Abstracts dos Conferencistas Estrangeiros

HEMISPHERE - WEST end-1997
HIV PREVALENCE REVIEW:
Brazil in context of 125 countries / territories

BERNARD, Roger-Paul MD MSPM FMH
Director, AIDS FEEDBACK & DEM-EPI
Liaison, UN and NG Organizations

This report is a 3-year update from end-1994 to end-1997 of the best HIV prevalence estimates by country/territory as issued by WHO/GPA (end-1994) and UNAIDS/WHO (end-1997). AIDS FEEDBACK (AF) has worked up the first series with a double panel on *HEMISPHERE-West appearing in the American Journal of Public Health (AJPH), June 1997. The aim is to updated the figures and the two panels on Hemisphere-Est.*

The update estimate series for end-1997 appeared in the UNAIDS/WHO document: REPORT on the global HIV/AIDS epidemic, June 1998 and was available to some 14,000 delegates to the 12th World AIDS Conference in Geneva, 28 June to 3 July 1998. The sole source for this analytical display pertains to its annex: pages 64-66: Population 1997; estimated number of people living with HIV/AIDS, end 1997, etc.

The following steps are to be implemented:

1. Calculate *crude HIV prevalence rates* for adults (15-49 years) and express them as rate per 10,000 adults.
2. Proceed with a HIGH-low ranking of the rates for the three macroregions (Continental África/The Américas / EURO West / East); then introduce biranking by fitting the three macroregional rank systems along a HEMISPHERE-WEST HIGH-low ranking sequence. Each country/territory carries thus a *dul rank.* Example: Brazil carries PAHO rank 13 (out of 29), but HEM-WEST rank 54 (out of 126) for a best estimate HIV prevalence rate of $63.1/10^4$. This birank system will be available to the delegates. For ad libitum Rate Ratio CHAINS!
3. Application of the **8 level / factor 4* classification* to the HEM-EST birank system permits to grasp at a glace the entire rate struture for the 126 countries/territories (amount by space). May interest decision marks.
4. The 9-cell distribution (by space/amount) of the 126 countries/territories is:

HIV PREVALENCE LEVELS	CONTINENTAL ÁFRICA	THE AMERICAS	EUROPE W-E/C. ASIA	HEMISPHERE WEST
HIGH (Lev 1-3)	41	19	2	62
INTERMEDIATE (Level 4)	4	7	12	23
LOW (Lev 5-8)	6	3	32	41
ALL LEVELS (1-8)	51	29	46	126

and will be reviewed in detail. Brazil is amoung the 19 PAHO countries/territories falling into "HIGH HIV PREVALENCE".

5. A new colour document is to be developed giving in Panel A a 'three-layer' overview for the three macroregions ranked in rates from High to low (from left to right) along the corresponding Adult Population abscissa (DEM-EPI), while *Panel B* will display the corresponding 29 countries/territories pertaining to THE AMERICAS (from Canada to Chile).

This review of 2.35 billions population wih 1.17 billion being adults (15-49 years) with their estimated 23.57 million living wih HIV/AIDS en-1997, leads to a commanding conclusion/recommendation. PAHO in general, and Brazil in particular, shoul learn from the *now documented HIV disaster in Africa.* Information / care / prevention schemes have to be further expanded to bring about an early inflection of the annual incidence of new HIV infections. This expanded work should start in the *last quarter of 1998:* to favourably affect the next UNAIDS/WHO HIV Prevalence Estimation round.

THE GROWING F-DGES OF IUVIAIDS

PHILPOT, Dr. Ross B. Med Sc (Honours) MBBS (Adelaide) FRACP MASM PPACSHP FAFPHM
Secretary General, International Union Against Sexually Transmitted Infections (IUSTI/IUCITS). South Australian Infectious Diseases Services, 135 Hutt Street, Adelaide, South Australia, 5000, Australia
Tel: +61-8-8232 4511 Fax: +61-8-8379 E-mail: carlisle@wantree.com.au

INTRODUÇÃO: Data from WHO and UNAIDS reveal that in 1997 India was the nation with most adults age 15 to 49 years having HIV/AIDS with 4.1 million. South Africa is next with 2.8 Brazil with 0.6 and Mexico 0.2 have the most in Latin America, followed by 0.1 each in Argentina, Dominican Republic, Venezuela, Colombia and Peru.

