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HIV Education Prison Project

HEPP NEWS

HIV EDUCATION PRISON PROJECT

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ABOUT HEPP

HEPP News, a forum for correctional problem solving, targets correctional administrators and HIV/AIDS care providers including physicians, nurses, outreach workers, and case managers. Published monthly and distributed by fax, HEPP News provides up-to-the-moment information on HIV treatment, efficient approaches to administering HIV treatment in the correctional environment, national and international news related to HIV in prisons and jails, and changes in correctional care that impact HIV treatment. Continuing Medical Education credits are provided by the Brown University Office of Continuing Medical Education to physicians who accurately respond to the questions on the last page of the newsletter.

Faculty Disclosure

In accordance with the Accreditation Council for Continuing Medical Education Standards for Commercial Support, the faculty for this activity have been asked to complete Conflict of Interest Disclosure forms. Disclosures are listed at the end of articles. All of the individual medications discussed in this newsletter are approved for treatment of HIV unless otherwise indicated. For the treatment of HIV infection, many physicians opt to use combination antiretroviral therapy which is not addressed by the FDA.

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Prisons and Jails Worldwide: Update from the 13th International Conference on AIDS

Elizabeth Stubblefield, *Managing Editor, HEPP News*
David Wohl*, *Director, Central Prison, Infectious Disease Services, University of North Carolina*

Delegates from resource-rich nations attending the 13th International AIDS Conference in Durban, South Africa last month confronted the unfathomable suffering HIV is causing in South Africa and other developing nations. However, as desperate as the situation is in many of the world's poorest nations, it is in prisons where HIV reigns.

Reflecting the unique role prisons and jails play in the HIV pandemic, an entire conference symposium, entitled 'HIV Behind Bars', was convened. Oral and poster presentations at this symposium provided a glimpse of life behind prison walls - from rural sub-Saharan African jails to Latin American penitentiaries, and painted a fuller picture of HIV in the nation with the greatest per capita prison population, the US.

Concentrating an Epidemic

Presentations at Durban reinforced Dr. Jonathan Mann's observations that the most vulnerable members of the population of any country are at the highest risk for contracting HIV/AIDS (1). Regardless of the country, prisons and jails concentrate HIV-infected and at-risk individuals. Data regarding the prevalence of HIV/AIDS in prisons in countries outside North America and Europe have been scarce, however, reports at the conference provided some new HIV prevalence information. The methods used for collecting HIV prevalence data from correctional facilities differed widely. Some studies relied on voluntary reporting (to surveyors or to prison health care officials) which may significantly underestimate the number of inmates who have HIV infection by at least 25% (2). Anonymous serosurveys are far more accurate than voluntary reporting (3).

Sub-Saharan Africa

Studies of the prevalence of HIV in African prisons show rates ranging from 2.7% in a cross sectional serostudy in Senegal (4) to 27% in Zambia as determined by a voluntary questionnaire and ELISA testing of 1,596 inmates (8). In the Côte D'Ivoire, a random sample of 500 inmates in one facility demonstrated a prevalence rate of HIV infection of 28%, double that of the general population (4).

These high HIV prevalence rates are not surprising, given the impact that HIV has had on this region of the world. In sub-Saharan Africa approximately 24.5 million people are living with HIV infection - over two thirds of the world's burden of HIV. Over 11.5 million Africans have died of AIDS, representing 83 percent of the total HIV-related deaths worldwide. In several African countries, the rate of HIV infection among adults aged 15 to 49 exceeds 20% (5) and life expectancies have plummeted to turn of the century figures.

Asia

Eighteen percent (7 million) of the global population of HIV-infection individuals live in South and Southeast Asia. Limited information regarding HIV prevalence rates in Asian correctional settings is available (see Table 1). This is unfortunate given that the Asian/Pacific region had the second highest rate of new infections in 1998, second only to Sub-Saharan Africa, and that this region is predicted to be the next epicenter of HIV infection (5).

Latin America

HIV infection rates have doubled over the past year in many sub-populations of Latin America. On the Caribbean coast of Latin America, the prevalence rate exceeds 16% among adults in their 20s (5). According to the UNAIDS report, heterosexual transmission is rapidly spreading the disease throughout the region. A 1999 report from Brazilian correctional facilities describes an HIV prevalence of 16% among 631 inmates who agreed to voluntary testing (6). A cross-sectional study of 693 inmates from three Brazilian prisons revealed an HIV prevalence rate of 14%, with a range of 11% (in one minimum-security facility) to 22% (in one maximum security facility) (7).

Europe and the U.S.

European countries report a wide range of prevalence rates, ranging from 0.19% in anonymous survey of 544 inmates in Athens, Greece (8) to 11% of inmates who volunteered for an anony-

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mous survey in Southeastern France (9) and 47% among a selected group of 639 injection drug using prisoners incarcerated in Léon, Spain (10). In comparison, the nationwide average prevalence rate in the U.S. is low, 2.3% overall. In the Northeastern U.S., however, anonymous serosurveys have revealed HIV infection rates ranging from 7 to 26% depending on the location of the correctional facility (rates are highest in New York City, New York State, and New Jersey) (11).

