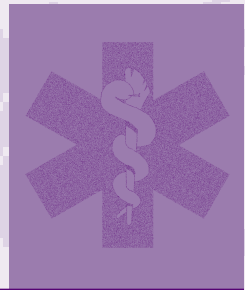


# ALERTS!

## EMERGENCIES IN HIV-INFECTED PEOPLE

By Edgardo Li-Espino, MD, Hilda Cuervo, & Roberto C. Arduino, MD  
The University of Texas–Houston Medical School

Human immunodeficiency virus (HIV) is associated with several diseases that may be life threatening and need quick intervention by health care workers. These emergencies could be related to complications from the use of anti-HIV medication or to **opportunistic infections** that occur as the immune system gets weaker. This article summarizes some conditions that can be considered medical emergencies in HIV-infected individuals.



### Emergencies related to HIV therapy

#### LACTIC ACIDOSIS

The term “mitochondrial toxicity” describes a group of different clinical conditions that happen because of damage to parts of the cell called mitochondria. (The mitochondria are the energy factories inside cells.) One possible cause of damage to mitochondria may be anti-HIV drugs known as nucleoside reverse transcriptase inhibitors (NRTIs). The most serious condition that can result from such damage is lactic acidosis (an increase of lactic acid in the blood). Lactic acidosis has been reported in patients receiving NRTI regimens including combinations of AZT (Retrovir) or d4T (Zerit) with ddI (Videx), ddC (Hivid), or 3TC (Epivir).

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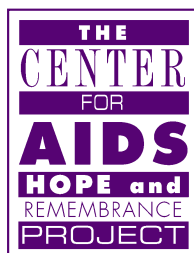
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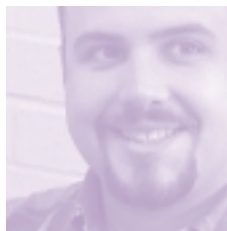
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Community spotlight



# WELCOME



As if the stigma of infection wasn't bad enough, people with HIV/AIDS have to worry about complications caused by the virus, **opportunistic infections**, or even the medications used for treating HIV. This issue of *HIV Treatment ALERTS!* includes a review of medical emergencies for the HIV-infected person. These are situations where that person's life might be in danger, and an emergency room visit might be necessary. It is not only important for the emergency room doctor to be aware of these issues, but also the patient. In addition, there is an article on strategies for regaining control of cholesterol and triglyceride levels. High blood fat levels are a problem for people with HIV/AIDS, especially those on certain medications like protease inhibitors. Finally, this issue's patient-doctor question and answer section covers some common dental questions. As always, the newsletter contains updates on treatment, useful phone numbers and Internet sites, and other important information. Remember that words in **bold** are explained in a section called "Definitions."

Living with HIV is best approached day by day. Remember to laugh, love, and learn whenever possible.

*HIV Treatment ALERTS!* is a publication of The Center for AIDS: Hope & Remembrance Project (The CFA). This newsletter is intended for those affected by HIV and their caregivers. The statements and opinions expressed in this newsletter do not imply recommendations or endorsement. Always consult your doctor before altering a prescribed drug regimen or taking any drug or supplement.

*HIV Treatment ALERTS!* is published 3 times a year (approximately February, June, and October). The print version of the newsletter is available for free at The CFA information center, various AIDS service organizations, some physician offices and health clinics, or by mail. Access to the newsletter is available online from The CFA website ([www.centerforaids.org](http://www.centerforaids.org)). The online *ALERTS!* page also features current reports on the latest treatment information—reports that will not be printed until the next newsletter.

The CFA also publishes *Research Initiative/Treatment Action! (RITA!)* twice a year (spring and fall). *RITA!* is a literature-review journal that covers issues in HIV research and policy. This and other publications are available on The CFA website or can be requested by mail (see contact information below).

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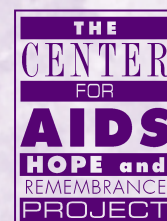
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#### MISSION & BELIEFS

*"We believe the well being of HIV-infected individuals begins with their affirmative participation in the process of treatment, and that often they do not have access, resources, or abilities to participate on their own. As such, The Center for AIDS dedicates itself to providing the latest treatment and research information to persons with HIV/AIDS, their caregivers and health-care providers. . . ."*





# Emergencies continued...

Lactic acidosis may or may not start suddenly. The initial symptoms may include nausea, vomiting, abdominal pain, weight loss, **malaise**, fatigue (feeling tired), shortness of breath, and occasionally fever. In addition, the patient may experience diarrhea, tachycardia (fast heart beat), and tachypnea (fast breathing). Laboratory tests usually show a high amount of **lactic acid** in blood, somewhat abnormal **liver function tests**, and moderate to severe **acidosis**. The management of lactic acidosis should include stopping anti-HIV drugs, and correction of these abnormalities. Patients may need to receive bicarbonate and glucose intravenously (into a vein). Treatment with riboflavin might help in some cases. As many as 60% of patients with lactic acidosis can die from it.

## ABACAVIR HYPERSENSITIVITY REACTION

The use of the NRTI abacavir (Ziagen) can cause a serious hypersensitivity reaction in a small number of patients (about 3.6%). This drug is also found in a pill called “Trizivir,” which combines abacavir with 3TC and AZT. The symptoms of abacavir hypersensitivity include fever, skin rash, nausea, vomiting, diarrhea, abdominal pain, **malaise**, and lethargy (sleepiness). Usually a hypersensitivity reaction will start within the first 6 weeks of taking abacavir. If a patient develops these symptoms, the abacavir should be stopped immediately. Whether hypersensitivity is suspected or confirmed, abacavir should *never* be restarted, as it may cause a more severe hypersensitivity reaction along with hypotension (low blood pressure), tachycardia (fast heart beat), and even death.

## INDINAVIR-INDUCED NEPHROLITHIASIS

Indinavir (Crixivan) tends to form crystals in the kidneys. These crystals can form kidney stones made up almost completely of this protease inhibitor. This can happen in 4% to 22% of patients treated with the standard dose of indinavir (800 mg three times a day). Patients with indinavir stones can feel like those with other kinds of kidney stones: pain on the sides, hematuria (blood in urine), nausea, and vomiting. The confirmation of kidney stones may be difficult because indinavir-containing stones are not visible using plain radiography or non-contrast CT scans. Most patients will respond to basic treatment that includes intravenous fluids, pain control, mon-

itoring kidney function, and discontinuation of indinavir. To prevent kidney stones caused by indinavir, patients should drink more liquids—a minimum of 1.5 liters per day of non-caffeinated, non-alcoholic beverages.

## RASH BY NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NNRTIS)

**Maculopapular rash.** NNRTIs sometimes can cause a maculopapular rash (a rash made up of small, well-defined bumps on the skin). NNRTIs include delavirdine (Rescriptor), nevirapine (Viramune), and efavirenz (Sustiva). In clinical trials, 37% of patients treated with nevirapine and 27% of patients treated with efavirenz developed a rash. The rash can affect the trunk, face, arms, and legs. It usually appears within the first 4 to 6 weeks of taking the medication.

**Stevens-Johnson syndrome.** This is the most dramatic form of rash caused by NNRTIs. This severe and life-threatening rash can affect the skin but also mucosal surfaces (like inside the mouth or nose). It is sometimes known as toxic epidermal necrolysis. Up to 8% patients treated with nevirapine and less than 1% of patients treated with efavirenz may experience this type of rash. The symptoms are a diffuse rash with peeling of large areas of the skin, blistering inside of the mouth, conjunctivitis (swelling and reddening of the eyes), bronchitis, and general symptoms including fever, myalgia (muscular pain), arthralgia (joint pain), and **malaise**. This condition is an extreme emergency and most of the time patients are treated in burn units where close medical observation is necessary.

