POSITIVE VOICES - SEPTEMBER 2012

Your Newsletter by Positive People for Positive People

August 21, 2012 (Reuters.com)

U.S. Task Force to Endorse Routine HIV Tests

The U.S. Preventive Services Task Force is expected to endorse routine HIV testing, Reuters reports. The health panel would make its recommendation available for public comment by the end of this year. The Centers for Disease Control and Prevention, the American College of Physicians and the HIV Medicine Association have already called for routine HIV testing. However, since the Affordable Care Act (a.k.a. health care reform) requires health care insurers to implement recommendations by the task force for preventive services, routine HIV testing in the United States would become reality.

March 6, 2012 (Vindy.com)

Ohio Man With HIV Faces 3 Years in Prison for Unprotected Sex

Randal Brown, a 23-year-old man charged with felonious assault for allegedly having unprotected sex with a girlfriend without disclosing his HIV-positive status, entered a plea agreement for a recommended three-year sentence, Vindy.com reports. Brown, a native of Youngstown, Ohio, was reportedly in a sexual relationship with a 20-year-old female college student for several months without disclosing his status. He later told her that he was born with HIV and had known about his diagnosis since he was 15. It remains unclear if the woman contracted HIV. Despite the three-year plea agreement, a felonious assault charge can carry a prison term of eight years and the judge is not compelled to follow the plea agreement. Sentencing takes place May 3.

July 10, 2012 (AIDSMEDS.com)

Shingles Still More Common in People With HIV

by Tim Horn

New cases of herpes zoster, better known as shingles, appear to be on the decline among people living with HIV, but rates are still higher than those seen in the general population, according to Johns Hopkins University School of Medicine data published online ahead of print by the Journal of Acquired Immune Deficiency Syndromes.

The researchers, under the direction of Leah Blank, MD, MPH, also noted that more than one-quarter of all new shingles cases in their HIV cohort were complicated, a “remarkable” finding in light of the young age of the patient population.

Shingles is caused by the varicella zoster virus (VZV), best known for its ability to cause chickenpox (varicella) in children. VZV isn't cleared from the body after a bout of chickenpox, but rather remains dormant in nerve clusters near the spine. If cellular immunity to VZV dwindles—which can happen in people living with HIV, advancing in age or undergoing treatment that depletes immune function—VZV can become reactivated, leading to a shingles outbreak.

Shingles typically causes a rash-like string of blisters that follow the path of a nerve extending from the spinal cord (known as a dermatomal pattern). While often painful, shingles is usually benign; it can last three to four weeks without causing otherwise serious or long-term problems. Sometimes, however, the disease can be complicated by recurrences, internal organ damage and multiple dermatomal patterns.

Shingles has long been more common among people living with HIV, particularly among young people infected with the virus compared with age-matched individuals in the general population. In the years following the widespread availability of combination antiretroviral therapy, studies didn't show that the risk of shingles was decreasing. In fact, some researchers suggested that the incidence may increase, given that people are now living with HIV longer and because shingles may be an adverse effect of the immune reconstitution syndrome that can occur in people with low CD4 cell counts responding otherwise favorably to antiretroviral treatment.

To get a sense of the modern-day incidence of shingles, including complicated cases, Blank and her colleagues identified herpes zoster episodes documented between 2002 and 2009 at Johns Hopkins. For each case the researchers identified, three HIV-negative controls were included in the analysis so that potential shingles outbreak risk factors could be assessed.

Researchers identified 183 new (incident) shingles cases among the more than 4,300 HIV-positive patients; an additional 138 patients were also diagnosed with shingles, but these were recurrent episodes.

The incidence rate during the entire study period was 9.3 new shingle cases per 1,000 person-years of follow-up. While the study did not show a statistically significant trend in the incidence of shingles over time, the authors note that the incidence rate was significantly lower than the one documented in a previous study of the same cohort. Between 1997 and 2001, Blank and her colleagues explain, the incidence rate during the study period was 32 new shingle cases per 1,000 person-years of follow-up.

The authors add that the apparent reduced incidence in the Johns Hopkins study conflicts with results from two other cohorts—the Veterans Health database (2000–2007) and Olmsted County, Minnesota, surveillance data (1996–2001)—that both showed small, but statistically significant, increases in shingles over time.

"The observed decrease in incidence rate in our clinic might be explained by improvements in addressing the risk factors for herpes zoster specific to [people living with HIV]," the authors explain. "Consistent with our earlier study and other studies, we found that a lower CD4 count was associated with increased risk of incident herpes zoster. Indeed, immune suppression is consistently a risk factor for herpes zoster outbreak in this population, with a CD4 count below 350 [conferring] greater risk than a CD4 count between 350 and 500. Given the median CD4 count of our population has steadily increased from 2009 from 298 to 431 cells, this finding highlights the importance of restoring immune function in protecting against herpes zoster."

