



# The Pitt Men's Study

News and Notes

Spring 2012

## HIV and Fracture Risk in Men

by Todd T. Brown, M.D., Ph.D.

Osteoporosis is generally thought of as a woman's disease, but what is not well known is that over a third of hip fractures in the general US population will occur in men. These fractures not only lead to discomfort, hospitalization, and disability, but people who have hip fractures have a higher risk of death compared to otherwise similar people who did not fracture, even 10 years after their fracture. What's more is that the risk of death after fracture is even higher among men than women. Nevertheless, osteoporosis in men remains underdiagnosed and undertreated.

HIV-infected men may be at particularly high risk of fracture compared to their HIV-uninfected peers. A combination of chronic infection with HIV, the effect of antiretroviral therapy on the bone and a high prevalence of traditional osteoporosis risk factors (eg, smoking, alcohol use, low testosterone, low vitamin D) conspire to increase the risk of osteoporosis in HIV-infected persons compare to HIV-uninfected persons. There's emerging evidence suggesting that this increased risk of osteoporosis will translate into an increased risk of fracture. However, with early identification of people at increased risk of fracture, proper preventative measures can be put into place to reduce risk of fracture.

We typically use dual-energy x-ray absorptiometry (DXA) to screen people for fracture risk by assessing their bone mineral density. This is a good test and tells you important information about fracture risk, but it doesn't tell you everything. In fact, DXA scanning only explains about 50% of fracture risk. The rest of the risk is unexplained and may have to do with other aspects of bone, such as strength, quality and turnover, as well as non-skeletal factors. These factors have not been investigated in HIV-infected men. It's not known how much HIV, the resulting immune activation, and antiretroviral therapies affect these aspects of fracture risk and how much HIV-infected men differ from otherwise similar HIV-uninfected men.



The Multicenter AIDS Cohort Study (MACS), of which the Pitt Men's Study is a part, has the potential to make a major contribution to our understanding of these issues. We recently received funding from the National Institutes of Health (NIH) to conduct a sub-study to take a comprehensive view of fracture risk in older men in the MACS. Four hundred men (200 HIV+/200 HIV-) will be recruited from the 4 sites to undergo state-of-the-art testing of bone health, including DXA scans, quantitative CT, serum markers of bone turnover, as well as sophisticated measured of muscle and fat (as these latter two factors may influence bone). To study the effect of aging, half of the men will be 50-59 years old and the other half will be  $\geq 60$  years.

Men recruited into the substudy will also undergo simple tests of strength and balance that will help identify men at increased risk of falling, a major risk factor for fracture that is independent of bone mineral density. We will also recruit additional MACS men  $\geq 60$  years to undergo the fall risk assessment. For all men completing the fall risk assessment, we will capture information about falls in the subsequent 2 years. In this way, we'll be able to tell how well these tools actually predict the risk of falling.

The information obtained could have a major impact on men

### The Pitt Men's Study

P.O. Box 7319, Pittsburgh, PA 15213  
(412) 624-2008 (800) 987-1963  
<http://pittmensstudy.com/>

Charles R. Rinaldo, PhD, Principal Investigator  
Anthony J. Silvestre, PhD, Publisher  
Nathaniel J. Soltesz, BA, Editor  
William G. Buchanan, MM, Contributing Editor  
Ross Cranston, MD FRCP, Contributing Editor  
Alyssa B. Abebe, MPAS, Contributing Editor  
Joseph Pawlak, MPA, Contributing Editor  
Raymond Yeo, BA, Contributing Editor

News and Notes is published by the Pitt Men's Study. All information and opinions are the sole responsibility of the Study and do necessarily reflect the policies or views of the University of Pittsburgh or the National Institutes of Health.

Continued on page 4

# Shigella - a Risk for Gay and Bisexual Men

The following Health Alert is presented by the Pitt Men's Study and the Pennsylvania Prevention Project at the Graduate School of Public Health, University of Pittsburgh, with funding from the Pennsylvania State Department of Health.