RESULTADOS, DISCUSSÃO E CONCLUSÕES:

EPIDEMIOLOGY. With total population of 476 million people in Latin American, there is potential for much further spread of HIV with many millions more deaths from AIDS. Prevention is therefore especially necessary in this region.

DETECTION of HIV is improving with simpler, cheaper HIV antibody tests, and more accurate viral load assays. Screening of groups such as attendees of antenatal clinics and well women's clinics is becoming routine, and should be the case in private STD practices. Novel testing methods are being introduced eg. urine tests for HIV, Vaginal Tampon Tests and better laboraty methods for a wide range of STIs.

TREATMENT of HIV is complex, toxic, prolonged, expensive, not widely acessible, and not yet curative. Adherence to treatment protocols is therefore a major issue. Zidovudine in 1985, didanosine (ddI) in 1992 and lamivudine (3TC) in 1995 began to turn this rapidly fatal infection into a chronic, partial controlled condition. In the 1990s triple/quadruple combination therapy can eradicate HIV from the blood. Eleven drugs are already approved, and many others being developed. I advocate carefully individualised decision making about when to introduce Highly Active Anti-Retroviral Therapy (HAART). Consider starting when HIV RNA levels exceed 10,00 copies/Ml, and when CD4+ lymphocyte counts are below normal.

VACCINATION against STIs is so far only widely used for hepatitis B virus. This provides a useful model for future anti-HIV vaccines. Vaccination against all STIs needs to be targeted to pre-adolescent boys and girls.

RESEARCH, both basic and applied, is essential to understand and implement best practices in diagnosis, treatment, and prevention of HIV/AIDS and all other STIs. Good science is the essential pre-requisite to success, with the ingredients of microbiological, human biological, pharmacological, behavioral, and social science.

EDUCATION is equally important and should be targeted at Health Care Workers and other profissionals, patients and their carers, people at risk and the general community.

RISK SETTINGS are keys to determining risky behaviour, safe behaviour, strategies for testing, and treatment choices. Prostitution involves the commercial sex Workers (CSW), SW Clients and SW managers; all must take appropriate actions to prevent acquisition and transmission of infection. Medical and dental practices require HIV/HBV/HCV Occupational Health and Safety procedures. Sexual Assault is another special issue.

BEHAVIOUR determines acquisition of infection. Lifelong behaviour patterns are initiated in pre-school boys and girls. Cognitive behaviour methods rely on logical choices by individuals and are therefore doomed to failure. Adolescents and young adults without strontg faamily values are especially at risk. Risk behaviour includes not only unprotected sex, but choice of partners, drug use and other factors. Injecting drug use has been responsible for 39% of HIV infecctions in Argentina and 24% in Brazil and is important in Uruguay as weel. Condoms for men and women, spermicides and microbicides are all protective when used properly.

INFORMATION TECHNOLOGY is becoming more important in the 1990s and into the 21 st Century. Books, journals, newsletters, CD ROMs. e-mail and Internet websites can all be useful.

ORGANISATIONAL RESPONSES. These include Local Associations for DST/Sexual Health; National Associations; College of Sexual Health Practitioners (Australasia); Regional Organisations (eg. Latin American and Caribbean Council of AIDS Service Organisations)(; Branch Committees (eg. IUSTI = ULACETS); and IUSTI World Executive Committee; International Aids Society (IAS); World Health Organisation (WHO) and Pan-America Health Organisation (PAHO); UNAIDS; the United Nations Development Programme, other bodies, and the Conferences they sponsor eg. World IUSTI STD/AIDS Conferences, and AIDS Meetings eg. Vancouver 1996, Latin American Congress 1997, and Geneva SOCIAL ORDER is essential, including effective structures and functions of Governance; Consulting with communities affected and at risk; involving people with HIV/AIDS (PWA) and their carers; Empowering women and other disadvantaged people; relieving Poverty; and overcoming Ignorance and Prejudice.

LIFE AND DEATH MATTERS. Dignified death requires good Palliative Care. Euthanasia and medically assisted suicide are controversial options. Humour can help (eg. International Bienal of Humours in São Paulo, sponsored by the Brazilian Ministry of Health).

IMPORTANCE OF ROUTINE SCREENING FOR ASYMPTOMATIC *CHLAMYDIA TRACHOMATIS* INFECTIONS IN WOMEN

WITKIN, Steven S., Division of Immunology and Infectious Diseases, Depto. of Ob/Gyn, Cornell University Medical College, New York, NY, USA.