Blank and her colleagues stress, however, that the incidence rate is still greater than the general population, especially when age is considered.

Also of concern was the high rate of complicated herpes zoster—28 percent of those with shingles experienced disseminated shingles (three or more dermatomal patterns), disease of the eye or internal organs, neurological complications or recurrence within six months. While this rate of complicated shingles in people living with HIV is consistent with other cohorts, Blank and her fellow authors note the 28 percent rate is lower than the one documented in the earlier Johns Hopkins cohort: 53 percent. In addition to low CD4 cell counts and detectable viral loads being associated with shingles outbreaks, Blank's team determined that outbreaks were more likely to occur

within 90 days of starting antiretroviral therapy, confirming that shingles is a possible complication of the immune reconstitution syndrome that can occur in people beginning HIV therapy with low CD4 cells. “Herpes zoster does appear to be associated with immune reconstitution, so the clinician should be aware of the higher risk of herpes zoster shortly after antiretroviral therapy is started,” they write.

Herpes zoster vaccination—or the lack thereof in the cohort—also appears to be a risk factor. “Despite the high complication rate, and the high incidence rate in [people living with HIV], not a single patient in our study population had been vaccinated against herpes zoster,” Blank and her colleagues wrote.

March 12, 2012 (Poz.com)

Zostavax Shingles Vaccine Generally Safe, Increases Antibody Levels, in People With Stable HIV

by Tim Horn

Two doses of Zostavax, a vaccine against shingles (herpes zoster), administered six weeks apart is “generally safe” for people living with HIV with CD4 counts of 200 or higher and undetectable viral loads, according to study results shared Wednesday, March 7, at the 19th Conference on Retroviruses and Opportunistic Infections (CROI).

Though the study was not conducted long enough to determine whether the Zostavax doses actually reduced the risk of painful shingles outbreaks compared with those who received placebo, lead presenter Constance Benson, MD, of the University of California at San Diego, reported that protective herpes zoster antibodies were significantly higher among those who were vaccinated in the trial.

Interest in Zostavax, approved by the U.S. Food and Drug Administration in 2006, has been high among people living with HIV. According to Benson, both the incidence and severity of shingles and post-herpetic neuralgia—severe nerve pain following a shingles outbreak—are increased in people living with HIV, particularly those with immune

suppression or immune-reconstitution inflammatory syndrome (IRIS) that can occur when antiretroviral (ARV) therapy is started when the CD4 cell count is very low.

Though antiviral therapy, such as acyclovir, can help control symptoms if started in the early stages of a shingles outbreak, it won't necessarily prevent symptoms entirely, especially in those with HIV-related immune suppression.

Merck's Zostavax has proved effective, reducing the incidence and severity of shingles by more than 51 percent and 61 percent, respectively, and post-herpetic neuralgia by 66 percent in HIV-negative adults 60 and older. Because it is a live, attenuated vaccine, however, there has been some concern about using it in people living with HIV, specifically that it will actually cause shingles symptoms in the absence of a functional immune system.

Benson and her colleagues with the federally funded AIDS Clinical Trials Group (ACTG) hypothesized that two doses of Zostavax will be well tolerated in people living with HIV, provided that their immune function is conserved—defined as a CD4 count of at least 200 cells—and they have undetectable viral loads while on ARV therapy. And while the researchers were not prepared to conduct a study in size and length necessary to determine whether the risk of shingles was reduced after receiving two doses of the vaccine, they were able to measure varicella zoster virus (VZV) antibody titers , or concentrations, both six and 12 weeks following the injections, as markers of protection.

The clinical trial enrolled 395 volunteers—192 of whom had CD4 counts between 200 and 349, and 203 of whom had CD4 counts of 350 or higher. Eighty-four percent were male, 47 percent were white, the average age was 49, and 66 percent had no prior shingles outbreak.

The researchers noted that Zostavax would be considered safe in the study if no more than 18 (6.1 percent) people receiving the vaccine met the pre-defined "endpoint" of the study—a severe side effect, as defined by two sets of criteria (one by the International Conference on Harmonisation and another by the National Institutes of Allergy and Infectious Diseases' Division of AIDS).

According to Benson, 17 (5.1 percent) of the 295 patients in the Zostavax groups met the pre-defined endpoint, compared with two (2.1 percent) of the 97 patients in the placebo group. This difference was not statistically significant, meaning it could have occurred by chance.
Rates of injection-site reactions were, however, significantly more likely to occur among those receiving Zostavax compared with placebo: 42 percent vs. 12.4 percent, respectively.

Rash and fever were documented in roughly 5 percent of all study volunteers, irrespective of whether they were in the Zostavax group or placebo group.