## Emergencies related to opportunistic infections

### OCULAR (EYE) EMERGENCIES

**Cytomegalovirus (CMV). Retinitis** caused by CMV is the most common vision-threatening condition in people with AIDS. When it starts, the T cell counts are typically below 50. About 50% to 75% of the patients complain of blind spots, visual field loss, flashing lights,

continued on pg 4...

**floaters**, or decreased or blurred vision. The goal of treatment of CMV retinitis is to slow down the progression of the disease, prevent further spread of the infection in the retina, and preserve visual function. Currently, 3 drugs have been approved for the treatment of this condition: ganciclovir, foscarnet, and cidofovir. All of them are given in 2 steps. Initially, a high dose of the anti-CMV medication is given to control the infection and afterwards a lower dose is given for maintenance to prevent another infection.

**Varicella zoster virus (VZV).** VZV infection is the second most common eye condition in HIV-infected people. The virus causes **shingles** around the eyes, which can affect 3% to 4% of patients with HIV infection. VZV may also affect the retina causing 2 different conditions. The first is **acute** retinal **necrosis** (a rapid deterioration of the retina) that can occur at any stage of HIV infection. Patients with this condition may have a history of **cutaneous** shingles occurring either before or at the same time as the **retinitis**. The treatment is acyclovir for 10 to 14 days followed by long-term suppression (usually with a lower dose to prevent the infection from coming back). The second syndrome occurs in patients with T cell counts typically less than 50 and is known as progressive outer retinal necrosis syndrome. Approximately two thirds of patients with this disease will develop it in both eyes. This disease is different from acute retinal necrosis syndrome. The treatment for this form of *Varicella zoster* retinitis is difficult and seems not to respond to intravenous acyclovir or other forms of treatment with one medication only. A majority of patients (70%) with this syndrome will develop retinal detachment resulting in poor vision.

## PULMONARY (LUNG) EMERGENCIES

**Pneumocystis carinii pneumonia (PCP).** The pneumonia caused by the **microorganism** *Pneumocystis carinii* is the leading AIDS-defining condition in the United States, and perhaps one of the most common HIV-related emergencies. The most important risk factors for the development of this **opportunistic infection** are T cell counts less than 200 and a history of **thrush**. In the patient, PCP causes fevers, an increasing shortness of breath when an effort is made, and a dry cough. Extreme fatigue usually accompanies these symptoms. Rapidly changing fevers, chills, shaking, and **purulent sputum** are common in bacterial infections, but not in PCP. The chest x-ray is the most important test for the diagnosis of PCP. The examination of sputum is a simple, inexpensive, and effective means to confirm the diagnosis. If sputum is not diagnostic, special medical proce-

dures like a bronchoscopy with bronchoalveolar lavage (BAL) may be performed. Trimethoprim-sulfamethoxazole (Bactrim) is the drug of choice for the treatment of PCP. It is given for 21 days followed by **prophylactic** therapy to prevent the high likelihood of PCP happening again. The drug is available as tablets, suspension, and intravenous solution. The most frequent side effects include rash, fever, and abnormal laboratory tests. If the patient has an allergy to **sulfa drugs**, alternative regimens include intravenous pentamidine, trimethoprim and dapsone, clindamycin and primaquine, or atovaquone and trimetrexate. In cases of severe PCP, the use of corticosteroids has clearly decreased clinical failures and lowered death rates.

**Bacterial pneumonia.** Bacterial pneumonia is much more common in HIV-infected persons than in HIV-negative persons. Several studies show a direct relationship between bacterial pneumonia and the degree of immunosuppression estimated by T cell counts. Also, the possibility of getting bacterial pneumonia is increased among smokers and injection drug users. People with bacterial pneumonia usually have fever, chills, **sputum** production, shortness of breath, and an abnormal chest x-ray.

## CENTRAL NERVOUS SYSTEM EMERGENCIES

**Cerebral toxoplasmosis.** *Toxoplasma gondii*, a **parasite**, is the most common cause of focal brain lesions in people with AIDS. Cats are usually the hosts of this parasite, but it spreads to humans when eggs are ingested in raw or undercooked meats, particularly lamb and pork. Almost all cases of **cerebral** toxoplasmosis in people with AIDS are the result of reactivation of an infection that may have occurred much earlier, but was kept under control by the healthy immune system. The risk of reactivation increases as the T cells decrease, with the highest risk in persons with T cell counts less than 50. Patients with cerebral toxoplasmosis complain of headache, confusion or altered mental status, and fever (in about half the cases). Up to 50% of patients with this infection may develop seizures as an initial sign of the disease, and even more will have a **stroke**. The diagnosis is based on the clinical findings, low T cell count, evidence of the infection in the blood (positive IgG antibodies against *Toxoplasma*), and CT scan or MRI of the head. Treatment for cerebral toxoplasmosis consists of a combination of pyrimethamine, sulfadiazine, and folinic acid. Alternative therapies for patients with allergies to **sulfa drugs** include pyrimethamine and folinic acid, in addition to one of the following: clindamycin, clar-

ithromycin, dapsone, or azithromycin. Improvement is expected after 7 to 10 days of therapy. If no improvement is seen by then, a brain **biopsy** is recommended.

**Cryptococcal meningitis.** *Cryptococcus neoformans* is the most common **fungus** responsible for infections in patients with AIDS. The most severe type of cryptococcal infection is **chronic** meningitis. The symptoms may include headaches, fever, altered mental status, nausea, vomiting, or **malaise**. All these symptoms usually increase and decrease over the course of 2 or 3 weeks before the diagnosis is made. A blood test for cryptococcal **antigen** may be used to screen HIV-infected patients with these nonspecific symptoms and low T cell counts. A spinal tap is the preferred diagnostic procedure. The level of cryptococcal antigen in cerebrospinal fluid (CSF) or a CSF fungal culture provides a definite diagnosis. Treatment of HIV-associated cryptococcal meningitis is with intravenous amphotericin B for 2 weeks with or without flucytosine, followed by oral fluconazole for 8 to 10 weeks. Once this therapy is finished, patients will have to stay on suppressive therapy with oral fluconazole. Increased intracranial pressure (pressure inside the head) may be frequent and could be a life-threatening complication of **acute** cryptococcal meningitis that may require a series of spinal taps or the placement of a special shunt to help relieve pressure.

## Emergencies related to immune reconstitution syndromes

The arrival of highly active antiretroviral therapy (HAART) has made it possible to control HIV viral load, allowing at least a partial recovery of the immune system. This partial recovery is sometimes called “immune reconstitution.” One benefit of this recovery is an increase in T cells, but this can lead to a strong immune response to **opportunistic infections** that were hidden. A number of conditions have been described, some of which may represent medical emergencies in HIV-infected persons.

Patients co-infected with HIV and *Mycobacterium tuberculosis* (tuberculosis or TB) who are receiving HAART and drugs against tuberculosis may develop severe inflammatory reactions including fever, worsening of **pulmonary** conditions, shortness of breath, and enlargement of lymph nodes or **cerebral** masses (tuberculomas). Similar kinds of reactions have been described with CMV, *Mycobacterium avium* complex (MAC) infections, and hepatitis C infections. In certain circumstances, corticosteroids are recommended to treat the **acute** symptoms associated with restored immune function. 🌐

## REMEMBER THIS!

Midazolam (Versed) is a drug commonly used for general anesthesia in outpatient surgery and other routine medical procedures where the patient must be “knocked out.” If you are taking any of the following anti-HIV drugs, be sure to remind your doctor, nurse, etc. These drugs have interactions with midazolam that can put you into a coma! The reason this happens is competition between the anti-HIV drugs and midazolam, causing the midazolam to build up in the body. The result is like getting an overdose of midazolam. Although your health care provider should always check for drug interactions, it never hurts to remind him or her. Another anesthetic agent can be substituted for the midazolam.

