing our teenagers? Value of a family planning service for teenagers with the sexually transmitted disease clinic
Miscellaneous

Penile horns: report of 2 cases

Metastatic prostate carcinoma manifesting as penile nodules

Papillary adenocarcinoma of the male urethra: case report and review of the literature

Hairy cell leukaemia presenting as spontaneous urethral rupture

Penile ulcer in Crohn's disease

Acute febrile neutrophilic dermatosis with genital involvement
R LINDSKOV (Hellerup, Denmark). Acta Derm Venereol (Stockh) 1984; 64:559-61.