Since mid-2011, the Pennsylvania Department of Health has received a number of reports of shigellosis due to *Shigella flexeri*, a species of *Shigella* that is infrequently diagnosed in Pennsylvania. The cases have occurred in the southeastern part of the state among men who have sex with men (MSM) who may or may not be HIV-positive.

## What is Shigella?

*Shigella* is one of the bacterial agents that causes acute diarrhea. Symptoms often include cramping, fever and vomiting. The infection spreads easily from person to person by the fecal-oral route since a very small number of organisms are necessary to produce transmission.

## How do you catch Shigella?

The Pennsylvania Health Alert Network reports "Shigella outbreaks have been previously reported in MSMs and are usually correlated with having multiple partners combined with unprotected high-risk sexual behavior. The fact that some of these patients are also HIV infected raises added concerns, not only due to the potential for transmission of HIV and other sexually transmitted infections through the same high risk behaviors, but also because immune-compromised individuals can have extended carriage of *Shigella*."

## What can you do?

Persons with diarrhea usually recover completely, although it may be several months before their bowel habits are entirely normal. Once someone has had shigellosis, they are not likely to get infected with that specific type again for at least several years. However, they can still get infected with other types of *Shigella*.

Currently, there is no vaccine to prevent shigellosis. However, the spread of *Shigella* from an infected person to other persons can be stopped by frequent and careful hand-washing with soap.

For more information about Shigella, you can go to the Centers for Disease and Control and Prevention Website.

For more information about Health Alerts, go to our Website [www.m4mhealthysex.org](http://www.m4mhealthysex.org).

## Feeling Sick? Stay Home!



We love to see our volunteers! We especially love to see them when they are due for their appointments. However there is one time when we would rather not see our volunteers, and that's when they are sick.

Because some of our volunteers have weakened or compromised immune systems it's important that we minimize their risk for contracting any type of sickness.

If you're feeling ill, do yourself and your fellow volunteers a favor and give us a call - we'll be happy to reschedule your appointment. The number is 412-624-2008 or 1-800-987-1963. The best times to reach us are Tuesday, Wednesday and Friday from 10am through 4pm, Thursday from 12pm through 6pm, and most Saturdays from 9am through 2pm.



Above is an image of the billboard that the Pitt Men's Study sponsored in commemoration of World AIDS Day. The billboard was on display on Herron Avenue just above Bigelow Boulevard.

## Good Luck Brian!



After five years on staff Brian Golgan, everyone's favorite Pitt Men's Study research assistant, is moving on to pastures new. Brian was recently offered a position as manager of the new North Hills Water Gardens. He'll be running the store and selling ponds, statues, fountains and other waterscaping supplies. Brian has long had an interest in type of work and we couldn't be happier for him. However, he will be missed.

Brian started working at the Pitt Men's Study in December of 2006. In addition to duties such as drawing blood, conducting interviews and scheduling appointments, Brian helped to organize and conduct community activities like the Shepherd Wellness dinner and the Study's presence at the annual Pittsburgh PrideFest. He was our go-to guy for any type of butch, hands-on project that we needed to accomplish. It's going to be hard to know what to do without a man around the office!

We wish him all the best as he begins this new chapter in his life!

---

## Looking for Magic: Production Report

*Looking for Magic* is a play based around one family's experiences with coming out and living with HIV/AIDS. The Pitt Men's Study developed this original, semi-autobiographical stageplay by Beverly King Pollock into a community awareness and outreach project that ran over the weekend of World AIDS Day, December 2-4, 2011. Much credit goes to David Givens who organized and facilitated much of the work it took to make *Looking for Magic* a success.



*Dr. Anthony Silvestre, Pitt Men's Study co-investigator, giving a framed commemorative poster used to advertise "Looking for Magic," to author Beverly Pollock. The play was performed at the Stephen Foster Playhouse on campus for World AIDS Day.*

In preparation for this program, the Pitt Men's Study (PMS) solicited donors, contracted a director and producer, and coordinated all logistical and financial requirements. With the generous support of the Lambda Foundation, UPMC, and the Actor's Co-op, PMS secured theater and rehearsal space, drafted and secured all the contracts for all the actors, support staff, tech crew and props identified by the producer and director, and secured permissions from the appropriate actor's unions.