Most women who are infertile due to blocked fallopian tubes never had signs or symptoms of a genital tract infection. Most, however, have serological evidence of a C. trachomatis infection and it is clear that this organism is the major cause of tubal infertility. At least 75% of women, and 50% of men, infected with C. trachomatis are asymptomatic, do not seek medical help, and continue to infect new sexual partners. Chlamydia ascends the female genital tract and infects epithelial cells in the fallopian tubes and uterus. The imune response to this upper genital tract infection contributes to its pathogenicity.

Production of interferon-y in response to the infection suspends the intracellular life cycle but does not kill the organism. In this persistent state, C. trachomatis produces at high levels a single protein, the 60kD heat shock protein (hsp60). There is also a human hsp60 with extensive homology to the chlamydial hsp60. Therefore, onde consequence of a persistent upper genital tract chlamydial infection is the possible development of autoimmunity to one's own hsp60. Human hsp60 is expressed at high levels in early pregnancy by both the embryo and the maternal decidua. This could reactivate lymphocytes previously sensitized to the chlamydial hsp60 and lead to immune rejection of the embryo. Women undergoing in vitro fertilization who are sensitized to hsp60 have a lower success rate than do unsensitized women. I is critical to diagnose and treat early stage asymptomatic chlamydial infections before the organisms ascend to the upper genital tract and sensitivity to hsp60 develops. A new technique, self collection of vaginal introital specimens, is as sensitive as endocervical sampling for C. trachomatis, when detection is by polymerase chain reaction (PCR). This should greatly increase the number of women who can be tested and treated for a chlamydial infection and hopefully will decrease the asymptomatic spread of this organism.

AZITHROMYCIN IN SEXUALLY TRANSMITTED INFECTIONS

Michael Waugh, President
International Union Against Sexually Transmitted Infections (IUSTI)

General Infirmary the University of Leeds, Leeds, UK.

Azithromycin is an azalide macrozide with high tissue penetration, extended half life and acid stability whilst retaining activity against STD organisms, it is well absorbed and effective against intracellular organisms in a single dose.

It has important therapeutic results in mcrolide-sensitive N. gonorrhoeae, C. trachomatis infection, non gonococcal-non chlamydia /genital infection, chancroid and, granuloma inguinale (donovanosis).

Studies in syphilis suggest oral dosage of 3g azithromycin over 11 days may be effective as prolonged intramuscular penicillin. Further controlled trials are required.

These exciting studies show useful clinical effectivity for azithromycin in the treatment of bacterial S.T.Ds.

In opportunistic infections in HIV disease, azithromycin is well known in *the* prevention of sinusitis, some respiratory tract infections and urinary tract infections. It has potentiality and therapeutic advantages in toxoplasmosis.

Azithromycin is a most useful therapeutic advance in S.T.Ds and HIV.

SUMMARY

The Program for the Topical Prevention of Conception and Disease (TOPCAD) was established in October 1993 with an overall mission to develop and evaluate new woman-controlled vaginal methodology that prevents sexually transmitted diseases (STDs) and/or conception.

TOPCAD's specific goals and objectives are the following:

Product Development

- Develop and test novel active ingredients and formulations, and perform preclinical and clinical studies.
- Create collaborations among scientists and clinicians with broad-based expertise from a variety of backgrounds, including universities, the industry and government, to accelerate the pace of vaginal topical development and evaluation.

International Collaboration and Training

- Forge an international collaborative effort, especially with scientists from developing countries, to address the needs of women in those countries.

Consumer Information

Study consumer preference and use of vaginal topicais and the optimal delivery of newly developed methodology.

Sexually transmitted diseases and unwanted pregnancies are major concerns in both developed and developing parts of the world. These problems have led to much suffering and great dernands on the fragile support systems of many countries. The current AI DS pandemic has focused significant attention on STDs and their impact.

Methodology to prevent STDs is not available with the exception of condoms. Current contraceptives often do not address the variations in life style, cultural and socioeconomic conditions, sexual frequencies, health risk factors and other situations of many women.

Vaginal formulations can be developed that prevent STD infections and/or conception. Such methodology is under the control of the woman, used only when she expects to engage in intercourse. Other advantages of vaginal formulations include minimized systemic exposure to active ingredients and increased availability of active agents during intercourse when protection is most needed.

