

HCV ADVOCATE WEEKLY NEWS REVIEW

Review of HCV, HBV and HIV/HCV Coinfection Related News and Highlights

*Alan Franciscus
Editor-in-Chief*

Week Ending: August 16, 2008

In This Issue:

- [Genes might be key to hepatitis C](#)
- [Health worker wages personal and professional war on hepatitis](#)
- [Gilead wins OK to promote drug for hepatitis B](#)
- [GPs on the spot over blood tests](#)
- [Hepatitis C coinfection may increase the risk of heart attacks and strokes in people with HIV](#)
- [Cara Mastrey to Visit KNAC.COM Today to Discuss Tawn Mastrey Hepatitis C Aware Project](#)
- [Nano Vaccine For Hepatitis B Shows Promise For Third World - Nanoemulsion Could Save More Lives By Removing Current Vaccines' Drawbacks](#)
- [Hepatitis B virus genotype and mutations affect risk of cancer](#)
- [Court Upholds Compensation Cut-off For NHS Hepatitis Victim](#)
- [Older Donor Grafts Suitable for Liver Transplant Recipients With Hepatitis C Virus](#)
- [Waiting times double for transplants](#)
- [Music helps Kenny Neal get over the blues](#)
- [Spreading the word on Hepatitis C](#)

Aug 10, 2008

Genes might be key to hepatitis C

<http://www.onlinenews.com.pk>

ISLAMABAD: Genes that take the brakes off the immune system may help explain why some people essentially cure themselves of liver-destroying hepatitis C, research suggests. Hepatitis C

is widely considered the most serious of a family of liver viruses. Yet 20 percent of those infected clear it from their bodies without treatment.

Solving that mystery could point to new ways to treat hepatitis C or, more important, develop a vaccine to prevent it.

Research by a team of U.S. and British scientists suggests the key is being lucky enough to inherit a specific gene combination that lets the body more quickly unleash its front-line defense -- natural killer cells.

The research, published Thursday in the journal *Science*, will not immediately benefit the 3 million Americans and 180 million people worldwide who remain chronically infected with hepatitis C. The virus leaves them at risk of eventually developing liver cancer or failure, and claims 10,000 to 12,000 lives a year in the United States. "It brings us closer to understanding how the virus works," said Dr. Chloe Thio of Johns Hopkins University, co-author of the study with researchers from Britain's Southampton University and the National Cancer Institute in the United States.

"In the long term, whether we can use this information to modulate the body's immune system to improve therapeutics or vaccine design -- that is the ultimate goal," she said. Hepatitis C studies in chimpanzees suggested natural killer cells were more active in animals that recovered. To find the genes involved in that immune response, the researchers analyzed the DNA of 1,037 hepatitis C patients, 352 of whom spontaneously recovered. Natural killer cells are continually poised to attack if a virus strikes. Inhibitory receptors called KIRs (pronounced "keers") keep them in check between infections, to ensure they do not attack healthy tissue.

The scientists discovered a particular gene combination that controls one KIR receptor, and the molecule attached to it was twice as common in recovered patients than in the still-infected. How would an immune-inhibiting system fight hepatitis? When the body senses viral infection, it has to activate the natural killer cells by switching off inhibiting receptors, Thio said. This KIR combination seems weak, "so it's easier to overcome," she said.

The genetic protection was found only in patients thought to have received an initial low dose of hepatitis C because they were infected by contaminated drug or tattoo needles instead of a blood transfusion. It may be that the extra virus from tainted blood -- long a common cause of hepatitis C -- was simply too much for those patients' first-line defenses to handle, Thio said.

Aug 11, 2008

Health worker wages personal and professional war on hepatitis

<http://www.peninsuladailynews.com>

By Jim Casey, Peninsula Daily News

PORT ANGELES — The accidental needle prick didn't hurt much 20-some years ago, certainly not enough for Christine Hurst to remember.

What she'll never forget is how it turned her life inside out.

"I was diagnosed with hepatitis C in 1998 after several years of having chronic fatigue and flu-like symptoms, but never getting really sick," she said last week in Clallam County's Health and Human Services Department.

There, she manages its health programs. She's been a public health worker most of her life.

"To the best of my tracking back, I was infected in the 1980s by a needle stick," she said. "I was doing blood draws in Arizona at the time."

Hurst was "tested for everything under the sun," including HIV.

At one point, doctors diagnosed her chronic fatigue as a brain disorder and prescribed anti-depressants.

"I just knew something was wrong," she said.

"I spent two years trying to express to a doctor what this chronic fatigue was like."