We designed our program and solicited ads from our community partners, and secured media coverage/exposure in Pittsburgh OUT, WAD, The Greater Pittsburgh Arts Council, and at Shepherd Wellness Center and the University of Pittsburgh. We created and distributed tickets in three locations – including online – and we also arranged for a video recording to be created based on this project.

By all measures *Looking for Magic* was a great success. We remained under our expected budget in terms of costs incurred and had generous financial support from Lambda Foundation and UPMC. We expect to have much of the remainder of our costs covered by the Graduate School of Public Health via the National Institutes of Health. More importantly, however, almost four hundred people attended our three weekend performances with

a nearly sold-out show on Sunday and rave reviews.

Because of our budgeting, donor support and support by the GSPH, we were able to donate all our donation-based ticket sales to Shepherd Wellness Center, which amounted to over \$3500 from just that one weekend. Our DVDs and web clips of the performance are being finalized now for distribution at community centers and support groups across the state of Pennsylvania, and are being sent to our partners interested in producing this play in LA, Tuscon, and New York.



# New Website: Clinical Research Trials and You

The National Institutes of Health has created a new website, NIH Clinical Research Trials and You <clinicalresearchtrials.nih.gov> to help people learn more about clinical trials, why they matter, and how to participate. From the first cure of a solid tumor with chemotherapy to the use of nitroglycerin in response to heart attacks, clinical research trials -- or research studies involving people -- have played a vital role in improving health and quality of life for people around the globe.

Clinical trials are essential for identifying and understanding ways to prevent, diagnose, and treat disease. Research has shown that among the greatest challenges to recruitment of volunteers is the lack of general knowledge about what trials involve, where they are carried out, and who may participate.

“The ability to recruit the necessary number of volunteers is vital to carrying out clinical research that leads to health and medical advances,” said NIH Director Francis S. Collins, M.D., Ph.D. “This new, centralized resource will make it much easier for the public and health professionals to learn about clinical trials and how people can participate in them.”

Visitors to the website will find information about:

- The basics of clinical trial participation
- First hand experiences from actual clinical trial volunteers
- Explanations from researchers
- Links on how to search for a trial or enroll in a research matching program

In addition, health care professionals can read about evidence-based strategies for talking with patients about trials, print audience-tested posters to help promote trials in clinics and offices, and find other educational materials.

NIH supports clinical research trials across the country and throughout the world. NIH's ongoing effort to raise awareness about clinical research and educate potential clinical trial participants about the option of a clinical trial is vital to developing public support and understanding for how clinical research drives medical discovery and improves health outcomes.

About the National Institutes of Health (NIH): NIH, the nation's medical research agency, includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. NIH is the primary federal agency conducting and supporting basic, clinical, and translational medical research, and is investigating the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit <www.nih.gov>.



---

## HIV and Fracture Risk in Men

### Continued from page 1

aging with HIV. For example, if we find that balance and lower extremity function are compromised among older HIV-infected men, these simple tests can be implemented in clinical practice in order to identify patients who may benefit most from physical therapy.

As another example, a finding that inflammation and immune activation are important mediators of bone strength and fall risk would pave the way for investigation of HAART medications which suppress inflammation in addition to HIV replication or adjunctive therapy targeting uncontrolled inflammation with the goal of decreasing fracture risk. We are also partnering with the Women's Interagency HIV Study, who have also received an NIH grant to study the same outcomes, so that we can investigate gender differences.

Participating men will be given copies of their DXA reports with interpretation by an expert in the field and recommendations for referral if needed. Men will be chosen for the study based upon age and several other eligibility criteria. Eligible men will be contacted by study coordinators and asked to volunteer. The testing should take 2-3 hours.