Tremendous potential exists for rapid progress in the areas of both STD prevention and conception through the development of vaginal topicals. TOPCAD is an organized, coliaborative effort to actualize this potential and offer women expanded health care options.

ACCOMPLISHMENTS

Since its inception in October 1993, TOFICAD has made significant and continuous progress toward its goais and objectives.

- Seven novel active ingredients have been discovered in laboratory studies that prevent conception (equaily or more effectiveiy than nonoxynol-9), and inhibit infectivity by human immunodeficieney virus (HIV), herpes simplex virus (HSV), gonococci and chlamydia. Unlike nonoxynol-9, these compounds are not cytotoxic, do not inhibit the growth of lactobacilli and, those tested, are not irritating to the rabbit vagina.
- Two vaginal formulations have been developed that are long acting, are less messy than existing formulations, form a protective film over the vagina and cervix and minimize vaginal irritation of the active ingredient. One of these formulations also has strong acid-buffering activity.
- Pre-IND development of two of the novel active ingredients is in progress and the compounds are expected to enter clinical trial in the near future. Clinical testing with one of the formulations is ongoing; the other wili enter clinical trial soon.
- Tests required to evaluate novel agents for their potential contraceptive and antimicrobial activity have been established, including: (1) spermicidal and sperm function inhibition assays; (2) rabbit vaginal contraceptive tests; (3) anti-HIV, anti-HSV, anti-gonoccal and anti- chiamydial tests; and (4) lactobacillus inhibition assay.
- Safety tests have been instituted, including rabbit vaginal irritation, penile, dermal and eye irritation, acute and subchronic toxicity, teratological and other reproductive assays as well as pharmacokinetic/pharmacodynamic studies.
- An algorithm with decision points has been prepared providing consistent inclusion or elimination criteria for antimicrobial and contraceptive activity, and for safety, in determining whether to carry compounds forward into clinical trials.

- A chemical laboratory has been established for GMP synthesis of compounds.
- Experience has been accrued regarding preclinical FDA requirements for the preparation and submission of INDs and the initiation of Phase I and II trials.
- A clinical model is being established to screen the antiviral properties of vaginal formulations in a Phase I clinical trial.
- Studies are ongoing to evaluate consumer preferencer of vaginal formulations.
- Research and clinical collaborations are ongoing with investigators at universities, governmental agencies and the pharmaceutical industry.
- Joint ventures have been established with scientists from developing countries.
- Support has been received from a variety of government and private organizations, and the industry.

ORGANIZATION

TOPCAD is administeredby a director, Lourens J. D. Zaneveld, D.V.M., Ph.D., a co-diretor, Donald P. Waller, Ph.D., D.A.B.T., a research director, Robert A. Anderson, Ph.D. and a medical director, Sebastian Faro, M.D., Ph.D. These leaders guide TOPCAD's efforts to develop new vaginal formulations that prevent conception and disease.

TOPCAD is divided into five areas of responsability:

- **Administration and Resources**
  Dr. Zaneveld is responsable for TOPCAD's overall administrative support, including funding, and he ensures this support is available to all area managers for the efficient and rapid completion of their assigned tasks. TOPCAD serves as a clearinghouse for new products being developed for vaginal STD prevention and contraception by providing a communication link between investigators, companies and funding surces.

- **Discovery and Testing**
  Discovery and testing is managed by Dr. Anderson. This area focuses on identifying potential new leads and performance of *in vitro* and *in vivo* contraceptive screens, *in vitro* testing against human immunodeficiency virus (HIV), herpes simples virus 9HSV), gonorrheal and chlamydial organisms, and initial safety studies. This work is conducted through in-house capabilities and a network of collaborating investigators.

- **Preclinical Development**
  Preclinical development is managed by Dr. Waller. This area facilitates the GMP synthesis of active ingredients, the development of formulations, product manufacture, and preclinical safety testing. The preparation of an IND for new products, including pre-submission meeting and communications with the FDA area undertaken, as is the identification and performance of FDA-requered safety testing to obtain approval for Phase 2 and Phase 3 clinical trials.

- **Clinical Trials**
  Clinical trials area managed by Dr. Faro. TOPCAD is establishing a network of experienced clinical investigators and sites to perform the required studies of new vaginal methodology for both STD prevention and contraception. The performance of clinical trials is assisted by identifying, organizing and monitoring clinical sites.