Gender

Distribution of HIV prevalence by gender is reversed in correctional settings. In U.S. prisons, incarcerated women are twice as likely as men to have AIDS (11), in contrast to the general US population where men are almost four times as likely to have AIDS than women (See HEPP News, April 2000) (12). Several papers presented at the conference from Brazil indicate women in that country also exhibit higher rates of HIV infection than men (7.2% versus 4.8%)(13, 14, 7). Likewise, a study from India found a high rate of 9.5% HIV prevalence among women inmates, compared to 1.7% among men. Ghante Nagaraj and colleagues attribute the high rate of HIV among incarcerated women to the fact that most are commercial sex workers, a very high-risk occupation (15). Likewise in the U.S., women are more likely to be incarcerated for sex and drug crimes known to be associated with increased risk for HIV infection.

Risk Behaviors: Drug use

Obtaining data regarding in prison drug use is challenging, but critical to our understanding of the risk of HIV transmission inside prisons. In several reports, investigators presented evidence that injection drug use does occur in correctional settings and is associated with HIV infection. Outside the US, intraprison spread is an important concern. Greek researchers found that 55% of IDUs use drugs in prisons, and over half (57.8%) used injection drugs. Ninety percent of those injecting in prison shared needles, and these researchers suggested that IDUs inject less but share needles more frequently when incarcerated (8).

Very few correctional facilities allow the distribution of sterile injection equipment. Switzerland, Spain, and Germany, however, have had successful pilot programs and some facilities have since adopted programs that allow clean injection equipment to be available. Inmates and staff in these facilities have reported that they feel safer, needle stick injuries have declined significantly, and there was no increase in drug consumption (16). In Durban, C. Menoyo presented similar findings from a 22-month needle exchange pilot study in the prison of Bilbao, Spain (17). Prison officials, guards and inmates all expressed satisfaction. No custody or safety incidents related to the program occurred.

Table 1. International HIV in Prison Statistics
From the XIII International AIDS Conference, Durban, South Africa, July 2000

Country	Survey Method	HIV Prevalence	Other Notes
Buenos Aires, Argentina (Wainstein 1998)	voluntary Testing	11% men 9% women	
Rio de Janeiro,Brazil (Bauer TuPeD3674)	voluntary	3.4% men 11.6% women	considered low for Brazil HCV 7.1% of men, 10.1% of women
Rio de Janeiro, Brazil (Gomes TuPeD3690)	voluntary n=250 men, 43 women per year	2% men 4% women	from 1996 to 1999 prevalence did not change syphilis : 9% of men, 20% of women HCV: 6% of men, 5% of women
Women of Rio de Janeiro, Brazil (Carvalho TuPeD3692)	sectional study in 3 women's prisons=513, blood tested	12% women	women: 22.6% syphilis 23.1% HBV 10% HCV
California (Ruiz WePeC4343)	cross-sectional unlinked (blinded) survey n=5593	1.43%	3.5% HBsAg 34.5% HCV 77.9% were + for anti-HSV-2
Cote D'Ivoire (Togbe 1998)	random sample of 500 inmates	27.54%	
Conakry, Guinea (Magassouba MoPeC2344)	sample of 500, confirmed w/ western blott.	3.4% overall 3% men, 0.4% women	considered high in comparison to general population
Europe: Belgium, France, Germany, Italy, Portugal, Spain, Sweden (Rotily TuOrD318)	voluntary, anonymous questionnaire, saliva test	5.6% overall Portugal: 19.7% Spain: 12.9%	32% IDUs (n=3229) 45% injected in prison
India (Ghante Nagaraj MoPeC2333)	ELISA n=831	1.68% women: 9.5% (mostly CSWs)	
Nigeria(Idigbe 1998)	serostudy, random selection of 753 inmates	9%	
Russia (Morozov MoPpC1103)	mandatory, non-anonymous testing n=4182	34%	58% reported IDU in past 12 months
Senegal (Ndaiye 1998)	cross-sectional serostudy	2.7%	
Shanghai (Bao TuPeD3698)	12,998 serum samples taken between 1991 and 1999.	0.23% (n=30)	primarily among drug users
Spain (BurattiniTuPec3457)	random sampled interviewed and blood tested n=631	16%	22% IDUs. 34% HCV 16% Syphilis Parenteral exposure was more common than sexual
United States (Hammett 1999)	national survey	2.3% overall 2.3% men (range 0.2%-13.2%) 3.5% of women (range 0%-20.5%)	Some facilities have condom availability
Zambia (SimooyaMoPeC2336)	voluntary questionnaire ELISA n=1596	27%	no condom distribution

Risk Behaviors: Unprotected Sex

Condom availability continues to be a highly controversial topic in most correctional settings. According to the Canadian HIV/AIDS Legal Network, all facilities in Canada and New South Wales, Australia, and some facilities in Europe allow condom distribution within correctional settings. Condom availability is rare in facilities in the United States.

In 1996, South Africa ended segregation of HIV-infected prisoners and established a policy allowing the distribution of condoms. However, according to a report presented at the International AIDS Conference by Teboho Kekana of the AIDS Law Project in South Africa, policy and practice are very far

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Letter from the Editor

Dear Colleagues,

As horrific as the HIV epidemic has been in this country, the toll among prisoners has been even greater. In reports this month from the XIII International AIDS Conference in Durban, E. Stubblefield and D. Wohl remind us that North American statistics pale in comparison to the situation in much of the developing world. With an estimated 24.5 million adults and children living with HIV/AIDS, Sub-Saharan Africa has 25 times the number of cases as does North America. In much of the developing world,. the rate of new cases and the prevalence of infection in the general population far exceeds that seen in more developed nations.