Found answer in paper

It wasn't until Hurst read a newspaper report about hepatitis C that she matched its symptoms to what she was feeling and asked for a test.

It was positive and, for a brief while, so was Hurst.

"It was almost a sigh of relief to know there was a name for what I had," she said.

There are three strains of hepatitis:

- A, transmitted by food, water or feces, sickens people, who get well and become immune to it.
- B, passed on only by bodily fluids, also makes people ill, sometimes severely and causing liver damage, but 90 percent of victims develop immunity.

Types A and B can be vaccinated against.

- C cannot. It spreads mostly by blood, and 85 percent of people who get it become chronically ill with a lifelong progression.

It also has no cure, although it can disappear.

Pills and injections

Once diagnosed, Hurst immediately had her children tested for the disease because she could have passed it to them during childbirth.

Jessie, now 17 years old, and Ryan, now 9, were free of hepatitis C.

Hurst herself began a regimen of taking anti-viral pills and injecting herself weekly with prescribed amounts of interferon, a cancer chemotherapy drug.

Things went smoothly for about a month.

Then she became extremely sick with long bouts of high fever, fatigue, nausea, vomiting and depression.

"I just wanted to crawl into bed," she said, "and I wanted to die."

Hurst kept up the body-wracking regimen for nine months before tests showed she had been clean of the hepatitis C virus for 12 weeks.

"I stopped the treatment," she said. "I was never happier."

Virus rebounded on her

But two weeks later she felt ill again, and tests showed the virus had rebounded.

Hurst had to choose between letting the illness continue to attack her liver or to endure a year of treatment, spending \$500-\$600 a month on medications.

This time, she suffered tingling in her legs, loss of balance, fever and vomiting.

"I kept plugging and I kept going on," she said, working when she could at the Arizona Department of Health Services — in the hepatitis C program.

"It was kind of a fluke that that's where I ended up," she said.

"I helped them create some programs."

The main advantage to her job was that "I had people around me who knew what I was going through."

Friends stayed at her home when she was too sick to care for herself, and Jessie helped care for Ryan.

Daughter became mother

"She became the primary mom of the family for a little while," Hurst said, helping cook and clean so her mother, who was raising the children on her own, could sleep, sometimes 24 hours a day.

After six months of treatment, Hurst began having seizures. Her doctor stopped her treatments — and discovered she no longer had the virus.

"For whatever reason, it worked, and I have been virus-free for four years now.

"I'm one of the lucky ones."

Now Hurst is supervising a program that offers free testing for hepatitis C to residents of Clallam County.

Many people can have hepatitis C for 20 or 25 years without being diagnosed — until they show signs of serious liver disease.

Some people might shrink from discussing an illness that often attacks intravenous drug users.

'I'm hoping that this helps'

Not Hurst.

"My main goal is that if my story can help one person, it's worth people knowing what happened to me.

"I'm hoping that this helps somebody get through what I went through."

Hurst has been known to don a costume that transforms her into a walking drop of blood to dramatize blood-borne illnesses.

She's taking on the hepatitis C campaign with even more than her customary zest.

"I'm just really excited," she said.

"This is a really great opportunity for us to be able to do something with hepatitis C in this county."

Where and when to get free testing

Clallam County Health and Human Services will offer free hepatitis C testing in Port Angeles and Forks through July 2009.

"It's a finger stick," said Christine Hurst, health programs manager, about the test.

"We take a blood sample and we send it to a laboratory. They send us back the results."

People who test positive for the liver-wasting disease will receive advice on how to fight it and learn about other resources.

They'll also get free vaccinations for hepatitis A and B, a series of three shots over six months.

Testing will be offered from 8:30 a.m. to 4 p.m. weekdays at the public health clinic in the lower level of the Clallam County Courthouse, 223 E. Fourth St., Port Angeles, and at the county clinic in Forks, 140 W. C St.

Hurst said it's best to call 360-417-2274 to arrange an appointment and avoid a delay.

People especially at risk of hepatitis C include persons who:

- Received organ transplants, transfusions or blood products before 1992.

- Use or used intravenous drugs.
- Received clotting factors for hemophilia or organ transplants before 1987.
- Received tattoos, body piercings or other body art with unsterilized equipment.
- Had sexual contact with someone with hepatitis C or have a history of high-risk sexual practices.
- Worked in the health care field and may have had exposure to blood containing the hepatitis C virus.

Hurst said an estimated 69,000 people in Washington state unknowingly have hepatitis C.

Clallam ranks third in the state with 136 cases of the illness per 100,000 persons. Mason and Cowlitz counties top the list.