- **Consumer Studies**
  Ongoing consumer studies aim at the identification of the formulations and delivery preferences of women for vaginal methodology. This will be an international effort to address women's diverse preferences and needs.

BIOGRAPHICAL SKETCHES OF THE DIRECTORS

Lourens J. D. Zaneveld, D. V. M., Ph.D. is the director of TOPCAD. He holds an endowed professorship in the Department of Obstetrics and Gynecology and is professor in the Department of Biochemistry at Rush University, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL. Dr. Zaneveld is also the Director of the Section of Obstetrics and Gynecology Research and was the Research Director of the Women's Health Research Center, a clinical drug testing site. He has worked in the areas of conception, contraception, and drug/device development for almost three decades. Dr. Zaneveld was t rained as a basic scientist after completing veterinary school and has conducted research from the very basic stages through clinical trials. Dr. Zaneveld's projects have required efforts in the areas of physiology, biochemistry, synthetic chemistry, engineering, toxicology and pharmacology, and included obtaining FDA approval for clinical trials as well as the supervision of such trials. He has received more than 50 grant/contract awards from the govermnent, the industry and foundations. Dr. Zaneveld is a frequent speaker at national and international meetings.

DIAGNOSIS OF GENITAL ULCER DISEASE

Morse, Stephen A.
Division of AIDS, STDs, and Tuberculosis Laboratory Research
Centers for Discase Control and Prevention
1600 Clifion Rd., Atlanta, Georgia 30333, U.S.A.
E-Mail: saml@cdc.gov

INTRODUCTION: Genital ulcer disease (GUD) is an important health problem in many developing and developec country settings. The etiology of GUD varies both geographically and temporally. The three primary agents causing GUD in STD clinic patients are *Treponema pallidum, Haemophilus ducreyi,* and herpes simplex virus (HSV); less common causes of GUD are *Calymmatobacterium granulomatis* and *Chlamydia trachomatis.* Laboratory tests for the detection of these organisms are relatively insensitive and are often not available in clinics where GUD patients are seen. For that reason, syndromic algorithms have been proposed to aid in the management of patients with GUD.

OBJECTIVES: The objectives of this presentation are: 1) to discuss the sensitivity and specificity of standard laboratory tests for the diagnosis of GUD; 2) to disCUSS the sensitivity, specificity and accuracy of the clinical diagnosis of GUD; 3) to discuss the performance of syndromic algorithms for the diagnosis of GUD; and 4) to discuss the impact of HIV infection on the clinical and laboratory diagnosis and etiology of GUD.

METHODOLOGY: A multiplex PCR (M-PCR) amplification assay, which can simultaneously detect the presence of *T **pallidum,** H. ducreyi,* and HSV in a single ulcer specimen, was used to determine the etiology of GUD, and assess the performance of syndromic algorithms, conventional laboratory tests, accuracy of a clinical diagnosis, and to study the association between GUD and HIV in STD clinic populations with varyíng prevalences of HIV infection. Genital ulcer specimens were obtained from consecutive patients with GUD. The criteria used for clinical diagnoses were defined prospectively. A diagnosis based on clinical findings was made prior to knowledge of the results of microscopic or laboratory tests and treatment was dispensed according to established guidelines. Serum specimens obtained by venipuncture were tested for antichlamydial antibody by microimmunofluorescence and syphilis by the quantitative RPR and FTA-ABS tests. HIV serology was done by ELISA with confirmation by Western blot and DFA. HSV type-specific antibodies were determined by Western blot analysis of recombinant, baculovirus expressed HSV glycoproteins GI and G2 from HSV-1 and - 2, respectively. A definitive diagnosis by conventional laboratory tests was based on the results of darkfield microscopy for T. *pallidum,* Giemsa-stained smear for donovan bodies, and on the results of cultures for *H. ducreyi,* HSV, and *C trachomatisand* MIF for LGV. Two syndromic management protocols for GUD were evaulated and their efficacy in a defined population compared with that which would be recorded using a disease-specific approach.

