Prevalence of Chlamydia trachomatis IgG antibodies in antenatal patients from Trinidad

Editor,—A recent study in Jamaica by Dowe et al using cell culture and a direct fluorescence assay (DFA) showed a prevalence of Chlamydia trachomatis infection in 47% of gynaecological patients.1 Unfortunately, there are no comparable data for cell culture and DFA in Trinidad. Moreover, we cannot find any reports on serological studies for C trachomatis IgG antibody in the West Indies. In an attempt to shed more light on prevalence of C trachomatis IgG antibody in pregnant women in Trinidad, we collected 56 serum specimens (mean age of patients 27 years) with ethics committee approval from one clinic at the general hospital, Port of Spain. As well as testing these sera by an in-house ELISA test method based on that described by Ossewaarde et al,2 we also used a commercial ELISA test specific for C trachomatis IgG (Savyon Diagnostics, Israel) and the whole inclusion immunofluorescence (WHIF) test as previously described by Richmond and Caul.3

All collected sera were stored at −70°C until analysis. Samples were subsequently coded and tested blind in duplicate in laboratories in Sheffield and Bristol. Details of the in-house ELISA test methodology and interpretation of readings using microimmunofluorescence (MIF) serum positive and negative controls were described in Keay et al.4 The commercial ELISA was performed according to the manufacturer's instructions. The WHIF test consisted of chlamydial inclusions of infected mammalian cells with LGV2 mounted on a glass well or coverslip. The WHIF titre is described as the highest dilution of antibody where the inclusion can be clearly seen by fluorescence staining.

For the ELISA tests, results were recorded as positive, equivocal, negative, or negative. For the WHIF test, titres between 1.64 and 1.256 were recorded as such; a low titre was ≥1:64 and a high titre ≥1:512. Twenty five (45%) and 29 (52%) samples were positive for the commercial and in-house ELISA tests respectively. Eighteen (32%) samples had a titre of ≥512 in the WHIF test, as shown in table 1.

The latter finding is of note. It is accepted that C trachomatis is an established pelvic pathogen and in a recent study of 34 women positive for C trachomatis IgG (>1:128) by ELISA, at laparoscopy 31 (91.2%) were diagnosed as having tubal disease.5 It is likely that significant damage could be occurring in these patients as a previous study looking at high C trachomatis IgG titres showed 46% positive and 8% positive in infertile women with damaged and normal tubes, respectively.6 Although these findings are based on relatively small numbers, they are of significant concern if combined with the other most recent study.7 It would appear that the prevalence rates for C trachomatis may well be high and that data presented here suggest possible future PID development and resultant sequelae. It is clear that further studies are warranted and that screening and treatment strategies may be required urgently to curtail considerable morbidity in Trinidad and throughout the West Indies in general.


Table 1 Comparison of ELISA and WHIF tests showing the Chlamydia trachomatis IgG antibody titre distribution

<table>
<thead>
<tr>
<th>WHIF test</th>
<th>Commercial ELISA</th>
<th>In-house ELISA</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥512</td>
<td>15 (1)</td>
<td>2</td>
</tr>
<tr>
<td>256</td>
<td>3 (1)</td>
<td>1</td>
</tr>
<tr>
<td>128</td>
<td>4 (1)</td>
<td>1</td>
</tr>
<tr>
<td>64</td>
<td>2 (1)</td>
<td>4 (1)</td>
</tr>
<tr>
<td>&lt;64</td>
<td>1 (1)</td>
<td>2 (1)</td>
</tr>
</tbody>
</table>

Eq = equivocal.
STIs. Even small random errors can have or condom use practices, are likely to statistical analysis for numbers and types of control for covariates associated with risk for measurement of sexual behaviour has power-

Fenton in study design and analysis, as described by from studies of sexually transmitted infec-

sexual behaviours for drawing inferences to provide an important footnote on the forms of measurement error. We would like the collection of sexual behaviour data helps to draw attention to this frequently overlooked methodological aspect of the epidemiology of STIs.

CHELSEA MORRONI
Women's Health Research Unit, Department of Public Health, University of Cape Town, South Africa

Correspondence to: Landon Myer, Fogarty-AITRP, Division of Epidemiology, School of Public Health, Columbia University, 622 West 168th Street, PH 18, New York, New York, 10032, USA

Landon.Myer@mrc.ac.za or landon_moyer@hotmail.com

Is Mycoplasma hominis a vaginal pathogen?