Correctional health care providers from around the world provided data in Durban on the heavy impact HIV is having upon the incarcerated. Ongoing injection drug use, the lack of clean needles and/or sterilizing equipment, and unprotected sex due to the unavailability of condoms create environments in jails and prisons in developing nations by which the ongoing amplification of the HIV epidemic is assured.

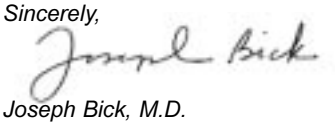
Clearly, there are success stories, both in the US and abroad. One such program at the Mysore Central prison in India is featured this month. However, even when prisoners receive good HIV care, many lose access once paroled or released. In California alone, over 10% of inmates are deported upon release, usually to a resource-poor nation where access to antiretroviral therapy is negligible.

Certainly, progress has been made in those countries that can afford life sustaining treatments. The challenges will be extending these benefits to the legions afflicted in developing countries, and finding ways to stem the growing tide of new infections, which threaten to overwhelm the efforts to control the epidemic.

This month's issue also features a sample HIV treatment plan flowsheet and an approach to the management of varicella zoster virus in the correctional setting. After reviewing this issue, readers should be able to describe the management of chicken pox and varicella zoster virus, list ART regimens in order of effectiveness according to the latest news from Durban, and determine when Abacavir may be reintroduced.

As always, we welcome your feedback on HEPP News!

Sincerely,



Joseph Bick, M.D.

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Prisons and Jails Worldwide...

(continued from page 2)

apart. Only 3 facilities actively distribute condoms (18).

A recent World Health Organization (WHO) report found that 23 of 52 countries surveyed allowed condom distribution in their correctional systems. Significantly, no system that has adopted a policy of making condoms available in prisons has reversed the policy, and the number of systems that make condoms available has continued to grow every year (19). According to the WHO, "condoms should be made available to inmates throughout their period of detention and prior to any form of leave or release" (20).

International Recommendations: HIV Interventions and Policies

In most countries, prisons are recognized as key intervention sites to prevent the advance of HIV. Reports on access to testing, medications, and trained providers in correctional settings are limited. Many experts and corrections-related institutions, however, have written recommendations for HIV interventions in correctional settings (21). In 1993, The World Health Organization established broadly applicable recommendations for the management of HIV infected inmates (20, see Table 2 for a summary).

In the United States, the National Commission on Correctional Health Care (NCCHC) promotes voluntary testing of prisoners and recommends the involvement of prisoners in the development and delivery of HIV/AIDS educational programs (22). Most authors emphasize the importance of educating staff as well as inmates about HIV risk and the needs of HIV infected people. The success of anonymous testing in one study was attributed to the high level of HIV education in the general prison population (2).

Even when effective HIV care is administered in a prison setting, the gains made may be lost following release, as was highlighted in a presentation by Stephenson and colleagues (23). In this retrospective study of state prison inmates in North Carolina, HIV-infected inmates receiving potent HIV therapies who were released and subsequently reincarcerated were compared to matched HIV-infected controls who remained in prison. Released prisoners experienced significant increases in HIV viral loads, while those remaining in prison actually saw a modest decline in HIV levels during the study period. Clearly, these data demonstrate that correctional facilities indeed provide an opportunity for HIV care initiation but that community resources must pick up where jails and prisons leave off.

Conclusion

Durban has focused the world's attention on the plight of the developing nations engulfed by HIV. In many ways prisons and jails represent the best and worst of the pandemic both in developing and developed nations. Great strides have been made in many countries to address HIV and AIDS in prisons and jails. Programs enabling the distribution of condoms and sterile injection equipment in some European and Australian facilities show promise for preventing the spread of HIV. Some U.S prisons and jails have developed strong programs for HIV testing and treatment, and many facilities conduct seroprevalence studies concerning HIV risk behaviors. However, despite these successes, the failure to implement comprehensive national programs (even in the U.S) combined with the lack of resources from non-western countries indicate that the global community needs even more focus on HIV/AIDS in prisons.

Prisons were identified years ago as key intervention sites for identifying and treating persons with HIV/AIDS. In 1987, prison medicine researcher T.W. Harding wrote: "Prison medical services will be tested by the AIDS epidemic. … Prisons are not created to promote health. Nevertheless, the AIDS epidemic demonstrates forcibly how important prison health policy is for the community as a whole" (24). How nations meet the challenge of providing care and preventive services in their correctional systems remains to be seen, but thanks to Durban, the world is now watching.

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Table 2. WHO Recommendations for the Management of HIV Infected Prisoners

Guidelines were established by the World Health Organization (WHO) to provide standards which corrections officials should strive to achieve in their efforts to prevent HIV transmission and provide HIV care within correctional settings.

The WHO recommendations are summarized as follows. The complete guidelines can be found at http://www.who.org.