RESULTS. Results using M-PCR indicated that the etiology of GUD varied geographically as well as within a given country. Conventional laboratory tests for the diagnosis of GUD were relatively insensitive. The marked differences in performance that were observed within and between countries sudeste that training may be an important factor. M-PCR identified an etiology for GUD in significantly more patients that conventional laboratory tests as well as patients infected with more that one agent. A clinical diagnosis was also insensitive; the specificity of a clinical diagnosis was reduced in patients infected with HIV. Infection with HSV- 2 was strongly associated with HIV infection patients with HIV were more likely to have recurrent HSV infections. As the HIV epidemic progresses, the proportion of GUD caused by bacterial agents is decreasing and the proportion due to HSV is increasing. Poor sensitivity, specificity and predictive values were recorded using the disease-specific protocol. In contrast, the two syndromic managernent protocols provided adequate treatment for approximately 90% of patients with GUD) while overtreating syphilis.

NUCLEIC ACID AMPLIFICATION TESTS FOR THE DIAGNOSIS OF SEXUALLY TRANSMITTED DISEASES

Morse, Stephen A.
Division of AIDS, STDS, and Tuberculosis Laboratory Research
Centers for Disease Control and Prevention
1600 Clifton Rd., Atlanta, Georgia 30333, U.S.A.
E-Mail: saml@cdc.gov

INTRODUCTION: The introduction of nucleic acid amplification (NAA) tests has markedly improved out ability to diagnose and manage sexually transmitted infections, particularly those due to *Chlamydia trachomatis*. More irnportantly, the increase in analytic sensitivity afforded by this technology has enabled the use of noninvasive specimens, such as first void urine or self-obtained vaginal swabs, for sereening asyrnptomatic low-prevalence populations and hard- to-access populations.

OBJECTIVES: The objectives of this presentation are: 1) to discuss advances in STD diagnosis through an improved understannding of the applications and limitations of NAA tests; 2) to discuss the use of NAA tests with noninvasive specimens, 3) to discuss the cost- effectiveness of NAA tests and compare their cost with that of other technologies; and 4) to discuss the limitations and problems with the use of NAA tests.

RESULTS AND DISCUSSION: Commercial development of NAA tests for STDs has focussed primarily on the organisms responsible for cervical and urethral discharge, *C. trachomatis, and Neisseria gonorrhoeae*. NAA tests are the most sensitive and specific assays availabie for the detection of *C. trachomatis,* if they are performed according to the manufacturer's instructions. They are also sensitivo when used with less traditional specimens, such as first void urine (men and women) and vaginal or introital swabs. The three NAA tests approved for use in the U. S. are Amplicor [polymerase chain reaction assay] (Roche Molecular Systems), LCX [ligase chain reaction assay] (Abbott Laboratories) and AMP CT [transcription mediated amplication assay] (GenProbe). There are additional tests that are available in Europe but have not been FDA approved for use in the U. S. These include SDA (Becton Dickinson) and Hybrid Capture (Digene). Laboratory evaluations have suggested that these tests are equivalent in sensitivity and specificity. However, the various technologies are sensitive to differential inhibition by inhibitors that may be present in the clinical specimen. Advantages of NAA technology are specimen transport and multiplexing in which targets from multiple agents responsible for a particular syndrome can be amplified and detected. Nucleic acid amplification tests have been designed to minimize the possibility of contamination, which because of the high sensitivity of these tests, may produce a false-positive result. Nevertheless, there is some reticence to replace less sensitive tests with this new technology. Some of the concerns raised involve technology issues such as the potential for false positive results as well as false negative results due to the presence of inhibitors, Other concerns are infrastructure and personnel related such as through-put, hands-on time and time needed to get results. Cost is also a major issue for many clinics and laboratories and strate-ics have been developed and evaluated for reducing the cost of testing.

NAA tests are not the only solution to the diagnosis and prevention of STDs. Additional tests are needed for the diagnosis of STDs at the point of first encounter, with minimal delay between diagnosis and treatment. Affordable diagnostic tests, which are rapid, sensitive and specific are needed for use in resource-limited settings where most STDs are seen. Some of the tests currently under development involve adapting nucleic acid-based technology to a user- friendly strip format.

