Skeletal muscle damage

Italian researchers at the University of Bologna have reported an unexpected high incidence of enzyme elevations indicating muscle damage in patients taking active antiretroviral therapy (HAART).

The group, led by Roberto Manfredi, told the Sixth International Congress on Drug Therapy in HIV Infection that 15% of their 879 patient cohort receiving anti-HIV therapy had elevations in creatine phosphokinase.

Creatine phosphokinase (CPK) is an enzyme found mainly in the brain, heart and skeletal muscle. When total CPK levels are substantially elevated, it usually indicates injury or stress to one or more of these areas.

The group conducted a case control study to identify factors that might be associated with CPK elevations.

Thirty-seven (28%) of patients with CPK elevations reported muscle weakness or fatigue, compared to 103 (26%) of patients without CPK elevations, but 5 cases of myositis (inflammation and destruction of muscle tissue) or rhabdomyolysis (muscle cell destruction) were reported among patients with elevated CPK levels, compared with none in the group with normal CPK levels.

Patients were analyzed according to duration of HIV infection, age, gender, AIDS diagnosis, hepatitis co-infection, viral load, current CD4 cell count, lipodystrophy, hyperlipidemia, lipid-lowering treatment, bone problems, liver enzyme elevations, duration of HAART and exposure to each of the nucleoside analogues.

The only factors significantly associated with CPK elevations were male gender (p<0.001) and d4T treatment (p<0.006). CPK elevation has been reported previously in clinical trials of most nucleoside analogues, and muscle damage was particularly associated with AZT treatment using higher doses than those taken today.

The authors of the study say that alterations of skeletal muscle tissue, although mainly asymptomatic, may represent an emerging and underestimated toxicity in HIV patients that deserves further investigation.
CD8’s and Candida

Candidiasis is a fungal infection (Candida albicans) that occurs mostly in the mouth and vagina (yeast infection). However, it does occur in other areas of the body, such as the skin or lungs. Candidiasis of the mouth (thrush) is the most common opportunistic infection in people with HIV. The chances of developing it increases as CD4 cell counts decrease. This is especially the case with CD4 counts below 200. Infection of the esophagus with Candida is the most common AIDS-defining condition and is more common in women than men.

Treatment of thrush is usually with topical medications (clotrimazole or nystatin) or with a pill such as fluconazole or itraconazole. If these do not work, even at higher doses, IV medications are often used, such as IV amphotericin.

Usually, higher CD4 levels will help keep Candidiasis from occurring. If, however, you ever had a very low CD4 cell count your CD4 cells may be less effective against Candida, even if the count has again risen above 200. Also, you may be more likely to get Candidiasis if you had it before. Your doctor may recommend that you use fluconazole or another anti-fungal medication regularly to prevent future flare-ups of Candidiasis.

The CD4 cells are very important in fighting infections as they help the immune system to recognize the invading organism (such as Candida) and tell special attack cells of the immune system to increase in number and go kill the invader. With a low CD4 count there are few messengers around to rev-up the immune system to fight an infection.

CD8 cells primarily keep an eye on all of the cells of our body looking for any changes. When one of the body’s cells is infected with a virus or becomes cancerous the outside of the cell changes and looks different. The CD8 cell can see this change and attack and kill the cell before more virus is produced or the cell grows more cancerous. CD8 cells are good at finding cells infected with a virus, but not very good at seeing other types of invaders. Other cells in the immune system, triggered by CD4 cells, are better at fighting fungal infections like Candidiasis. That’s why people with low CD4 cell counts, but normal or high CD8 cell counts still get sick with opportunistic infections.

Heather Algren is an RN, BSN HIV Research Coordinator at Swedish Hospital and a STEP collaborator

Community Updates

Seattle Treatment Education Project, the AIDS Clinical Trials Unit and POZ Seattle present a forum.

The Lowdown on Fuzeon
(The new fusion inhibitor, formerly called T-20)

► How does this drug really work, anyway? ► What’s the deal with side effects?
► Any FUZEON support groups out there?
► Is there a “right” way to inject it? ► I heard there is a waiting list - why?
► Is FUZEON covered by any insurance?

Join a panel of HIV specialists and volunteers to address these important issues.
We will also talk about some of the new anti-HIV drugs being developed.