- Inmates should be given the same access to and quality of HIV care that is available in the local community. The general principles adopted by the national AIDS programs should apply equally to prisoners and to the community.
- All inmates and correctional staff and officers should be provided with education concerning transmission, prevention, treatment, and management of HIV infection. For inmates, this information should be provided at intake and updated regularly thereafter. HIV education should be part of correctional staff orientation, and should be updated regularly thereafter.
- In each country, specific policies for the prevention of HIV/AIDS in prisons and for the care of HIV-infected inmates should be defined. These strategies should be incorporated into a wider program of promoting health among inmates.
- Compulsory testing of inmates for HIV is unethical and ineffective, and should be prohibited.
- Voluntary testing for HIV should be available in prisons when available in the community, along with pre- and post-test counseling.
- Since segregation, isolation, and restriction on occupational activities, sports, and recreation are not considered useful or relevant in the case of HIV-infected people in the community, the same attitude should be adopted towards HIV-infected inmates. Decisions on isolation for health conditions should be taken by medical staff only, and on the same grounds as for the general public, in accordance with public health standards and regulations.
- Information on the health status and medical treatment of inmates is confidential and should be recorded in files available only to health personnel. If the patient consents, health personnel may provide prison managers or judicial authorities with information that will assist in the treatment and care of the patient.
- Inmates should have access to information on treatment options and the same right to refuse treatment as exists in the community.
- Correctional officials and public health administrators should work together to ensure medical and psychological follow-up of HIV-infected inmates after their release.
- Special attention should be given to the needs of women inmates. Staff dealing with detained women should be trained to deal with the psychosocial and medical problems associated with HIV infection in women.
- The role of condoms in preventing HIV transmission should also be explained to inmates and staff. Since penetrative sexual inter course occurs in prison, even when prohibited, condoms should be made available to inmates throughout their period of detention and prior to any form of leave or release.

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**Speaker's Bureau: Abbott Laboratories, Glaxo Wellcome and Merck & Co.*

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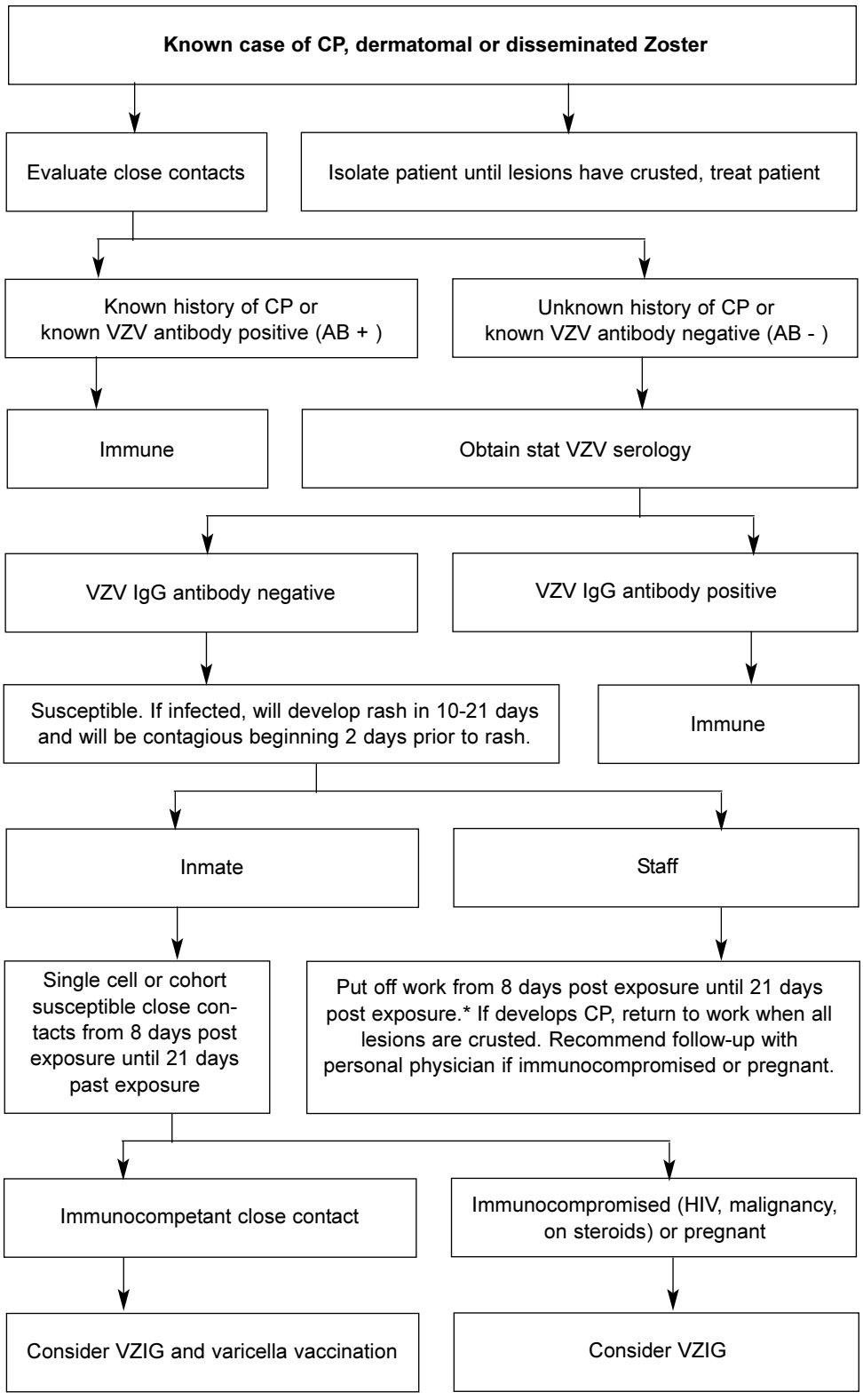
HEPPIGRAM

Management of Varicella Zoster Exposure (Chicken Pox (CP) or Shingles)



Developed by Joseph Bick, M.D., Editor, HEPP News

VZV=Varicella Zoster Virus
VZIG=Varicella Zoster Immune Globulin
*Alternatively, assign to work in area where no contact with immunocompromised or pregnant individuals.