- ▶ Amprenavir (Agenerase)
- ▶ Delavirdine (Rescriptor)
- ▶ Efavirenz (Sustiva)
- ▶ Indinavir (Crixivan)
- ▶ Lopinavir/ritonavir (Kaletra)
- ▶ Nelfinavir (Viracept)
- ▶ Ritonavir (Norvir)
- ▶ Saquinavir (Fortovase or Invirase)

Table 1. Emergencies in HIV-infected people

### Emergencies related to HIV-therapy

- Lactic acidosis
- Abacavir hypersensitivity reaction
- Indinavir-induced nephrolithiasis
- Rash by NNRTI
  - Maculopapular rash
  - Stevens-Johnson Syndrome

### Emergencies related to opportunistic infections

- Ocular emergencies
  - Cytomegalovirus retinitis
  - *Varicella zoster*
- Pulmonary emergencies
  - *Pneumocystis carinii* pneumonia
  - Bacterial pneumonia
- Central nervous system emergencies
  - Cerebral toxoplasmosis
  - Cryptococcal meningitis

### Emergencies related to immune reconstitution syndrome

# Blood fat levels and anti-HIV drugs: Now what?

By **Ben J. Barnett, MD**, The University of Texas–Houston Medical School, &  
**Mario Maldonado, MD**, Baylor College of Medicine

In the 20 years since AIDS was first described, there have been many advances and disappointments. One of the greatest advancements has been the discovery and use of highly active antiretroviral therapy (HAART). Unfortunately, we are now learning of the many possible types of **metabolic** side effects that come with these treatments, including body fat changes (lipodystrophy), insulin resistance, and diabetes, among others. We are also seeing increases, sometimes to extreme levels, in the amounts of cholesterol and triglycerides (types of fat) in the blood, a syndrome called **dyslipidemia**. It is possible that these metabolic complications will increase the chances of a heart attack or **stroke**. This article summarizes what you need to know as a patient about your levels of blood cholesterol and triglycerides.

## THE CARDIOLOGIST'S VIEW

The National Cholesterol Education Program (NCEP) updated their recommendations regarding cholesterol testing and management in May 2001 (online at [jama.ama-assn.org/issues/v285n19/fpdf/jsc10094.pdf](http://jama.ama-assn.org/issues/v285n19/fpdf/jsc10094.pdf)). It is important to understand that these recommendations are written for a general population—not HIV-infected patients specifically—and generally apply to patients who have *long-standing* high levels of cholesterol in their blood. It is not known if we should apply these guidelines to an HIV-infected population whose cholesterol levels have been increased only after taking medications to treat HIV. However, if we assume that high levels of cholesterol and triglycerides are “bad” in the long run, whether they are caused by medication or not, these guidelines are useful as a starting point for our discussion.

Blood fat levels are measured in 4 ways: total cholesterol, LDL (“bad” cholesterol), HDL (“good” cholesterol), and triglycerides. These blood levels should be measured in a fasting state, which means not eating for 8 to 12 hours before the test. The NCEP has established the following classifications for these tests. The numbers shown are in mg/dl (milligrams of fat particles for a certain volume of blood). (See chart on next page.)

*In the 20 years since  
AIDS was first  
described, there have  
been many advances  
and disappointments.*

<b>LDL cholesterol</b>	
Less than 100	Optimal
100-129	Near or above optimal
130-159	Borderline high
160-189	High
Equal or greater than 190	Very high
<b>Total cholesterol</b>	
Less than 200	Desirable
200-239	Borderline high
Equal or greater than 240	High
<b>HDL cholesterol</b>	
Less than 40	Low
Equal or greater than 60	High
<b>Triglycerides</b>	
Less than 150	Normal
150-199	Borderline high
200-499	High
Equal or greater than 500	Very high

The risk of heart disease and **stroke** is not only based on blood cholesterol levels. Other factors that can put you at risk are cigarette smoking, high blood pressure, a history of heart disease in an immediate relative younger than 55 years old, insulin resistance, diabetes, increased fat in the abdomen, and older age (45 years old or older for men, 55 years old or older for women). So, before considering taking additional medicines to treat high cholesterol, modifying your habits and lifestyle is recommended to reduce your risk of heart disease. This would include stopping smoking, engaging in a moderate exercise program (for example, walking for 20 to 30 minutes several times a week), maintaining an appropriate weight, and reducing the amounts of saturated fats and cholesterol in your diet. Saturated fats should be reduced to less than 7% of total calories, and cholesterol should be less than 200 milligrams (mg) per day. It may be wise to consult a nutritionist for more education on a proper low-fat, low-cholesterol diet, and a physical therapist to help you design an appropriate exercise program. A program like Body Positive in Houston can help (see page 15).

Even with a healthy lifestyle, some patients will require medications to help lower their cholesterol and triglyceride levels. Recently published guidelines for the start of lifestyle changes and for drug therapy are based on LDL cholesterol, because it is the single largest risk factor for heart disease. However, you should remember that these are only guidelines and each patient is an individual who requires individual care.

Patient status	LDL goal	Make lifestyle changes	Consider drug treatment
Prior heart disease	Less than 100	Greater than 100	Greater than 130
Other risk factors	Less than 130	Greater than 130	Greater than 160
No risk factors	Less than 160	Greater than 160	Greater than 190

**HIV AND CHOLESTEROL LEVELS**

The adult AIDS clinical trials group (ACTG) has recently published recommendations regarding HIV/AIDS treatment and **dyslipidemia**. These guidelines were developed by the ACTG cardiovascular disease focus group and published in a medical journal, *Clinical Infectious Diseases*, (31, p. 1216, 2001). (Contact your local librarian if you would like to see a copy of the article.)

Increases in cholesterol and triglyceride levels have been seen in patients taking protease inhibitors (PIs), and also in patients on non-nucleoside reverse transcriptase inhibitors (NNRTIs). These levels can be extremely high, sometimes with triglycerides reaching more than 1000 mg/dl. Elevated **lipid** levels can affect 47% to 57% of patients taking PIs.

There have been many stories of premature heart attacks and deaths in patients on PIs, but it is still not clear how much the elevations in lipid levels will increase the risk of heart disease for patients. Nevertheless, the ACTG does recommend diagnosis and treatment, if necessary, of abnormal lipid levels in HIV/AIDS patients on HAART.

If it is true that the PIs are mostly responsible for the increases in lipid levels in patients taking anti-HIV therapy, it makes sense that one reasonable strategy to correct this would be to switch to a non-PI containing regimen, such as with an NNRTI. This has been researched in a variety of settings with mixed results. Some studies have shown that switching a PI for nevirapine (Viramune) or abacavir (Ziagen) can result in a lowering of **lipid** levels without loss of HIV suppression. The NNRTI efavirenz (Sustiva) has shown less encouraging results, and in some studies has resulted in an increase in cholesterol levels. These “switch” strategies should be done with extreme caution, however, because the long-term effectiveness of switching a single medication is unknown, and this could lead to multidrug-resistant HIV infection. Right now we need more information and study data on whether this approach will have better effects on lipid levels.

... continued  
on pg 8

## TREATMENTS FOR HIGH CHOLESTEROL

All patients who have not started anti-HIV therapy should have a **lipid** “profile” prior to starting treatment, including total cholesterol, HDL and LDL cholesterol, and triglycerides. These levels should be measured while fasting (not eating food for at least 8 to 12 hours, and not having alcohol for 24 hours) and should be repeated 3 to 6 months after starting anti-HIV therapy. Of course, all other risks for heart disease (as discussed earlier) should be minimized. Having a low-cholesterol diet and not smoking can help greatly. Diet restrictions may have to be loosened for patients with wasting syndrome (losing weight), in whom total calorie intake is more important than long-term risk factors for heart disease. Again, treatment always must be individualized.