BACTERIAL VAGINOSIS: THE MOST FREQUENT GYNAECOLOGICAL INFECTION

Steben, Marc
Direction de La SANTÉ PUBLIQUE,
RÉGIE RÉGIONALE DE LA SANTÉ, MONTRÉAL-CENTRE.
CLINIQUE DE LA VULVE, PAVILLON NOTRE-DAME.
CENTRE HOSPITALIER DE L'UNIVERSITÉ DE MONTRÉAL. E-mail: marc.steben@ sumpatico.ca

Bacterial vaginosis (BV) is not only the most frequent gynaecological infection but is now recognized as a disease associated with many complications such as cancer of the cervix, PID, premature labor and post-partum sepsis. BV is a symdrome where lactobacilli are greatly diminished and the bacteria of the flora increased in number. The diagnosis is not based on a single positive test but on the presence of 3 out of 4 of the following findings: pH greater than 4,5 positive whiff test, grayish homogeneous discharge and clue cells grater than 20% of the total epithelial cells. Scoring the flora by Nugent's criteria is used in research settings. BV shares symptoms with candida (itching), trichomonas (odor), pain during intercourse (desquamative inflammatory vaginitis) and discharge (chlamydia, gonorrhea). BV shares features with trichomonas and DIV (ph greater than 4,5) and whiff test wakly positive with trichomonas. So diagnosis related only to symptoms without an exam or clinical exam without at least one of the following pH, whiff test or wet mount or gram stain carries a high risk of false-negative diagnosis. Treatment has to be specific and is accompanied by a high rate of failure because treatment is not sufficient to revert the flora to normal. Metronidazole and clindamycin in case of side-effect or intolerance to metronidazole are the preferred drugs. Tropical therapy may decrease the impact on the colonic flora and has a low rate of systemic side-effect but has not been shown to decrease the rate of complication in pregnancy. Treatment of the sexual partner has never been shown to decrese the recurrence rate in both isolated and recurrent infection. In some patients frequently recurring BV leads to distress and is best adresse with metronidazole weekly prophylaxis. Screening before uper genital tract manipulations or during pregnancy to reduce morbidity and complications is the subject of intensive trials.

BV is a common infection that may be easy to underdiagnose if good clinical practices are not applied. The frequency of this condition and it's complication rate warrants more attention from the Helth-Care providers.

HUMAN PAPILLOMA VIRUS INFECTIONS: HOW NEW FINDING APPLIES TO YOUR

Steben, Marc

New laboratory tools have helped increase our knowledge of this frequent viral STD. This STD was felt to be lifelong but non oncogenic strains may be self limited as up to 85% may clear spontaneously the virus without any treatment. High or intermediate oncogenic risk strains of HPV may establish a lifelong infection. Treatment of lesions is not associated with disappearance of the virus. Treatment modalities include destructive methods as cryotherapy laser, trichloroacetic acid and electrocautery, multiplication blocage of the virus by podophyllin or podophyllotoxin and imune stimulation by interferon or imiquimod. Comparative evaluation of the various modalitier of therapy are rare and flawed by short follow-up. Imiquimod has been reported having good sucess rate in nonkeratinized lesions especially in women. A low relapse reate has also been reported with this immunomodulator compound. The fact that it may be applied by the patient at home adds to it's efficacy features. Screening for other STDs and discussion about safer sexual practices are warranted for these patients. The long-term neoplastic sequelae associated with this infection calls for a sensitive way to detect effectively the patiens most at risk. Reliance on Pap smear is important but lack sensitivity compared to newer gene amplification technology or in-situ hybridization tecnique. In women with signs or symptoms of cervical cancer colposcopy with directed biopsies is the way to go. Women showing features of HPV infection on their Pap smear have usually been infected many years ago and this is not necessarily a sign of unfaithful partner. These women represent a very remote risk of transmission to a new sexual partner. Newer techiniques (PCR, ISH) are associated with major savings by triaging women with HPV much more effeciently especially in the case of ASCUS on the Pap Smear. New findings are showing that anal canal cancer in those having receptive anal intercourse is increasing at an alarming rate.Adaptation of the Pap smear technique and the anal colposcopy may be advised in those who had receptive anal intercourse since findings quite similar to those on the cervix have been demonstrated in the anus.

CONCLUSION: HPV infection is one of the most common std. It's association with cancer ask for better diagnosis and follow-up of these persons.