Ask the Expert: Blistering on an August Afternoon

Joseph Bick M.D., *Editor, HEPP News*

On Tuesday, inmate Jones presented to your clinic with a chief complaint of right sided pain in a band like distribution from his back around to his abdomen. Mr. Jones is HIV infected with a most recent CD-4 count of 180/mm3. He admits to malaise, but denies all other symptoms. His exam is notable only for hyperasthesia in the painful area. You prescribe Tylenol, and arrange follow-up. Now it's Friday afternoon, and Mr. Jones returns to your clinic with weeping vesicular lesions in the classic dermatomal pattern of zoster. Jones lives in a dorm with 48 other HIV infected individuals. What do you do next?

A) Arrange for the immediate transfer of Jones to the facility that dumped on you last Friday.
B) Decide that this is a good time to take that 2-week vacation you've been postponing.
C) Relax. Read this article.

The varicella zoster virus (VZV), a herpes virus, is responsible for primary varicella (chicken pox, CP) and recurrent disease zoster (shingles). In the United States, 90% of cases of CP occur in those under the age of 13. By early adulthood, approximately 95% have been infected. CP is the most contagious herpes virus, and is spread by the respiratory route and contact with vesicular fluid.

In children, CP is usually a benign self-limited illness, and is not uncommonly subclinical. The typical presentation is rash, malaise, and three to five days of fever. The rash is vesicular, and typically begins on the face and trunk before spreading centrifugally. A hallmark of CP is the presence of successive crops of vesicles.

In adults and especially those who are immunocompromised, CP can be more severe with more lesions and a longer time to healing of the lesions. Additionally, adults and the immunocompromised are at increased risk for bacterial infection of skin lesions, pulmonary disease, visceral disease, and encephalitis. Once infected, rash develops in 10 to 20 days. Those infected are themselves contagious from approximately 2 days before their rash develops until all of their vesicles have crusted.

Zoster, which is recurrent VZV disease from virus that has remained latent in the dorsal root ganglia, afflicts at least 10% of those who are HIV infected. The rash is typically a unilateral vesicular dermatomal eruption, most commonly involving the thoracic and lumbar dermatomes. It is not uncommon for pain and paresthesias to precede the rash by 2-3 days. In the immunocompromised, there is an increased risk for widespread dissemination or multi-dermatomal involvement. The disease can be prolonged, with new lesions occurring for up to 2 weeks and scabbing taking up to 4 weeks. Other complications include retinitis and acute retinal necrosis, which can be difficult to differentiate from CMV.

Treatment of CP with acyclovir can decrease new lesion formation by one day, result in less lesions, and decrease constitutional symptoms in 1/3 of patients. In zoster, acyclovir decreases acute neuritis and accelerates lesion healing. Acyclovir is dosed at 1000 mg P.O. five times per day for 14-21 days in adults. The pro-drugs valaciclovir (1000mg P.O. tid for ten days) and famciclovir (500 mg P.O. tid for 10 days) are better absorbed and may be superior to acyclovir.

The infection control challenges of VZV within congregate living environments (CLEs) such as jails and prisons are truly unique. In the free community, hospitalized patients who are exposed to VZV are often discharged until their communicable period passes to avoid transmission to other susceptibles. In the correctional setting, not only do we not have that option, but we often cluster our immunocompromised (HIV infected) inmates in CLEs where exposure to zoster is likely.

Once a case of CP or disseminated zoster is diagnosed, the American Public Health Association recommends that cases be placed in strict isolation, preferably with negative pressure airflow. Only staff who have positive serologies or a history of CP should be assigned to care for these patients. In addition to an acyclovir preparation, patients should be examined on a daily basis to assess for complications. Pneumonitis can initially present with tachypnea, tachycardia, and/or dyspnea. Patients should be kept isolated until all lesions have crusted.

In cases of shingles, single room placement with contact isolation is recommended. Gowns and gloves should be used if contact with infectious materials is expected. For both CP and zoster, contaminated clothing and linen should be bagged and cleaned according to facility protocols.

Advance preparation is key. 80% of adults will recall a history of CP. Of the remaining 20%, blood testing will reveal that all but 5% of adults have been previously infected. By routinely obtaining varicella IgG serology on all incoming immunocompromised inmates who do not recall a history of CP, a database can be maintained of those who are susceptible. Ideally, serology should also be collected on all staff who work with immunocompromised individuals and do not remember having had CP. Those who are found to be IgG positive are immune. (See HEPPigram on page 5 for more information).

Now the hard part: contact investigations. If baseline serologies have been obtained on all staff and inmates who do not recall a history of CP, your job is much simpler. If not, stat serologies should be obtained on contacts who do not remember having had CP. Inmates who are close contacts should be single celled from 8 days after exposure until 20 days post exposure. If this is not possible, exposed inmates can be cohorted in one dormitory. Those who develop CP should be isolated and treated as above. Non immune staff should be reassigned so that they are not in contact with immunocompromised individuals during their contagious period. Close contacts who are immunocompromised are candidates for varicella zoster immune globulin (VZIG), which must be given within 96 hours to be effective. VZIG is available from blood services regional offices of the American Red Cross.

With appropriate planning, you can be prepared to effectively treat CP and zoster, and prevent epidemic spread within your immunocompromised patients. Education of clinical and custody staff is essential, and will go far to help control hysteria when your next case presents. Do it now, before that inevitable Friday afternoon scenario!