Editor,—We would like to comment on the study by Arya and colleagues1 in which they failed to find evidence for Mycoplasma hominis being pathogenic in the vagina, or otherwise contributing to bacterial vaginosis (BV). They mentioned the 21 year old review of Taylor-Robinson and McCormack2 who surmised that M hominis might act in symbiosis with other organisms or as a sole pathogen in BV. The latter was referred to as non-specific vaginitis or Gardnerella associ-

ated vaginitis. In the term BV being used from about 1984. Since then, much has been learned about the vaginal microflora in health and disease, but the question of which organisms, other than the suggestion of Mardh and colleagues that M hominis was associated with a number of genital signs and symptoms and BV had been excluded, our assertion being that M hominis organisms in the healthy vagina appear to behave as commensals. We challenged the suggestion of the healthy vagina increase in number, perhaps by 10 000-fold or more, in the vagina of women with BV. This increase, however, occurs only late in the development of BV: Indeed, it is rare to find large numbers in the “intermediate” (grade 2) stage between the normal vaginal flora and “full blown” BV (grade 3). Thus, in the study by Arya and colleagues we have difficulty in understanding why only 35 (48%) of the 73 women with M hominis positive BV had large numbers of organisms (≥ 1 × 109) and could not even show the likelihood of the women developing BV, M hominis is not involved. It is clear that M hominis organisms are not essential for the development of BV and unlikely that their initial presence in the vagina increases the likelihood of BV develop-

Ing. However, if they are present in the vagina initially, then they will multiply as indicated and large numbers will ensue. The data of Arya and colleagues1 may resolve the issue of whether large numbers contribute to the disease process or are involved in its persist-

ence. Against this, as they point out, is a study1 in which metronidazole, inactive in vitro against M hominis, cleared vaginitis, and active doxycycline, active against M hominis, did not. However, it also should be remembered that M hominis organisms caused pharyngitis and cervical lymphadenopathy when given orally in large numbers to volunteers, indicating the pathogenic potential of the organisms. Furthermore, M hominis species is heterogeneous, some strains having greater epithelial cell adherence properties than others. We do not see any data that point to M hominis being a sole pathogen or co-pathogen in the vagina but, equally, we are not convinced by data that purport to show that it is not.

DAVID TAYLOR-ROBINSON
Department of Gynaecology, Imperial College School of Medicine, St Mary's Hospital, Paddington, London W2 1NY, UK

ISOBEL J ROSENSTEIN
Scientific Development Division, Public Health Laboratory Service, Headquarters Office, 61 Colindale Avenue, London NW9 5DF, UK


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Response of hepatitis B induced membranoproliferative glomerulonephritis to HAART

Editor,—Renal disease occurring in HIV infected individuals is well described. HIV associated nephropathy (HIVAN) is the
predominant renal lesion in black patients, whereas immune complex and membranous nephropathy occur more commonly in white patients. Improvements in renal function have been described with highly active antiretroviral therapy (HAART) when the underlying renal lesion is HIVAN or membranous nephropathy. We report here an HIV infected patient in whom renal disease caused by hepatitis B induced membranoproliferative glomerulonephritis improved with HAART.

A 34 year old white homosexual man was found to be HIV-1 antibody positive in August 2000 after he presented with biopsy proven Kaposi's sarcoma. At this time he also reported 2 months of fatigue and frothy urine. In the past he had been found to be hepatitis BeAg positive in 1996. Examination revealed multiple cutaneous Kaposi's sarcoma, BP = 170/100, no peripheral oedema, and scanty retinal haemorrhages on funduscopy. Investigations showed blood urea = 9.2 (normal = 2.8–7.6) mmol/l, normal serum potassium, and sodium. Liver function tests were normal apart from a serum albumin of 29 (normal = 35–50) g/l. The haemoglobin was 9.3 g/dl and white blood cell and platelet counts were normal. The CD4 count was 110 cells/µl and HIV viral load was 47 500 copies/ml. Complement C3 was 0.56 (normal = 0.9–1.8) g/l, C4 was 0.07 (normal = 0.1–0.4) g/l. Immunoglobulin quantification showed normal IgA, IgG = 23.2 (normal = 7.0–16.0) mg/l and IgM = 4.4 (normal = 0.4–2.3) g/l. Hepatitis B serology showed HbsAg+ and HbsAb+ (titre 1:3200). Urinalysis showed blood ++ and ++++ protein. Urine protein = 5.8 g/24 hours and creatinine clearance = 66 ml/min. Ultrasound examination showed normal sized kidneys. Histology of a renal biopsy showed membranoproliferative glomerulonephritis. Staining showed marked deposits of hepatitis B core and surface antigens (fig 1).