VZV antibody titers doubled in the Zostavax group, compared with the placebo group, at weeks six and 12 in the study. The observed differences between the two groups and both time points were statistically significant.

Benson also noted that antibody titers were significantly higher, compared with placebo, in both CD4 cell count groups, though she explained that antibody levels were highest among those in the high CD4 cell group compared with the low CD4 cell group.

“Administration of two doses of [Zostavax] in HIV-positive adults with CD4 counts of 200 cells or greater and virologic suppression on ARV therapy was generally safe, and preliminary data also suggest it was immunogenic,” Benson concluded.

ON GOING MEETINGS AND COMMUNITY SERVICES

Join/ Attend: Consumer Advisory Committee [CAC] Meetings

The STAP Consumer Advisory Committee is a committee facilitated by and made up of consumers (STAP clients) who welcome other consumers and their significant others, caretakers and family members to join them on the second Tuesday of each month. This collaborative effort provides a confidential space for clients to make recommendations regarding STAP client services and other programs in a non-judgmental environment. The meetings are held following the Friends Dinner @ 5:45 at Trinity Memorial Church (on the corner of Main & Oak Streets) in downtown Binghamton. Call 1-800-333-0892 for directions or more details. If you cannot attend these meetings, mail your opinions or suggestions to STAP, 122 Baldwin Street, Johnson City, 13790, Attention CAC. CAC is encouraging consumers in other counties to organize monthly meetings in their area.

Friends Who Care Support Groups

Broome County: "Friends Who Care" meets every Tuesday at 3 pm - 4:30 pm at Trinity Memorial Church located at 44 Main St. in Binghamton… Come join us for Binghamton's HIV/AIDS Support Group **(open to clients only). Also stay for a good (free) meal afterwards at the "Friends Dinner".

Chemung County: Men Living with HIV Support Group; 2nd Monday of each month; 6-7:30pm; Ivy Clinic, 600 Ivy St., Suite 206, Elmira. For more information people can contact: Lynn Bassler, LMSW Treatment Adherence Counselor, Ivy Clinic, 737-8188.

Tompkins County: The IVY Clinic is pleased to let all HIV+ men in the Ithaca and surrounding area know there is a support group that is held the third Tuesday of every month at the Ithaca STAP office. Time for the group is 6-7:30 pm and topics vary. If you are interested in attending please e-mail Shannon Sprague at ssprague@aomc.org for further information.

Friends Dinner

"Friends" meet every Tuesday for a time of fellowship and food. Join us at Trinity Memorial Church (on the corner of Main & Oak St. - across the street from the High School) in Binghamton. Doors open at 5PM and dinner is served @ 5:30. No charge, just come with a smile and a friendly attitude – ready to meet friends and have a hearty meal. Parking is on Oak St. behind the Church Annex. Use the Oak St. entrance for the cafeteria. Call your case manager for info. Free bus passes available for transportation to/from the dinner (STAP clients only). For more info about the "Friends Dinner", call STAP and they will get you in touch with Bill.

Free Anonymous Rapid HIV Testing

Walk-in *Anonymous* testing is available in our STAP Johnson City office Mondays from 1:00-4:30PM and Thursdays from 1:00-3:00PM. *Confidential* testing is available in our STAP Johnson City office Thursdays from 9:00AM - 12:00PM at 122 Baldwin Street Johnson City, NY 13790. Walk-in *Anonymous* Testing is also available Tuesdays from 9:00AM-11:30AM, and *Confidential* testing is Thursdays, 9:00AM-11:30AM at STAP's Ithaca office located at 501 S. Meadow Street, Ithaca, NY. For more information and other testing opportunities available throughout the month, please call (607)798-1706.

Free EDUCATIONAL Lunch/Dinner: August/September 2012

Good News! We now have 2 Drug Companies willing to come to our area to continue to teach/inform us about new and upcoming advancements in the treatment of HIV.

NEXT EVENT: September 24th 2012 @ 12 noon. (Monday) from Bristol Myers. Lunch will be held at Grande's on Vestal Ave. Downstairs in the new meeting room.

Gilead will have a lunch on October 16th at 12 noon also at Grande's / Vestal Ave.

* As usual seating is limited (you & a guest only) and must be reserved with Martha at least a week before the event. *R.S.V.P. - Martha # 607-238-8350.*

These are "learning events" - please respect everyone's right to learn.

Ask the Medical Advocate

** DO YOU Know What the C.H.O.I.C.E.S. Program Is?

C.H.O.I.C.E.S. is a self-paced educational series designed specifically for YOU to learn and understand HIV and your body. Whether you take one quick course or decide to go through the entire program and take charge of YOUR HIV, ask a Medical Advocate about C.H.O.I.C.E.S. today…

Medical Advocacy Coordinator: Stacy # (607)798-1706 Ext. 210

Medical Advocate: Autumn # (607) 426-9445

* Every 3rd Tuesday of the month at 4:30 pm *(new time) - just before the Friends Dinner come join us for our monthly C.H.O.I.C.E.S. module (open to everyone). We have found that we get more out of the program when we learn the modules as a group. Informative questions and discussions are raised.