Treatment Updates

Durban Continued . . .

The most important treatment news at Durban were the comparisons between different HAART regimens: Triple NRTI (such as ZDV/3TC/ABC), protease sparing (D4T/3TC/NVP), and protease-containing regimens were compared in several studies. There was no clear "winner" in these studies, which underscores the importance of providing a wide range of HIV drugs on the correctional formulary. However, there were some important trends. Tables 3 and 4 summarize results from three major studies, the Atlantic study (i), the French Ecureuil study (ii), and a Brazilian study (iii). The data shown represents "intent to treat" results, which count patients who do not tolerate the regimen and have to switch as failures.

As shown, these comparison studies showed (1) that the three types of "Triple" regimens used in HAART today are roughly comparable (Atlantic study); and (2) that PI-containing and "triple NRTI" regimens are also roughly comparable (Ecureuil and CNAB 3014). The Atlantic study appeared to show that protease inhibitor (PI-) containing regimen had a slight advantage for patients with higher initial viral loads, and there was a statistically insignificant trend in each of the arms towards better virologic suppression in the PI containing regimen. The other two studies, which were not placebo controlled, showed slightly less favorable results (trends only) for the PI-containing regimens, which may be related to study design (TID dosing of the PI). It came as no surprise that these studies all showed that patients with higher viral loads had lower rates of success with any of the regimens. Many HIV providers are considering initiating therapy with at least four drugs in treatment-naïve patients who have higher viral loads.

In addition, important new results on toxicities believed to be related to hydroxyurea (when used in combination with D4T and DDI) were reported in Durban. 98 treatment-naïve patients and 47 treatment-experienced patients were given DDI, D4T, efavirenz, with or without the addition of hydroxyurea (HU). The study was terminated early because of a difference in neurotoxicity between the treatment (HU) and placebo group (8 patients vs 2 patients). For those patients who completed therapy, the two regimens were equivalent, although a trend toward better viral suppression was observed among treatment-experienced patients who were taking the regimen containing HU. Thus, HU appears to add toxicity but not benefit to regimens containing DDI and D4T for most patients (although other studies have shown some benefit when DDI and HU are used in combination).

Table 3. Triple NRTI and PI vs NRTI and NNRTI*

Study	# patients	Type of Patient	All Patients Received	The study compared	HIV RNA <50 at 48wks	Comments
Atlantic	298	Naive	D4T (BID) + DDI (QD)	+IDV (TID) or +NVP (QD) or +3TC (BID)	49% 49% 40%	
	(subset)	Naive and higher baseline VL (>58,000)	D4T (BID) + DDI (QD)	+IDV (TID) or +NVP (QD) or +3TC (BID)	48% 28% 26%	P =.18 (trend)

Table 4. Triple NRTI vs NRTI + PI vs NRTI + NNRTI**

Study	# patients	Type of Patient	All Patients Received	The study compared	HIV RNA <50 at 48wks	Comments
Ecureuil	195	Naïve	Combivir (ZDV+3TC)	+ ABC (BID) or +NFV (TID)	67% 66%	Nausea and vomiting vs Diarrhea
CNAB 3014	342 (subset)	Naïve	Combivir (ZDV+3TC)	+ ABC (BID) or + IDV (TID)	73% 61%	
	(subset)	Naïve and lower baseline VL (<100,000)	Combivir (ZDV+3TC)	+ ABC (BID) or + IDV (TID)	82% 71%	
		Naïve and higher baseline VL (>100,000)	Combivir (ZDV+3TC)	+ ABC (BID) or + IDV (TID)	56% 43%	

**NRTI= Nucleoside Reverse Transcriptase Inhibitor*
- *ABC=abacavir, ZDV=zidovudine (AZT), 3TC=lamivudine, D4T=stavudine, DDI=didanosine)*

NNRTI= Non-Nucleoside Reverse Transcriptase Inhibitor
- *EFZ=efavirenz, NVP=nevirapine, DLV=delavirdine)*

PI= Protease Inhibitor
- *IDV=indinavir, NLF=nelfinavir*

***Both studies are expected to go 48 weeks; watch for more data.*

Treatment Updates from US News Update on Abacavir Hypersensitivity Syndrome

Glaxo Wellcome, Inc., in conjunction with the FDA MedWatch program, released an "important drug warning" letter last month to inform physicians of "new safety information about hypersensitivity reactions to abacavir," or Ziagen, a nucleoside analogue reverse transcriptase inhibitor. In the April 1999 issue of HEPP News, we reviewed the management of ABC-Hypersensitivity syndrome. The latest letter from Glaxo warns that "severe or fatal hypersensitivity reactions can occur within hours after Ziagen reintroduction in patients who have no identified history or unrecognized symptoms of hypersensitivity to abacavir therapy." In fact, in most cases, hypersensitivity occurs within hours following reintroduction. The letter warns that if abacavir was discontinued for reasons not related to hypersensitivity symptoms, the drug should only be reintroduced after evaluating the reason for discontinuation and ensuring that the patient had no symptoms consistent with hypersensitivity reactions. If no symptoms are identified, caution should be taken when reintroducing abacavir to a patient, and patients should be educated regarding the possibility of reaction upon reintroduction and should have access to immediate medical care (http://www.fda.gov).