The patient was managed conservatively. HAART was commenced with efavirenz, lamivudine and zidovudine. The CD4 count was 110 cells/µl and HIV viral load was 47 500 copies/ml. Complement C3 was 0.56 (normal = 0.9–1.8) g/l, C4 was 0.07 (normal = 0.1–0.4) g/l. Immunoglobulin quantification showed normal IgA, IgG = 23.2 (normal = 7.0–16.0) mg/l and IgM = 4.4 (normal = 0.4–2.3) g/l. Hepatitis B serology showed HbsAg+ and HbsAb+ (titre 1:3200). Urinalysis showed blood ++ and ++++ protein. Urine protein = 5.8 g/24 hours and creatinine clearance = 66 ml/min. Ultrasound examination showed normal sized kidneys. Histology of a renal biopsy showed membranoproliferative glomerulonephritis. Staining showed marked deposits of hepatitis B core and surface antigens (fig 1).

This case illustrates the importance of considering non-HIV associated pathology in the HIV infected patient presenting with renal disease. It also shows the value of renal biopsy in identifying the precise cause of the presentation. The patient demonstrates that non-HIV hepatitis B associated renal disease may improve with HAART. The exact mechanism for this remains unclear.

BOOK REVIEW


This is a profound work describing the impact of venereal diseases and conventional morality in the build up to AIDS. It is written by an American, who has been personally affected by the impact of AIDS. He has written a book on topics in history such as disease, morality, and infectious diseases, which have had an impact on the public response to AIDS. Throughout, one senses the author’s very real loss in what to him and many others have been tragic times.

It is interesting to see how different the general public moral climate is in different societies in the developed world. Thankfully, some forms of evangelism do not have the same influence everywhere.

Does the historical part of the book tell the medical historian anything new? The answer is yes. And that is the gap between what has been known on this subject to academics for a long time and what others are only finding out about now. The chapters containing information on the church’s attitude to sexual morality, on leprosy, the early history of syphilis, bubonic plague, and masturbation illustrate the age old story of reactionary view against progress. It is difficult to judge the mores of the past through the views of the present.

It is a pity that the author seems to have given such prominence to those whose views resisted progress. Nothing is mentioned of liberal pioneers in venereal diseases from Van Swieten in the 18th century, through Ricord, Fowler in the next, Abraham Flexner (for the Rockefeller Foundation), Neisser, or indeed the enormous changes brought about by the Royal Commission on Venereal Diseases in Great Britain at the time of the first world war or such notable more recent Americans such as Kampeimeir, Stokes, or Earl Moore.

The chapters on America are particularly interesting from a European point of view. Learning about reactionary views always helps in developing any strategy for public knowledge and education. Well educated AIDS lobbyists have certainly had an impact in Europe as in the United States and are neatly described in this work. The bibliography, 14 pages, is particularly good.

This is a book questioning responses and conventional morality in respect, sorrow, and anguish. It is worthy of merit. It enables the modern reader to learn about difficult aspects of morality in relation to venereal diseases and sexuality which have always had more impact on the public than the practising physician.

MICHAEL WAUGH

General Infirmary at Leeds, LS1 3EX

www.sextransinf.com
NOTICES

International Herpes Alliance and International Herpes Management Forum

The International Herpes Alliance has introduced a website (www.herpsalliance.org) from which a downloadable patient information leaflet is available. Its sister organisation, the International Herpes Management Forum (website: www.IHMF.org) has launched new guidelines on the management of herpesvirus infections in pregnancy at the 9th International Congress on Infectious Disease (ICID) in Buenos Aires.

Pan-American Health Organization, regional office of the World Health Organization

A catalogue of publications is available online (www.paho.org). The monthly journal of PAHO, the Pan American Journal of Public Health, is also available (subscriptions: pubsvc@tsp.sheridan.com).