More information on the illness is available at www.cdc.gov/hepatitis/HepatitisC.htm .

Reporter Jim Casey can be reached at 360-417-3538 or at jim.casey@peninsuladailynews.com .

Gilead wins OK to promote drug for hepatitis B

www.reuters.com

LOS ANGELES (Reuters) - Gilead Sciences said on Monday it won U.S. approval to promote its AIDS drug **Viread** for treating adults with chronic hepatitis B.

Hepatitis B is a potentially life-threatening infection that can destroy the liver. Gilead estimates that more than 400 million people worldwide have the disease, which is most prevalent in Asian countries. It is the leading cause of liver cancer and complications kill up to 1.2 million people per year.

Viread, known generically as **tenofovir**, is a once-daily tablet that works by blocking an enzyme necessary for the virus to replicate in liver cells.

The drug has been available in the United States as a treatment for HIV infection in adults since 2001.

Gilead already markets another hepatitis B drug, Hepsera, which saw second-quarter sales of \$90 million.

RBC Capital Markets analyst Jason Kantor estimated that Hepsera currently has 44 percent of the market, which remains significantly underserved.

"Compared to the available drugs, Viread is likely to be considered best-in-class based on its potency, resistance profile, long-term safety, and price," he said in a recent research note.

Truvada, which had second-quarter sales of \$516 million, is a pill that combines Viread with Emtriva, another of Gilead's HIV drugs.

Shares of Gilead, which lost 34 cents to close at \$56.43 on Nasdaq, were slightly higher at \$57.23 in after hours trading. Year-to-date, the stock is up about 24 percent, compared with a gain of about 11 percent for the Biotech Index.

(Reporting by Deena Beasley in Los Angeles and Lisa Richwine in Washington; editing by Carol Bishopric)

Aug 12, 2008

GPs on the spot over blood tests

<http://www.cambridge-news.co.uk>
chris.elliott@cambridge-news.co.uk

PEOPLE in Cambridgeshire are at risk from a potentially deadly virus - because many family doctors do not know how to interpret a test for the disease.

The shocking claim comes from a national charity, which has carried out a nationwide survey to find out how GPs deal with tests for hepatitis C, the liver infection that can kill.

Most doctors are able to test their patients for the blood-borne infection, which can be passed by transfusions, piercing, tattoos, dental work, and sharing toothbrushes or razors.

But according to the survey, carried out for the Hepatitis C Trust, four out of 10 Cambridgeshire GPs are unable to read the test results correctly. The survey also found that half the GPs questioned in Cambridgeshire "were not confident in their ability to diagnose and manage hepatitis C infection."

A spokeswoman for the trust said:

"Approximately 500,000 people in the UK are thought to be living with Hepatitis C. Of these, 90 per cent don't know they are infected.

"Hepatitis C is a major cause of chronic liver disease, including cirrhosis and liver cancer. Patients can live for many years without experiencing symptoms, and as a consequence, a large number remain undiagnosed."

Symptoms of the disease include digestive problems, joint pains and depression.

Charles Gore, the trust's chief executive, said: "More must be done to equip GPs so they can correctly identify those who should be offered a hepatitis C test, and then interpret any result correctly."

Dr Kate King, a specialist for the Health Protection Agency covering Cambridgeshire, said: "The analysis is carried out by an expert in a laboratory, and the results will then be passed back to the doctor who can tell the patient.

"If there is a clear-cut result whether a patient is infected or not that will be passed on. If it is an equivocal result, they might recommend a further test.

"GPs may lack experience in these tests, but they are certainly not left alone when it comes to interpreting them."

If people are worried about the disease they can ring the trust helpline 0845 223 4424

Hepatitis C coinfection may increase the risk of heart attacks and strokes in people with HIV

www.aidsmap.com

Liz Highleyman

Coinfection with hepatitis C virus (HCV) may be associated with an increased risk of cardiovascular events such as heart attacks and strokes, even though people with hepatitis C have lower cholesterol levels, according to a study presented on Thursday at the XVII International AIDS Conference in Mexico City.

Cardiovascular disease has become an increasing concern as people with HIV live longer. Over time, atherosclerosis ("hardening of the arteries") can lead to heart attacks and strokes as blood flow is restricted to the heart muscle or the brain, respectively. Several studies have shown that HIV-positive people taking antiretroviral therapy are at increased risk of cardiovascular disease, in part due to elevated cholesterol and triglyceride levels.