Drug treatments for cholesterol in patients on PIs can be a problem because of drug interactions. The so-called “statin” drugs are the first-line treatments for high cholesterol, but may interact with PIs to produce severe side effects and **toxicity** from high levels of the statin. Also, drug interactions can lower PI levels and cause HIV to rebound. There are 6 approved statins, some with more interactions than others (see table below). These drugs lower LDL cholesterol and have been shown to reduce the long-term risk of heart disease in the general population. A good recommendation is to start with a low dose of either pravastatin (Pravachol) 20 mg a day or atorvastatin (Lipitor) 10 mg a day. When you are on a statin, it is important for your health care provider to measure blood tests for the liver (to make sure there is no damage) and to watch carefully for signs of toxicity to muscles, like muscle aches and cramps.

If you have elevations in both cholesterol and triglycerides, or if you have elevated triglycerides alone, then the drugs known as “fibrates” may be a good place to start. Fenofibrate (Tricor)

67 to 200 mg per day or gemfibrozil (Lopid) 600 mg twice a day are effective in lowering triglyceride levels, and have some effect on cholesterol as well. Fenofibrate may have better activity than gemfibrozil on lowering LDL levels. The fibrates do not have any drug interactions with PIs. However, they *must be given with caution* if used with a statin drug, as the combination of those two can result in more

severe muscle **toxicity**. A key symptom to look for when using this combination is severe muscle cramps. If a patient develops such symptoms while taking the drug combination, he or she should stop taking the lipid lowering medications and have blood levels of a muscle **enzyme** called CPK measured. Also, cerivastatin (Baycol) and gemfibrozil should *not* be taken as a combination. However, cerivastatin was withdrawn recently from the market over concerns about muscle toxicity that caused the deaths of 31 people.

## OTHER IMPORTANT CARDIOVASCULAR RISK FACTORS

Patients taking PIs may experience other abnormalities like lipodystrophy and insulin resistance. Lipodystrophy is a general term for body fat changes, which can include loss of fat from the periphery (arms, legs, face, and buttocks) and increase of fat in central regions (breasts, upper back, and abdomen). Some forms of lipodystrophy are inherited (for example, in **Cushing's syndrome**) and others are acquired (like in **diabetes mellitus**). All patients with these forms of lipodystrophy have increased risk for cardiovascular complications such as heart attack and **stroke**. HIV-infected patients who develop lipodystrophy after beginning HAART may have an increased risk of cardiovascular disease, but there is no conclusive proof yet.

Insulin resistance is a **metabolic** complication in which the cells of the body require higher levels of insulin (a hormone) for taking sugar from the blood into the cells. In persons who have a defect in the production of insulin by the pancreas, type-2 **diabetes mellitus** develops. Both insulin resistance and diabetes mellitus are independent risk factors for cardiovascular disease. Virtually all patients

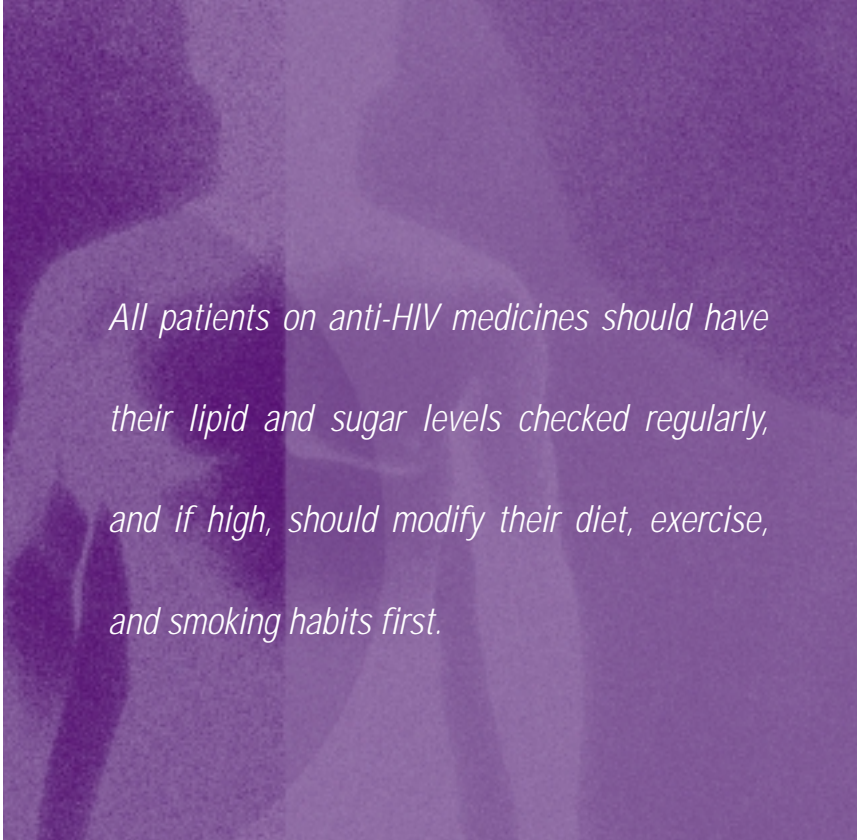
taking HAART who develop **dyslipidemia** or lipodystrophy have insulin resistance. The risk of developing diabetes has doubled in HIV-infected individuals who are taking HAART. It is very important for health care

providers to measure blood sugar levels in patients before and during HAART therapy, and to be on the look out for symptoms of diabetes such as frequent urination, increased thirst and hunger, increased weight, weakness, and confusion. A heart-healthy diet and daily exercise are the cornerstones of treatment for both diabetes and insulin resistance.

Generic name	Trade name	Comments
Lovastatin	Mevacor	Should not be used with PI
Simvastatin	Zocor	Should not be used with PI
Fluvastatin	Lescol	Interaction with nelfinavir likely
Cerivastatin	Baycol	Recently withdrawn from market
Atorvastatin	Lipitor	Probably OK with PIs
Pravastatin	Pravachol	Least affected by PIs

## CONCLUSIONS

The use of the PIs and HAART have substantially increased our ability to treat HIV and AIDS, but now we are seeing side effects such as high cholesterol and triglycerides, lipodystrophy, and insulin resistance and diabetes, all of which may result in a higher risk of heart disease and **stroke**. All patients on anti-HIV medicines should have their **lipid** and sugar levels checked regularly, and if high, should modify their diet, exercise, and smoking habits first. Drug therapy (like using statins or fibrates) may also be required, and this should be discussed with your health care provider, because many of the cholesterol medications interact with medications used for HIV. ~



*All patients on anti-HIV medicines should have their lipid and sugar levels checked regularly, and if high, should modify their diet, exercise, and smoking habits first.*



## Run, Spot, Run!

HIV-infected people who exercise regularly may be able to increase their endurance and improve their body fat composition, according to a report in the journal *AIDS* (15, p. 693, 2001). Past studies have shown aerobic exercise to improve patient health in chronic conditions like cancer and heart disease; this may also be true in individuals with HIV infection. Researchers from the University of Alabama at Birmingham School of Nursing studied the effects of 12 weeks of aerobic exercise in 60 HIV-infected adults. After the 12 weeks, subjects were able to stay on a treadmill longer than those who did not exercise. Although the aerobic exercise increased the maximum oxygen use in the patients, the program had little impact on breathing measurements (like shortness of breath). During their exercise program, participants lost an average of about 3.3 lbs and reduced their fat consumption from 35% to 30% of total calories. Exercise also had beneficial effects on muscle-to-fat ratio, skin fold (subcutaneous fat) measurements, and waist circumference. The exercise did not appear to have any effect on T cell count or viral load.

# Benefits of drug-resistant HIV?

For HIV-infected individuals with drug-resistant virus, piecing together a drug regimen that can suppress the virus is a major challenge.

When HIV is drug-resistant, it carries changes that allow it to reproduce in the presence of drug. However, there may be some hope for heavily treated individuals with drug-resistant virus. Research suggests that drug-resistant HIV may not always reproduce or attack T cells as well as natural or "wild-type" HIV. One report published

in *The New England Journal of Medicine* (344:7, p. 472, 2001) indicates that patients with drug-resistant virus may benefit from staying



on anti-HIV drugs—even if their viral loads are detectable. The researchers studied a group of 23 patients who had drug-resistant virus for a year or more. Patients who stopped

taking anti-HIV drugs immediately experienced increases in viral load levels and decreases in T cell counts.