Didanosine Dosing

The preferred dosing frequency of didanosine (Videx) is twice daily. Once-daily dosing should be considered only for adult patients whose management requires once-daily dosing of didanosine. (http://www.fda.gov).

References:
i Squires, K. Abstract LbPeB7046.
ii Brun Vezinet F, Viraben R, Malkin Abstract WeOrB605.
iii Cahn, P. WeOrB606.
iv Murphy, R, Katlama, C, Autran, B et al Abstract We OrB603.
Abstracts available at http://www.AIDS2000.org

Save the Dates

24th National Conference on Correctional Health Care
September 9-13, 2000
St. Louis, MO
Cervantes Convention Center
CME credit available.
Call: 773.880.1460
Fax: 773.880.2424
Email: ncchc@ncchc.org
Visit: www.ncchc.org

HIV/AIDS Behind Bars
Saturday, Sept. 9, 2000
1:00-5:00 pm
HEPP News is sponsoring a pre-conference colloquium at the NCCHC conference listed above that will discuss the outcomes of HIV education and prevention interventions in correctional settings.
For more information contact Matt Stark.
Call: 401.863.2180
Fax: 401.863.1243
Email: matthew_stark@brown.edu.

Management of HIV/ AIDS in the Correctional Setting: A Live Satellite Videoconference Series, Antiretroviral Update 2000
October 3, 2000
12:30- 3:30 E.S.T.
2.5 CME credits available
Call: (518) 262-6864
Email: santosm@mail.amc.edu

Thirteenth Annual Conference Association of Nurses in AIDS Care
Chasing a Changing Tide: Complex Clients, Care, and Communities
November 2-5, 2000
Caribe Hilton San Juan, Puerto Rico
Contact: Sande Gracia Jones
958 Whitehall Ln.,
Orlando , FL 33019
Call: 305.493.6734
Fax: 305.567.4319
Email: sj394@ starnet.com
http://www.anacnet.org/anacabstracts.htm

Medical Management of AIDS: A Comprehensive Review of HIV Management - Winter Symposium
December 7-9, 2000
San Francisco, CA
Contact: Cliff Brock
Department of Medicine UCSF
Box 0656
San Francisco, CA 94143-0656 USA
Call: 415.476.5208
Fax: 415.476.3542
Email: cme@medicine.ucsf.edu
Web: http://medicine.ucsf.edu/programs/cme

News Flashes

Vietnam: Increasing Number of HIV Cases in Prisons

HIV cases among Vietnam's inmates have tripled since 1998 and now comprise one-fifth of all infections in the country, according to a government newspaper. A total of 22,161 inmates had tested HIV-positive as of July 20, with 3,621 AIDS cases and 1,895 inmate deaths from AIDS since the first case detection in 1990. A National AIDS Committee official said that the actual number of HIV infections in Vietnam's prisons could be 10 times higher. Infected inmates remain in the general prison population until they develop AIDS, when they are transferred to the prison's clinic. Hoping to curb the spread of the virus, the Ministry of Public Security last year launched an HIV/AIDS awareness campaign in prisons and correctional institutions (Associated Press, 7/28).

Cost Effectiveness of Universal vs. Voluntary Screening for HIV among Pregnant Women Compared in Chicago

In a recent article published in Pediatrics Online, researchers from the University of Illinois Chicago College of Medicine investigated the cost-effectiveness of implementing three screening strategies to detect HIV among pregnant women in Chicago. The three strategies included no screening, voluntary screening, and universal screening. Results found that compared to no screening, universal testing could save $3.69 million for every 100,000 pregnant women tested in Chicago. The costs of implementing the program of universal testing show that it would both lower the incidence of newborn HIV infections and would cost less on average per pregnant woman than no screening or voluntary screening. (Immergluck, Lilly Cheng; Cull, William L.; Schwartz, Alan; et al. Pediatrics Online. April 2000; 105(4):54)

Resources & Opportunities

In the Works: CDC Guidelines for TB Treatment in Prisons and Jails

The CDC is working on new guidelines for the treatment of Tuberculosis in prisons and jails, and will hold a meeting this Fall to finalize the document. HEPP News will keep you updated, or you can check with the website for the National Center for HIV, STD and TB Prevention at http://www.cdc.gov/nchstp/tb/

Ryan White CARE Act for Prison and Jail Inmates

HRSA's HIV/AIDS Bureau is currently working on clarifying how Ryan White funding can be used for programs for inmates. This is an opportunity to let HRSA know of the myths and barriers that you are confronting in your efforts to utilize or access these funds for inmate programs and discharge planning programs. If you have questions or suggestions, contact John Palenichek, Policy and Program Director, HAB/HRSA, 5600 Fishers Lane, Rockville, MD 20857 or visit http://www.hrsa.gov/hab

Office of the Surgeon General: Increased Involvement

The office of the Surgeon General/USPHS has indicated that they are interested in becoming more involved with treating HIV in men of color and welcome community input regarding any issues pertaining to HIV and minority men. This is an opportunity to let policy makers know about HIV and corrections. To be heard, send information to Allan Noonan, Senior Advisor, Office of the Surgeon General /USPHS, 5600 Fishers Lane, Rockville, MD 20057

Informational Videos: Albany Medical Center AIDS Program's Inmate Adherence Initiative

This five part videotape series models a peer support group of five HIV-infected former inmates. The series addresses coping with HIV, adherence to treatment, and related health care issues. The goal of the videotapes is to improve treatment adherence, secondary prevention, risk reduction, and overall enhancement in the quality of life for the incarcerated population. To order, contact Douglas Fish at the Albany Medical College at 518.262.6846, fax: 518.262.4756.