**When:** Thursday, May 15th, 2003  
**Place:** LGBT Center, 1115 E. Pike Street, here in Seattle.  
**Time:** 6:30 to 8:30 pm, parking off street  
(Light refreshments will be provided)

Questions?

Call:  
**STEP:** 206.329.0064 ext 106 / **ACTU:** 206.731.3497
or visit the **POZ Seattle:** [www.pozseattle.org](http://www.pozseattle.org)

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Home Alive provides trainings to the entire community. People living with HIV/AIDS and their families are encouraged to attend if they are interested.

**HOME ALIVE**

**BASIC SELF-DEFENSE:**

This workshop will cover safety planning, awareness, basic strikes, and getting out of common grabs. Participants will learn boundary setting skills with both strangers and familiar people in our lives.

**DATES:** Sunday, May 18th, 1-4 pm

**6-WEEK BASIC SELF-DEFENSE:**

This class covers boundary setting, de-escalation, striking and kicking, releases from common grabs, and fighting from the ground. We will use exercises, role-playing and discussion to explore and practice these techniques while building strength, confidence and power. This class explores self-defense with both strangers and with people in our lives.

**DATES:** Tuesday, April 8th, 6-8:30 pm (Tuesdays thru May 13)  
Wednesday, May 14th, 6-8 pm (Wednesdays thru June 18th)
**BOUNDARY SETTING WORKSHOP:**
Participants will explore boundaries, defining whom we set boundaries with, and the tools we use to set and maintain healthy boundaries with the people in our lives. We will also practice these skills in role-playing related to real-life situations.

**DATES:** Call for next session.

**COST:** $10-50/session recommended

*ALL classes available on a sliding scale, starting at $0*

**TO REGISTER FOR CLASSES:**
E-mail homealive_classes@hotmail.com or
Call: (206) 720-0606

For more info or questions about accessibility:
(206) 720-0606 or homealive_classes@hotmail.com

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**ACAP (still) has funds for Dental Care!!**

AIDS Care Access Project still have available funds for people living with HIV/AIDS. If you or a family member fits into the federal poverty level of $1,496 a month or less (200%), ACAP would coordinate access to provide you with basic dental care.

What basic dental care means:

- Cleanings
- Fillings
- Extractions
- Partial dentures

Call ACAP for more information (206) 284-9277. For Spanish speakers: dial the same number and ask for Justin
Si hablas Español solamente llama al mismo número y pregunta por Justin.

**Call now and prevent further dental problems!**

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**YouthCare Program Information**

**What the Orion Center offers:**

Who can get case management at Orion? Young people who are:

- Homeless (ages 13-21.5)
- Experiencing legal issues (criminal or civil) (ages 13-21.5).
• Having difficulty in school (truancy issues) or who have school-related goals (ages 13-18).
• Sexually exploited and/or are participating in sex trading (ages 13-18).
• Participating in risky behaviors (ages 13-21.5).
• Are infected with HIV/AIDS (up to age 25).

What does case management at Orion offer?

• Orion case management services are based in harm-reduction theory. We start where the young person is at and provide advocacy, support, opportunities and reflection in order to help them get to their next best place.
• A case manager will help a young person identify their personal goals and work towards them by achieving small successes.
• A case manager will provide resource referrals and often acts as a gatekeeper to services that require a case manager referral.
• Orion case management regularly helps young people improve their housing, obtain identification, enroll in school, gain employment, access chemical dependency treatment and mental health counseling, and access government programs and subsidies.

How can someone get into case management?

1. Young people between the ages of 13 and 21.5 may come to Orion during drop-in hours (Mon, Wed, Thurs & Fri 2:30-6:00 p.m.) and ask for Case Management, OR
2. Call and request Case Management Services at (206) 622-5555: For HIV/AIDS case management talk to Kristen Tobias X 222 For all other case management talk to Liza Burell X 221

Please note that this is not a complete list of all HIV-related treatment information. STEP strives to provide the very latest in HIV treatment information, research and drug development information. The most current research directions and antiretroviral drug data are provided throughout the Ezine publications. You will find highlight reports as well as extensive follow-up reports from many of the AIDS research and science conferences on the Ezine. In addition, all STEP quarterly treatment journals are available on our Web site at http://www.thebody.com/step/steppage.html or by calling our Talkline at 1-877-597-STEP. STEP works hard to give unbiased treatment information to all interested parties. If you have comments, questions, suggestions or grievances, please contact us at ezine@stepproject.org.

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