Those who continued taking anti-HIV drugs experienced little change in viral load or T cell count. The researchers conclude that staying on drug forces the virus

to maintain drug-resistant changes, and that stopping drug allows the virus to change back to its wild type, which can do more damage.

## List of AIDS-related cancers may be growing

Three forms of cancer are currently considered as AIDS-defining diseases: cervical cancer, non-Hodgkin's lymphoma, and Kaposi's sarcoma (a form of skin cancer caused by a herpes-type virus). However, an analysis of more than 300,000 patients with AIDS suggests that other forms of cancer may also be caused by immune suppression. The study was conducted by researchers from the National Cancer Institute and the Danish Epidemiology Science Center using data from the "AIDS-Cancer Match Registry Study, United States, 1978-1996." The analysis, published in the April 4 issue of *The Journal of the American Medical Association* (285, p. 1736, 2001), shows an increased risk of Hodgkin's disease, lip cancer, and testicular cancer, in patients diagnosed with AIDS. Specifically, AIDS patients were 11.5 times more likely to have Hodgkin's disease, 3.1 times more likely to have lip cancer, and 1.8 times more likely to have testicular seminoma (a cancer of the testes). Although other forms of cancer also showed higher risks in AIDS patients, these cancers either were associated with risk factors independent of immune status (for example, lung cancer with "heavy smoking") or were not different before and after AIDS diagnosis. The researchers recommend that Hodgkin's disease, and possibly lip cancer and testicular cancer, be considered AIDS-defining conditions associated with advancing immune suppression.

## NEW DRUG APPLICATION SUBMITTED FOR TENOFOVIR

On May 1, 2001, Gilead Sciences announced the submittal of a New Drug Application (NDA) to the US Food and Drug Administration (FDA) for approval of tenofovir disoproxil fumarate (tenofovir DF). This drug is an inhibitor of the HIV **enzyme reverse transcriptase**, a protein that is crucial to the reproduction of HIV. Currently approved reverse transcriptase inhibitors include nucleoside and non-nucleoside inhibitors, but tenofovir is a *nucleotide* reverse transcriptase inhibitor, which has slightly different chemical properties. FDA review and action is

expected within 6 months. Tenofovir is dosed as a single 300 mg tablet taken once daily. Side effects associated with the use of tenofovir have yet to be characterized fully. In January 2001, Gilead announced an expanded access program to provide tenofovir to people with advanced HIV infection. For more information regarding the tenofovir early access program or to request registration materials, call 800.GILEAD-5.



## BREASTFEEDING DANGERS

Anti-HIV drugs have played an important role in greatly reducing the risk of HIV transmission from mother to child (also called “vertical transmission”). However, transmission is also possible through breastfeeding, so HIV-infected mothers are warned against breastfeeding their children. Now, researchers at the University of Nairobi in Africa have identified another reason not to breastfeed—higher risk of death for the HIV-infected mother. The researchers studied 425 HIV-positive mothers in Nairobi. Two years after delivery, HIV-positive mothers who breastfed had a death rate of 10.5% compared to 3.8% in mothers who used formula. Also, this effect extended to children, since the children of mothers who died from AIDS were 8 times more likely to die than children with surviving mothers. The reasons for the increased death rate are not clear. The research is published in *The Lancet* (357:9269, p. 1651, 2001).



## Battling fatigue

Fatigue can have many possible causes: anemia (low red blood cell counts or their ability to carry oxygen to cells), sleeping problems, poor nutrition, hormone imbalances, depression and anxiety, active infection (like HIV or **hepatitis**), medication side effects, etc. If you frequently feel tired or “out of energy,” you may be experiencing fatigue. Talk to your health care provider about how you feel. He or she may be able to take some tests and suggest ways to overcome fatigue. An informative article on fatigue is available online ([www.sfaf.org/treatment/beta/b47/b47fatigue.html](http://www.sfaf.org/treatment/beta/b47/b47fatigue.html)) in the Spring 2001 issue of the *Bulletin of Experimental Treatments for AIDS* (BETA). Some tips in the article for helping to cope with fatigue include:

- Scheduling important activities for when energy levels are highest
- Reducing or eliminating nonessentials tasks
- Getting assistance with tasks like shopping, cooking, or cleaning
- Alternating restful activities with physically demanding activities
- Taking naps or resting during the day (but not within 6 hours of bedtime if you have problems sleeping)
- Setting realistic goals about what can be done each day



## Increased frequency of oral warts

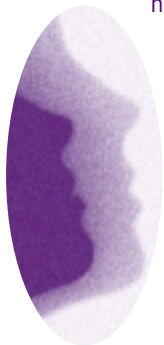
A review of the records from 1280 patients with HIV seen at a clinic between 1990 and 1999 indicates that the frequency of oral warts is increasing, despite the use of anti-HIV therapy. While the incidence of several oral infections decreased during this period, this was not the case with oral warts. A 3-fold increase in oral warts was seen in patients taking anti-HIV therapy (not including protease inhibitors) and a 6-fold increase in oral warts was seen in patients taking anti-HIV therapy that included protease inhibitors. The authors could not provide an exact reason for this observation, but suggest that the rebound of the immune system caused by anti-HIV therapy may be incomplete. The report was published in *The Lancet* (357, p. 1411, 2001).

# BOTTOM LINES

## SEEN AND HEARD

Peripheral **neuropathy** is a common side effect of nucleoside reverse transcriptase inhibitors (NRTIs). These drugs include AZT (Retrovir), d4T (Zerit), ddI (Videx), 3TC (Eпивir), ddC (Hivid), and abacavir (Ziagen). The “d” drugs (ddI, d4T, and ddC) in particular can cause nerve damage to the hands and feet, especially when used over an extended period of time. However, the nerve damage may not stop there. The package insert for Videx EC (the new formulation of ddI) includes a warning about vision problems like retinal changes and **optic neuritis**. The insert recommends that “periodic retinal examinations should be considered for patients receiving VIDEX EC.” This recommendation is based on a few case reports of retinal lesions and vision problems seen in people taking ddI. Complaints included night blindness and restricted vision (like “seeing through a tube”).

On a related note, in the journal *Clinical Infectious Diseases* (32:11, p. 1623, 2001), researchers in Colorado recently reported on 3 HIV-infected males who experienced hearing loss when they began taking anti-HIV therapy. All 3 men were middle-aged (47 to 53 years old) and had experienced temporary hearing loss caused by loud noise in the past. Upon beginning anti-HIV therapy, the men complained of hearing loss and ringing in the ears. When 2 of the men stopped the anti-HIV medication, their hearing somewhat improved. Risk factors for hearing loss include older age and any previous hearing damage. Certainly more vigilant case reporting is needed to further confirm these observations.



**BOTTOM LINE:** notify your health care provider of any noticeable changes in vision or hearing, or if you are experiencing any pain or discomfort in your hands or feet.

## USE CAUTION WITH HERBAL SUPPLEMENTS

Last year’s headlines about interactions between the herb St. John’s Wort (used to treat depression) and certain prescription drugs (including protease inhibitors) caught many people by surprise. Even a product that comes from plants or is “all natural” can interact with medications or cause changes in the body. The reason for the interaction with St. John’s Wort is that this herb speeds up an **enzyme** in the liver that also processes certain kinds of drugs, including protease inhibitors. If the enzyme works faster, then the drugs are cleared from the body too quickly—a dangerous situation for people with HIV because the virus may be less suppressed. In contrast, research with human liver cells shows an herb called milk thistle may slow down this liver enzyme. This work was published in the journal *Drug Metabolism and Disposition* (28:11, p. 1270, 2000). Although research is needed to confirm this effect in humans, the slow-down of this enzyme system possibly could cause drugs to be processed more slowly, resulting in a build-up of drugs in the body and leading to more side effects or **toxicity**.