Web Resources

Treatment Websites:

HIV Insite, from UCSF "Gateway to AIDS Knowledge"
http://HIVInSite.ucsf.edu

HIV/AIDS Treatment Directory
http://www.amfar.org/td

Medscape HIV/AIDS
http://hiv.medscape.com

Johns Hopkins AIDS Service
http://www.hopkins-AIDS.edu

International Websites:

XIII International AIDS Conference
http://www.AIDS2000.org

AEGIS-AIDS Education Global Information System
http://www.aegis.com

World Health Organization
http://www.who.org

United Nations AIDS
http://www.unaids.org

HIV 101

HIV Treatment Plan *Developed by: HEPP News* Brown University, Box GB 426 Providence, RI 02912 www.hivcorrections.com	Inmate Number:	Date of Birth:	
	Inmate Name (last, first, initial):		
	Sex: **M F**	Race/Ethnic: **B W H O**	Facility:

	Date: (example)	**Date:**	**Date:**
NEXT T CELL PROFILE	Q 3mo		
HIV - 1 / RNA / via PCR	Q 3mo		
PHYSICAL EXAM DUE	Q year		
ID EVALUATION	Q X weeks (depending on health status)		
BLOOD WORK	CBC, LFT, Chem 7 Q 4-6 wk		
PPD	Q year		
☐ **ANERGY PANEL**			
PAP SMEAR	Q 6mo		
CHEST X - RAYS	Q year		
OTHER X - RAYS			
THERAPEUTIC DIETS / MVI / RESOURCE	MV T PO QD		
MEDICATIONS:			
ANTIRETROVIRALS	D4T, DDI, EFV		
PCP PROPHYLAXIS	Bactrim TPOQD		
ANTI-FUNGAL MEDS	N.A.		
MAI / CRYPTO / TOXO MEDS	Azithro 1200 Qwk		
ANTI-VIRAL MEDS	N.A		
TB MEDS	N.A.		
VACCINES	DT, DV, FLV, 9/00		
OTHER MEDS	N.A.		
CONSULTATIONS			
MD / IDS SIGNATURE	A. Jaildoc, MD		
NURSE SIGNATURE			

This plan gives overall direction to the management of each HIV patient. An example of directions, initiated by the physician and to be administered by the nursing staff, is given on the left. This plan would be updated at least quarterly or every time there is a significant health change in health status or medical regimen. The October 2000 issue of HEPP News will include a flow sheet on clinical HIV management.

Self-Assessment Test for Continuing Medical Education Credit

Brown University School of Medicine designates this educational activity for 1 hour in category 1 credit toward the AMA Physician's Recognition Award. To be eligible for CME credit, answer the questions below by circling the letter next to the correct answer to each of the questions. A minimum of 70% of the questions must be answered correctly. This activity is eligible for CME credit through Sept. 30, 2000. The estimated time for completion of this activity is one hour and there is no fee for participation.

1. Hydroxyurea may cause increased toxicity when combination with:
   a) D4t/DDI
   b) AZT/3TC
   c) EFV/ABC

2. In the Atlantic study reported in Durban, were the PI containing regimens significantly better than NRTI or NRTI and NNRTI regimen?
   a) Yes, 73% of patients on the PI regimen had HIV RNA under 50 at 48 weeks.
   b) No, only 26% of patients on the PI regimen had HIV RNA under 50 at 48 weeks.
   c) The differences were not significant but there was a trend in favor of PIs at higher viral load.

3. Which of the following phrases accurately describe Chicken Pox in HIV-infected adults?
   a) A benign, self-limited illness
   b) Those infected risk bacterial infection of skin lesions, pulmonary disease, visceral disease, and encephalitis
   c) Rash is typically a unilateral vesicular dermatomal eruption, most commonly involving the thoracic and lum bar dermatomes
   d) Those infected have an increased risk for widespread dissemination or multi-dermatomal involvement

Indicate whether the following statements are true or false:

4. _____ Patients who have HIV should never receive varicella zoster immune globulin, regardless of whether they are still relatively immunocompetant.

5. _____ Inmates who are close contacts of a CP case should be kept in single cells from 8 days after exposure to 20 days post exposure.

6. Under which circumstances may Abacavir be reintroduced to a patient?
   a) After discontinuation due to symptoms of ABC Hypersensativity Syndrome, and carefully educating about potential signs and need to seek care if they develop.
   b) After evaluating the reasons for discontinuation and ensuring the patient had no signs of ABC Hypersensativity Syndrome.
   c) There are no circumstances under which Abacavir may be reintroduced after discontinuation.

HEPP News Evaluation

5 Excellent 4 Very Good 3 Fair 2 Poor 1 Very Poor

1. Please evaluate the following sections with respect to:

	educational value	clarity
Main Article	5 4 3 2 1	5 4 3 2 1
HEPPigram	5 4 3 2 1	5 4 3 2 1
HIV 101	5 4 3 2 1	5 4 3 2 1
Ask the Expert	5 4 3 2 1	5 4 3 2 1
Save the Dates	5 4 3 2 1	5 4 3 2 1

2. Do you feel that HEPP News helps you in your work? Why or why not?

3. What future topics should HEPP News address?

4. How can HEPP News be made more useful to you?

5. Do you have specific comments on this issue?

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