GENITAL HERPES: WHEN ATYPICAL IS TYPICAL

Steben, Marc

The knowledge about genital herpes (GH) natural history has increased tremendously in the past yars. GH has amongst the highest prevalence and incidence rates of STDs. Risk factors for GH are age, number of partners, being a woman, prior exposition to HSV-1, asymptomatic excretion of the virus, no barrier method, recurrences frequency, cocaine use, poverty and lack of education. Previosly we knew that Gh wa sknown in no more than 20% of seopositive even if 60% had incorrectly diagnosis of their GH symptons. GH is frequently misdiagnosed has yast, heat rash, irritation caused by soap, hygiene product, acne, boil, hemorrhoids, lack of lubrication during sex and much more. The figureabout unknown carriage of HSV might be even higher: in NHANES III only 9,2% of seropositive knew they had GH. So a combination of being unaware of the serostatus, bening symptoms, short lived signs and sumptons, ease of self-treatment, difficultiers in seeign the patient in the limited time frame of signs and phusician not taking good history combine to explain the low level of diagnosis for GH. Also silent acquisition of GH from partial protection by previous HSV-1 infection of the oro-labial area is very common and help explain why the first episode of herpes is a recurrence rether than a primary or non-primary!! Lesions susceptible to be GH include any lesions, especially if recurrent, on S2-3 dermatoma, with or without prodrome. In the spectrum of first presentation are recurrence, primary and non-primary episodes. In the spectrum of recurrence are asymptomatic episodes (asymptomatic excretion and sub-clinical) and sumptomatic recurrences (with or without prodrome, typical or atypical, single-side presentation) Asymptomatic shedding might occur more than 1% of the days. We had known for many years that HSV-1 infected the oro-labial area while HSV-2 infectede mostly the genital area. But now we are seeing more and more of type I in the genital area particularly in women. But recurrences from HSV-1 might be 6-10 time less frequent than type 2. No data exists for type-specific asymptomatic shedding. Neonatal herpes might be easy to diagnose if the mother had previous GH especially if acquired durin this pregnancy and in the cutaneous form rather than the neurological form. Oro-labial infection might be difficult to diagnose if not on the muco-cutaneous jonction of the labia. Recurrent lesions on the mandibular branch of the Vth cranial nerve.

CONCLUSION: Because of the synergy of acquisition, transmission and evolution between hiv, there's a revived interest in GH.

SEXUAL COUNSELLING: THERE'S MORE TO DO AFTER YOU DIAGNOSE GENITAL HERPES

Steben, Marc

While the lesions of genital herpes (GH) might be painful, the psycho-sexual and social stigma are often worse in many of these persons. ASHA has publixhed the results of a large scale survey (n=2770) of the readership of The Helper. Major dissatisfactions about phusicians were expressed: ifonly 35% of health-care provider were rated poor answering questions, 64% were rated poor advising on emotional issues and 57% asking about sexual practices. Feelings and mood have to be carefully evaluated because many patients have complicated emotional responses to a herpes diagnosos: 82% had depressio, 75% fear of rejection 69% feeling of isolation, 55% fear of being <<, and 28% feelings of self-destruction. We may believe that these reaction will abate over time but in reality they stay quite high in many persons: during recurrences 52% had depression, 52% fear of rejection, 36% feeling of isolation, 28% fear of being <<unmascked>>, and 10% feelings of self-destruction. When questionning a person with herpes we have to be aware of the mental health: even if the lesions are on the genital there is a mâjor impact of GH on self-estem, body image and quality of life. Since HSV can be transmitted to a partner even in a stable, faithful and monogamous couple, sexual counselling can be difficult because of hints of adultery felt because of the STD status of HSV . Sexual counselling has to include information about the disease in form of a leaflet, STD hot-line phone number or referral to a self-help group affiliated or not to ASHA principles. Exploration of a person's understanding of the disease is also important because of the misrepresentation and misconceptions about the infection running in the community. Partner notification is controversial but screening for other STDs might be warranted, Safer sexual practices have to be discussed. Emphasis on negociation of safer sexualprctices has to be emphassized since the level of comfort may vary from one couple to another. Office-based discussion with the couple is frequently needed to staighten differresnces of interpretation.

Liability issues may arise: because the fear of rejection, persons may be tempted not to broach the issue. But in court decisions, a person not disclosing the issue may be liable especially when safer sexual practices are not used. By decreasing recurrences and viral shedding suppressive therapy has beeen shown to increase the quality of life and may help adjustment to the condition. The use of condom and spermicidal agents may decrease risk of transmissiom.

CONCLUSION: Sexual counselling is a very important part of the consultation after a diagnossis of GH. FAliling to do so contributes to the mala djustment suffered by persons with GH