**BOTTOM LINE:** remember to tell your health care provider about *any* herbs or supplements you are taking.

## DON’T FLIP OVER BLIPS


In a recent paper published in *The Journal of the American Medical Association* (286:2, p. 171, 2001), researchers analyzed the frequency of temporary, low-level increases in viral load (“blips”) and whether such episodes could predict failure of anti-HIV drugs. The researchers looked back at 2 studies, ACTG 343 and Merck 035, and used patient blood samples to measure viral load. They found that blips over 50 copies were frequent, but did not predict failure of the drugs—in this case AZT, 3TC, and indinavir (Crixivan)—over 4.5 years. A more important measure of drug durability seems to be how low the virus is suppressed when the drugs are first begun. Achieving a viral load less than 50 usually predicts

long-term effectiveness of anti-HIV drugs. The researchers note that intensifying treatment (increasing dose or adding a drug) or changing treatment may not be necessary for patients experiencing blips. However, blips were not defined as an exact viral load (like under 500) or period of time (like 2 months). Also, the study did not look at issues like medication adherence, which can affect the success of drug combinations.

**BOTTOM LINE:** don't panic if your viral load becomes detectable at a low level once in a while. Your health care provider can monitor your viral load more frequently and recommend therapy changes only if it becomes necessary.

## SEXUAL PROBLEMS AND HIV DRUGS

Two recent reports suggest that HIV-positive individuals experiencing symptoms of lipodystrophy (a broad term describing changes in body fat occurring because of HIV infection, anti-HIV drugs, or both) may also experience sexual problems. At the recent *1st International AIDS Society Conference on HIV Pathogenesis and Treatment* in Argentina, researchers from London reported that 63% of HIV-infected patients with fat changes complained of sexual difficulties. Men reported problems that included **erectile dysfunction**, orgasm problems, and loss of sex drive. In women, loss of sex drive, painful intercourse, and orgasm problems were reported. One observation was that few males had low levels of testosterone (male sex hormone), but several men showed increased levels of estrogen (female sex hormone). The researchers plan to study sexual problems in a larger group of patients, on and off anti-HIV therapy. The second report, published in the journal *AIDS* (15:8, p. 1019, 2001), found that a high number of patients on highly active antiretroviral therapy (HAART) complained of sexual problems, including a loss of sex drive or erectile dysfunction. A decrease in sexual interest was reported more frequently by individuals (men and women) whose anti-HIV drugs included protease inhibitors. For example, 34% of men taking protease inhibitors reported sexual problems compared to 12% of men who never took protease inhibitors. The researchers believe that the relationship between sexual dysfunction and side effects of anti-HIV drugs (like lipodystrophy and neuropathy) should be studied further.

**BOTTOM LINE:** your sexual health is part of your overall health and well-being. If you are dissatisfied with your sex life and think you are experiencing problems, talk to your health care provider about possible options. 

# BOTTOM LINES

*...your sexual health is part of your overall health and well-being. If you are dissatisfied with your sex life and think you are experiencing problems, talk to your health care provider about possible options.*

# definitions

**Acidosis:** excess production of acid in the body that usually produces symptoms of sweet breath, headache, nausea and vomiting, and vision problems.

**Acute:** beginning suddenly or severely (as in a disease); progressing rapidly.

**Antigen:** a substance that stimulates an immune response (usually a foreign substance related to a disease).

**Biopsy:** a sample of tissue or fluids from a living body.

**Cerebral:** relating to the brain.

**Chronic:** lasting over a long period of time.

**Cushing's syndrome:** an abnormal condition of obesity and muscle weakness caused by an overproduction of corticosteroids in the body.

**Cutaneous:** relating to the skin.

**Diabetes mellitus:** a disorder involving insulin (a substance in the body that helps regulate blood sugar) that results in too much sugar in the blood and urine, as well as symptoms like hunger, thirst, loss of weight, and frequent urination.

**Dyslipidemia:** irregular levels of fats in the blood.

**Enzyme:** a protein that carries out specific jobs in the body.

**Erectile Dysfunction:** the inability to have an erection of the penis, the male reproductive organ.

**Floater:** debris (like a dead cell) in the liquid of the eye that may be seen as a spot in the visual field.

**Fungus:** a type of organism that includes molds and mushrooms and lives off of living or dead material.

**Hepatitis:** inflammation of the liver that can have a variety of causes including viruses, medications, etc.

**Lactic acid:** a substance in blood and muscle tissue produced by the body when it is processing sugar for energy (usually when exercising or in the absence of sufficient levels of oxygen).

**Lesion:** an abnormal change to an area of the body, usually a well-defined mark.

**Lipids:** fats or fat-like substances that help make up living creatures.

**Liver function tests:** blood tests that can measure levels of liver proteins in the blood and detect stress or disease of the liver.

**Malaise:** a feeling of weakness or sickness that usually accompanies disease.

**Metabolic:** relating to chemical reactions in the body that are part of life; for example, turning food into energy or breathing in oxygen and breathing out carbon dioxide.

**Microorganism:** an organism that can only be seen with a microscope, like bacteria.

**Necrosis:** the death of living tissue.

**Neuropathy:** degeneration of nerves that can result in muscle weakness, pain, and numbness.

**Opportunistic infection:** a disease caused by an organism that is usually harmless, but becomes activated when a person's immune system is impaired or damaged.

**Optic neuritis:** inflammation or lesion of the optic (eye) nerve resulting in impaired vision.

**Parasite:** an organism living with, in, or on another living creature.

**Prophylactic:** preventing the spread or occurrence of disease.

**Pulmonary:** relating to the lungs.

**Purulent:** containing pus, such as that produced during an infection.

**Retinitis:** inflammation of the retina of the eye, which helps turn light into visual messages for the brain.

**Shingles:** reactivation of the virus that causes chicken pox, usually affecting nerves and causing radiating feelings of pain.

**Sputum:** saliva and discharge that can be coughed up, usually during an infection.

**Stroke:** a rupture or clot of a blood vessel in the brain that can cause a loss of sensation, movement, or consciousness.

**Sulfa drugs:** a type of bacteria-inhibiting drug.

**Thrush:** a disease caused by a fungus that usually causes white patches inside the mouth.

**Toxicity:** the quality of being poisonous or damaging.

# useful resources

The HIV and Hepatitis Education Prison Project. [www.hivcorrections.org](http://www.hivcorrections.org)

*"How are you feeling? Positive?"* is a publication for HIV-positive women. To request a copy of this booklet, or other free information, contact Project Inform. 800.822.7422

For a ready list of AIDS Service Organizations in Houston, plus information resources, databases, and much more, visit the Houston AIDS Information Link (HAIL). [www.hailinfo.org](http://www.hailinfo.org)

Houston's Body Positive Wellness Center offers exercise training, physical therapy, and nutrition counseling services to individuals with HIV/AIDS. 713.524.2374

A special collection of articles and archives in *The New York Times* covering the grim 20<sup>th</sup> anniversary of AIDS. [www.nytimes.com/library/national/science/aids/aids-index.html](http://www.nytimes.com/library/national/science/aids/aids-index.html)


The HIV/AIDS Treatment Information Service (ATIS) is sponsored by the US Department of Health and Human Services. [www.hivatis.org](http://www.hivatis.org) or 800.448.0440 (Monday through Friday, 9 a.m. to 5 p.m. eastern time)

The AIDS Clinical Trials Information Service (ACTIS) is the sister site of ATIS and has information on clinical trials near you. [www.actis.org](http://www.actis.org) or 800.874.2572 (Monday through Friday, 9 a.m. to 5 p.m. eastern time)

The National Minority AIDS Council has searchable online publications and many other resources. [www.nmac.org](http://www.nmac.org)

HIVandHepatitis.com has treatment information about HIV and hepatitis including news, resources, and special reports. [www.hivandhepatitis.com](http://www.hivandhepatitis.com)

HIVDENT is a not-for-profit coalition of concerned health care professionals committed to assuring access to high quality oral health care services for people with HIV/AIDS. [www.hivdent.org](http://www.hivdent.org)



**DON'T HAVE INTERNET ACCESS?** If you are in the Houston area, remember that The Center for AIDS has 2 computer workstations available to search for information on HIV/AIDS. The workstations are provided by the Houston AIDS Information Link (HAIL). The walk-in information center (1407 Hawthorne) is open Monday through Friday, 9 a.m. to 5 p.m. Also, consider visiting a local branch of your public library.