* Next Program will be September 18th at 4:30 pm *(new time) with Autumn Cook, Medical Advocate, in the dining room at Trinity Church. Followed with a free dinner prepared by one of the local churches that supports our “Friend’s Dinner”.

March 21, 2012 (Poz.com)

Marijuana and its CD4 Receptors: A New HIV Treatment Strategy?

by Tim Horn

Drugs that target one of the two cellular receptors stimulated by the active ingredient in marijuana may prove to be effective at blocking a form of HIV that has been linked to faster disease progression during late stages of the infection. Though the PLoS One research report highlighting these findings—published March 20 by a team of scientists at Mt. Sinai School of Medicine in New York—stops short of concluding that marijuana is one of nature's best antiretrovirals, the authors suggest that further study of cannabinoids is needed to ultimately discover drugs with both antiviral and symptom-reducing properties.

Marijuana—purchased legally or illegally and either smoked or ingested—along with its synthetic counterpart Marinol (dronabinol) are used by many people living with HIV to manage various symptoms of illness, including pain, depression and weight loss.

The numerous effects of marijuana are the result of chemical interactions between the drug's active ingredient, tetrahydrocannabinol (THC), and two receptors on a variety of cells in the body: cannabinoid receptor 1 (CR1) and cannabinoid receptor 2 (CR2).

CR1 receptors are densely populated in the brain and, when stimulated by chemicals like THC, can have a variety of neurological effects. It is THC's interaction with CR1 in the brain and central nervous system that contributes to marijuana's "high"-like effects.

THC also interacts with CR2, which is not only found on some cells in the brain, but also on cells of the immune system, gastrointestinal tract and peripheral nervous

system. It is THC's stimulation of CR2 in the latter two compartments that may account for the drug's positive therapeutic effects on nausea and neuropathic pain, to name a few important symptoms.

CR2 has also been found on a variety of immune system cells and is present on CD4 cells in abundance. While some studies have classified CR2 as a suppressor of CD4 cells and early trials indicated that marijuana use was associated with progression to AIDS, more recent analyses suggest that the drug isn't associated with significant immune suppression. In fact, both smoked marijuana and Marinol have been associated with increases in CD4 cell counts—along with a decrease in viral load—in at least one short-term study and laboratory experiments.

In effect, the mechanisms by which the interactions between THC and the cannabinoid receptors alter CD4 cell function remain unclear. One particular area of interest, though, is the connection between CR2 and CXCR4, another receptor on immune system cells. For example, CR2 activation blocks CXCR4 from directing the movement of certain cells in the body (chemotaxis). CR2 also plays a role in moving white blood cells out of bone marrow (egress), a role previously attributed largely to CXCR4.

The apparent "cross talk" between CR2 and CXCR4, therefore, led the Mt. Sinai researchers—under the direction of Cristina Maria Costantino, PhD—to explore whether stimulation of CR2 can block the way CXCR4 interacts with a particular form of HIV: CXCR4-tropic virus.

During the early years of untreated HIV infection, HIV primarily targets—or is tropic for—cells with the CCR5 receptor. As HIV disease progresses, however, approximately 50 percent of people living with HIV see their virus develop preference for the CXCR4 receptor on CD4 cells. This particular form of the virus, research has shown, is associated with rapid disease progression, though it is unclear if the emergence of CXCR4-tropic virus is a cause or an effect of immune suppression.

Costantino's test tube experiments proved encouraging. Using a cannabinoid receptor agonist—a THC-like compound—her team found that activation of CR2 inhibited CXCR4-tropic HIV infection. It did this, not by altering the number of CXCR4 receptors on CD4

cells—this is a therapeutic approach being explored by others—but rather by blocking the receptor's "signaling process" and interaction with HIV.

According to the PLoS One report, activation of CR2 blocked the ability of CXCR4-tropic virus to infect other cells by 30 to 60 percent. "This inhibition is pronounced in resting cells," the researchers explain, "which are a target of CXCR4-tropic HIV."

"Developing a drug that triggers only [CR2] as an adjunctive treatment to standard antiviral medication may help alleviate the symptoms of late-stage AIDS and prevent the virus from spreading," said Dr. Costantino in an accompanying news announcement.

As a result of this discovery, additional research at Mt. Sinai is being planned. Specifically, researchers there will be developing a mouse model of late-stage HIV infection in order to test the efficacy of a drug that triggers CR2, not in test tubes, but in living organisms.