1st Asia Pacific Forum on Quality Improvement in Health Care

The 1st Asia Pacific Forum on Quality Improvement in Health Care will be held from 19–21 September 2001 in Sydney, Australia. Presented by the BMJ Publishing Group (London, UK) and Institute for Healthcare Improvement (Boston, USA), with the support of the Commonwealth Department of Health and Aged Care (Australia), Safety and Quality Council (Australia), NSW Health (Australia) and Ministry of Health (New Zealand). Further details: quality@bma.org.uk; fax +44 (0) 7383 6869.

41st St Andrew’s Day Festival Symposium on Therapeutics

The 41st St Andrew’s Day Festival Symposium on Therapeutics will be held on 6–7 December 2001 at the Royal College of Physicians of Edinburgh. Further details: Ms Eileen Strawn, Symposium Co-ordinator (tel: 0131 225 7324; fax: 0131 220 4393; email: e.strawn@rcpe.ac.uk; website: www.rcpe.ac.uk).

10th International Congress on Behçet’s Disease will be held in Berlin 27–29 June 2002

Further details: Professor Ch Zouboulis (email: zoubbere@zedat.fu-berlin.de).

5th World Congress of Perinatal Medicine, 23–27 September 2001, Palau de Congressos de Barcelona - Avda Maria Cristina s/n, Barcelona, Spain

Further details: Dr Francesc Figueras, Congress Promotion Secretary (fax: +34.93.451.74 38; website: www.perinatality2001.com).

Second International Conference on Sexual Health, to be held in Bangkok, Thailand on 23–26 February 2002. Calls for abstracts deadline 1 September 2001

Further details: European Secretariat, Dr Richard Burack (tel: +44 (0) 20 8599 8029; email: siamcare@aol.com).

International Conference on HIV/AIDS 16–19 December 2001, Mumbai, India

Further details: Dr Chander P Puri, President, Indian Society for Study of Reproduction and Fertility, Institute for Research in Reproduction, Jehangir Merwanji Street, Parel, Mumbai 400012, India (Tel: 4137730 (Direct), 4132111-2-6-7; fax: 091-022-4964853 or 091-022-4194912; e-mail: vinch@vsnl.net.in OR dirirr@vsnl.com).

10th International Symposium on Human Chlamydial Infection, 16–21 June 2002, in Antalya, Turkey

The scientific programme will encompass the breadth of chlamydial research from clinical and epidemiological studies to molecular and cell biology of all species of Chlamydia. Further details: Professor A Demir Serter, Department of Clinical Microbiology and Infectious Diseases, Ege University, Faculty of Medicine, 35100 Bornova, Izmir, Turkey (Fax: 90 232 343 71 30; e-mail: ISHcIX@itsa.ucsf.edu).

20th World Congress of Dermatology, Paris, 1–5 July 2002

Further details: P Fournier, Colloquium, 12 rue de la Croix St Faubin, 75011 Paris, France (Tel: +33 1 44 64 15 15; Fax: +33 1 44 64 15 16; Email: p.fournier@colloquium.fr; Website: www.derm-wcd-2002.com).

Mechanics for Africa—training school in Africa to bring health awareness into curriculum

Mechanics for Africa is a training school for motor mechanics in Zambia, giving young Africans skills for life. This charitable initiative was recently launched to help impoverished Africans break out of the persistent reliance on outside aid to help them become self reliant. Mechanics for Africa (MFA) will set up a school for motor mechanics in Ndola, Zambia, in association with Milford Baptist Church in Surrey. MFA (charity on outside aid to help them become self reliant. Mechanics for Africa—training school in Africa to bring health awareness into curriculum

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The project asks companies, organisations, and individuals to become financially involved at various levels either through donation, tax reclaimable gifts, or loans.

MFA is the brainchild of Charles and Sharonne Watt who have worked on aid projects in southern Africa for 3 years and had the opportunity to evaluate the needs of local and wider communities.

Part of the holistic curriculum will help introduce the need for health awareness among ordinary local people, particularly with HIV/AIDS and other STDs, diarrhoea and resultant dehydration. Other topics to be covered will include malaria (still the biggest killer, especially among children), nutrition, first aid, hygiene, etc. All this to be part of a balanced “life skills” curriculum which will empower students to improve their lives; and those of their families by inviting them to participate in these studies.

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