# CLINICAL



# I N F O R M A T I O N

# TRIAL

## SMART

They call it SMART and it launches on Monday, October 15, 2001. SMART stands for **S**trategies for the **M**anagement of **A**nti-**R**etroviral **T**herapy, and it will be the largest, most ambitious clinical trial in the history of the HIV/AIDS epidemic. The study will involve 6000 patients and last for as long as 8 years.

Driven by the widespread recognition that anti-HIV drugs are toxic, the study's planners are hoping to learn whether delayed, discontinuous treatment for HIV is just as effective as the present strategy of immediate, uninterrupted treatment. The study will also gather information on the long-term side effects of HIV treatment and its effect on quality of life. Additionally, the study will seek to learn whether interruptions in treatment are associated with an increase in unsafe sex.

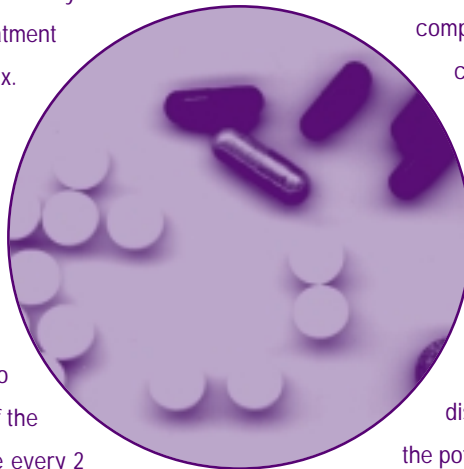
The study is open to anyone with HIV, male or female, who is at least 13 years old. To volunteer, you must have a T cell count of at least 350 and you must be willing to start, stop, or change anti-HIV drug therapy, depending on the study group to which you are assigned. For the first year of the study, you will have to see the doctor once every 2 months. After that, you will see the doctor 3 times a year. For safety, you cannot volunteer for the study while you are pregnant, but you can volunteer after you have had your baby.

In Houston, this study will be available at 3 sites: Thomas Street Clinic, the Veteran's Administration Medical Center, and Montrose Clinic. The principal investigator (head doctor) for the study is Roberto Arduino, MD, an associate professor of medicine at the University of Texas–Houston Medical School.

For more information, call Hilda Cuervo at 713.500.6731.

## COMPLIANCE STUDY LAUNCHES AT THOMAS STREET CLINIC

Even though HIV disease has become a "chronic" disease, it is unlike many other chronic disease states (such as hypertension and diabetes) because compliance in HIV care has unparalleled social and public health influences. Many factors interfere with compliance, including continued substance abuse, competing subsistence needs (like housing, clothing, etc.), difficulties in accessing care, and poor support from peer groups, employers, and family members. All of these factors lead to failure to come for scheduled clinic appointments and to refill prescriptions on time. Thus, overall compliance is poor, which will likely limit options for future therapy, worsen disease outcome, and possibly even increase the potential for transmitting drug-resistant virus.



A new study is being launched at Houston's Thomas Street Clinic to look at interventions that might improve compliance among women in traditionally underserved populations. A grant for \$243,000 was generously awarded by Bristol Myers Squibb to fund the project. Dr. Fehmida Visnegarwala, Director of Education at Thomas Street Clinic and an assistant professor of medicine at Baylor College of Medicine, will oversee the study.

The study proposes to establish a quality improvement program for 100 women followed for an average of 18 months in an attempt



to increase compliance with clinic visits and anti-HIV medications. This will be accomplished by providing patients with sufficient understanding of

- ▶ the basic biology of HIV infection,
- ▶ the effects and limitations of presently available anti-HIV drugs, and
- ▶ the best ways to use health care resources to maximize response to therapy.

For those participants identified with active drug use, effective drug-rehabilitation services will be provided. The study will test if an intensive early-intervention program will give patients the desire and skills needed to use the health care delivery system to their best advantage. Women receiving care at Thomas Street Clinic are eligible to enroll in this study. For more information, contact Mary Caprio (713-873-4185).



*Dr. Fehmida Visnegarwala (center) displays her award check for a new HIV/AIDS care compliance intervention study for women in underserved communities. **Thomas Gegeny**, Editor at The Center for AIDS, is on her left. **Steven Nettles**, of Bristol-Myers Squibb (the study sponsor), is on her right.*

## Why we need U.

With your support, The Center for AIDS would not be able to continue producing this publication or provide helpful updates about drugs and research for HIV/AIDS.

Get the picture?

Please make a contribution today. Call toll-free 888.341.1788 to make a credit card donation or use the donation envelope in this issue.

## Thank YOU!

## Q & A Patient/Doctor

**Edwin Cordray, DDS**, answers some important questions about HIV and the mouth.

**Edwin Cordray, DDS**, is in general practice in Houston and has treated patients for 38 years, caring for HIV-infected patients since the beginning of the epidemic. To help meet the needs of patients with HIV/AIDS in difficult financial situations, he helped start the Bering Dental Clinic (see below). Send your questions for physicians to [rita@centerforaids.org](mailto:rita@centerforaids.org) or by mail: Questions, P.O. Box 66306, Houston TX 77266-6306.

### **Bering Dental Clinic: an important community resource**

For individuals who cannot afford private dental care, the Bering Dental Clinic is a wonderful option. The Bering Dental Clinic is a nine-chair treatment facility dedicated to serving the oral health care needs of the HIV/AIDS population. The clinic is staffed by several dentists and a hygienist who provide a variety of services including restorative dentistry, hygiene (cleanings), root canals, gum surgery, oral surgery, and oral pathology. This staff has developed a high level of expertise in the special needs of the HIV/AIDS patient by having seen over 10,000 patients in the last 14 years. The clinic also provides a unique experience for patients to participate in several research studies looking at topics like oral warts, oral Epstein-Barr virus infections, the effects and treatment of lipodystrophy in the oral cavity, and dental implants.

To qualify as a patient of the Bering Dental Clinic, an individual must have an income below 500% of the poverty guidelines and the patient must provide proof of residency and have current blood work from a physician. The clinic is also willing to work with patients of dentists in the private practice setting. If the patient cannot afford all of the dental work, the clinic will be happy to perform some of the more basic procedures allowing the patient to save money for the more costly procedures, such as porcelain or gold crowns and bridges. For more information, call 713.524.7933 (ext. 120).

**Q:** I occasionally get sores in my mouth and have a gel my dentist gave me that helps them heal faster. Lately, I have been getting sores on my tongue that turn white and seem to spread, with dead skin that I can scrape away. The gel helps, but should I be worried about this?

**A:** Yes, you should be concerned about any unusual looking **lesion** in the mouth, whether it is painful or not. Many HIV-related problems appear in the oral cavity, most of which can be treated very easily without surgery. If your dentist is familiar with HIV oral problems, he or she can determine if the dead skin is a problem or not.

**Q:** My viral load is undetectable, but my T cells are at 250. Do I need to worry about thrush or other mouth problems?

**A:** Yes, you need to be concerned with **thrush** and other mouth problems—even if your viral load is undetectable. Even immune-healthy people can have thrush following certain drug therapies.

**Q:** I have heard about bone loss in people with HIV (especially in the last couple of years on combination therapy). Can teeth also lose minerals and become weaker? What should I do?

**A:** HIV-related gum diseases can be very aggressive and rapid. Bone (that holds your teeth in place, just under the gums) can be destroyed, causing the loss of the teeth in the affected area. Look for gums that bleed easily, even if painless. Blood on your toothbrush is another problem that is frequently ignored. Healthy gums do not bleed and are not painful or sore. If they are, see your dentist. Teeth can lose minerals due to decay from sweets and acidic food and drinks (see next answer). However, mineral loss in the teeth has not been associated with the use of anti-HIV drugs.

**Q:** My mouth is dry since I have started taking my medications, should I be concerned?

**A:** Yes, dry mouth is very destructive to your teeth and gums. If this occurs, do not ignore it! Your dentist can help. First, stop drinking regular colas that contain sugar; even diet colas are not suggested but are less harmful. Decreasing caffeine intake, using toothpaste with fluoride, brushing and flossing regularly, and using fluoride supplements, as directed by your dentist, can diminish the harm caused by dry mouth. Between-meal snacks that contain sugar should be eliminated completely. Many times in my practice I have seen destruction of the teeth and gums caused by behaviors like tobacco use. Tobacco acts as a poison to the gums. For many people, stopping the use of tobacco is a choice of either their habit/addiction or their teeth. Tobacco can cause dramatic damage to your teeth and gums—imagine what it does to the rest of your vital internal organs.

**Q:** I get painful ulcers in my mouth, is there anything that can help?

**A:** Unfortunately, ulcers are a frequent and common complaint. Again, your dentist can help. New drug therapies sometimes can cause ulcers or sores. However, any ulcer that lasts over several weeks and does not respond to medications may have to be removed surgically. See your dentist regularly as recommended. Prevention is far less invasive and certainly less expensive than treatment after the damage is done.

# CALENDAR

## AUGUST

- 8 Journal Club**  
Noon at The Center for AIDS  
1407 Hawthorne  
Rsvp 713.527.8219 for lunch
- 14 Treatment Mixer**  
7:00 p.m. at The Center for AIDS  
1407 Hawthorne
- 17** The information center at The Center for AIDS will be closed to host The Texas Title I Quarterly Meeting.
- 22 Journal Club**  
Noon at The Center for AIDS  
1407 Hawthorne  
Rsvp 713.527.8219 for lunch
- 28-30** A concert staging of *Falsettos*  
7:30 p.m. at Ovations  
Rsvp 713.527.8219 and  
press 5 for reservation information.

## SEPTEMBER

- 3** The Center for AIDS will be closed for the Labor Day holiday.
- 5 Journal Club**  
Noon at The Center for AIDS  
1407 Hawthorne  
Rsvp 713.527.8219 for lunch
- 11 Treatment Mixer**  
7:00 p.m. at The Center for AIDS  
1407 Hawthorne
- 13-16 The United States Conference on AIDS National Minority AIDS Council**  
Miami Beach, Florida  
For registration information, call 202.483.6622, ext. 343.  
Registration deadline is August 21, 2001.

- 19 Journal Club**  
Noon at The Center for AIDS  
1407 Hawthorne  
Rsvp 713.527.8219 for lunch
- 20 AIDS Action 2001 Houston Leadership Dinner**  
6:30 p.m. at The Metropolitan  
Contact 713.523.1762 for more information or to purchase tickets.

## OCTOBER

- 3 Journal Club**  
Noon at The Center for AIDS  
1407 Hawthorne  
Rsvp 713.527.8219 for lunch
- 9 Treatment Mixer**  
7:00 p.m. at The Center for AIDS  
1407 Hawthorne
- 17 Journal Club**  
Noon at The Center for AIDS  
1407 Hawthorne  
Rsvp 713.527.8219 for lunch
- 19-20 Halloween Magic 2001**  
*"The Best Little WHITEHOUSE in Texas"*  
Edwin Hornberger Conference Center  
For more information or for advance ticket sales, please call 713.226.232.
- 26** The information center at The Center for AIDS will be closed.  
**HIV Nurses Forum**  
8:00 a.m. – 4:15 p.m.  
Rsvp 713.527.8219  
7.8 continuing nursing education hours have been applied for from the Harris County Hospital District, which is approved as a provider of continuing education in nursing by the Texas Nurses Association, which is accredited as an approver of continuing education in nursing by the American Nurses Credentialing Center's Commission on Accreditation. This approval meets Type I criteria for mandatory continuing education requirements towards re-licensure as established by the Board of Nurse Examiners for the State of Texas.

### UNITED WE STAND

Some of the nation's most prominent HIV treatment activists will gather in mid-August under the Texas sun. Meeting in Houston, the activists will attempt a historic first: organizing a nationwide community advisory board (CAB) for advocates in HIV basic science and drug development. Although many regional and institution-specific HIV CABs exist around the country, never before has there been an effort to form a national CAB devoted to the important fields of science and treatment. The Center for AIDS will host approximately 50 advocates as they hammer out the "constitution" of the new CAB. By developing a formal structure and mechanisms for accountability, training, and process, the participants will try to infuse US AIDS activism with greater clarity and efficiency. If successful, the new CAB will serve as a clearinghouse for both "freelance" independent activists and those employed by treatment advocacy organizations.

### NEW DIRECTOR OF EDUCATION AND OUTREACH

The Center for AIDS (CFA) announces the hiring of Rich Arenschioldt as Director of Education and Outreach. Rich will be responsible for The CFA's new effort to get treatment and disease information out into the HIV-infected community through presentations and special training sessions. Also, he will develop, maintain, and update the many resources available in The CFA's walk-in information center (1407 Hawthorne) in Houston. Rich comes from The People With AIDS (PWA) Coalition, Houston, where he headed up a special HIV/AIDS training program called Project LEAP (Learning, Empowerment, Advocacy, and Participation). He has over 10 years of experience in HIV/AIDS and has authored numerous articles on this topic. To find out more, or to schedule a patient/client or staff presentation, contact Rich at The CFA (713.527.8219 ext. 108; rich@centerforaids.org).

# COMMUNITY SPOTLIGHT

## The People With AIDS Coalition, Houston, Inc. (PWA Coalition)

The PWA Coalition (established in 1986) is an organization of, by, and for people with HIV/AIDS (PWAs) that promotes independence and self-reliance so that PWAs may live with dignity, self-esteem, and acceptance. The coalition provides short-term crisis intervention and long-term referrals and works to create opportunities for participation in the PWA community, including public advocacy to address the needs of PWAs.

### PROGRAMS:

- ▲ New Beginnings Household Restart: furniture and household goods for clients in need.
- ▲ Milam House: temporary housing to men living with drug or alcohol addiction and HIV/AIDS.
- ▲ Case Management Services: coordinated direct services to PWAs, including assessing and evaluating needs and monitoring referrals to other HIV service providers.
- ▲ Childcare Services: onsite childcare for families at Thomas Street, Maya's Place, Bering Omega Community Services, and Montrose Clinic.
- ▲ Project Open Doors: a collaborative program, targeting young females 14 to 24 years old who are HIV infected and pregnant or homeless, that offers intensive referrals to services such as food, shelter, medical care, transportation, drug treatment, job training, etc.
- ▲ Rural Emergency Rent and Utility Assistance: Emergency vouchers for rent and utilities are available for indigent clients through a program for residents of Austin, Colorado, Walker, and Wharton Counties.

- ▲ Project LEAP (Learning, Empowerment, Advocacy, and Participation): education and prevention program that trains HIV-infected and affected adults to serve on boards, councils, and committees involved in policymaking and advocacy on behalf of PWAs.
- ▲ BHIVE (Be HIV Empowered): an opportunity for heterosexual PWAs to come together and share common experiences in a safe, confidential environment and to network about what they can do to live longer, healthier lives.
- ▲ Volunteer Program: opportunities include office support, fundraising, public relations, etc.

### CONTACT INFORMATION:

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Houston, Texas 77006  
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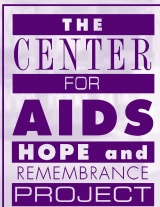
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