Research has shown that people with hepatitis C are less likely to have abnormal blood lipid levels, but are more prone to metabolic complications such as insulin resistance and fat accumulation in the liver (steatosis). However, it is not known how hepatitis C coinfection influences lipid levels or other metabolic changes related to HIV infection or its treatment, nor how this might impact the risk of cardiovascular disease.

Roger Bedimo and colleagues from the United States analysed data from the Veterans Administration Clinical Case Registry to look at the impact of HIV/hepatitis C coinfection on risk of acute myocardial infarction (MI) and cerebrovascular disease (stroke) after adjusting for other risk factors. The registry includes more than 20,000 HIV-positive patients, of whom about one-third also have hepatitis C.

The investigators identified coinfecting individuals in the database who had experienced an acute MI or stroke. They then compared the risk of such events in the pre-HAART era (1980 to 1995) and the post-HAART era (1996 to 2004), ie before and after combination therapy was introduced.

Consistent with prior studies, people with hepatitis C were less likely to have abnormally high blood fat levels or to be taking lipid-lowering medications. Over the entire study period, 18% of coinfecting patients had total cholesterol above 240 mg/dL, compared with 27% of people with HIV alone ($p < 0.001$). For triglyceride levels above 200 mg/dL, the corresponding rates were 55% and 60% ($p < 0.001$). People with HIV alone had an increased likelihood of having high cholesterol after the advent of HAART (rising from 24% to 31%), but the rate did not change among the coinfecting patients. The likelihood of having high triglycerides decreased in both groups.

Overall, traditional risk factors such as older age, diabetes, and high blood pressure predicted an increased risk of acute MI or stroke with one exception. Strangely, smoking was not associated with an elevated risk of cardiovascular disease—in fact, it had a protective effect with regard to stroke—a finding the researchers were unable to explain.

Before the advent of HAART, HIV/hepatitis C coinfection was associated with about a 40% higher risk of acute MI or cerebrovascular disease. In the HAART era, the rates of acute MI were 3.36 per 1000 person-years for people with HIV alone and 4.19 per 1000/person-years for coinfecting people. This represented a 25% increased risk after adjusting for other factors, but failed to reach statistical significance (adjusted HR 1.25; $p = 0.072$).

For cerebrovascular disease in the HAART era, the corresponding rates were 11.12 and 12.47 per 1000 person-years for HIV monoinfected and HIV/hepatitis C coinfecting individuals. In an adjusted analysis, this represented a 20% increased risk, which was statistically significant (adjusted HR 1.20; $p = 0.013$).

The investigators concluded that HIV/hepatitis C coinfection was an independent risk factor for acute MI and cerebrovascular disease prior to the advent of HAART. After the introduction of effective combination therapy, this effect appears to have declined for acute MI but not for stroke, since coinfection was no longer a significant predictor of acute MI but remained significantly associated with stroke. However, the impact of coinfection on MI risk remained significant for patients over 60 years of age.

Based on these findings, the researchers recommended that “adjustment for HCV status is indicated” when analysing cardiovascular disease risk in people with HIV.

Reference

Bedimo R et al. HCV co-infection and risk of acute myocardial and cerebrovascular disease among HIV-infected patients in the pre-HAART and HAART eras. XVII International AIDS Conference, Mexico City, abstract THAB0205, 2008.

Cara Mastrey to Visit KNAC.COM Today to Discuss Tawn Mastrey Hepatitis C Aware Project

<http://knac.com>

By Newsferatu, Writer

Tune in today at 5:30pm Pacific Time when Tawn Mastrey's sister, Cara Mastrey visits KNAC.COM to update Junkman on the Tawn Mastrey Foundation, and the Tawn Mastrey Hepatitis C Aware Project which has initial offers of help from many a rock star whom Tawn's life and passing touched in an indelible way.

The following press release provides more information on the project:

Groundwork is being laid for The Tawn Mastrey Hepatitis C Aware Project. The non profit Foundation is on a mission to assemble devoted, generous friends of the late great, DJ Tawn Mastrey, with the goal of creating a compilation album of tracks recorded and donated by the

formidable cache of musicians with whom Tawn interacted over her magnificent 30 year career that began in the freeform 70s at San Jose's KSJO and included several years at Pure Rock 105.5 KNAC in Long Beach, CA.

The Hepatitis C Awareness Compilation album is a not a musical epitaph but a loud and lovely celebration of one amazing woman's life and her eternal love of rock n' roll. There are more than 190 million people in the world today infected with Hepatitis C today, and the majority are unaware of it and are spreading the disease. This figure will triple by 2012, if nothing is done to wake people up, get tested and live consciously.

"The Tawn I knew and adored was personable, charming, enchanting, loving, funny, ballsy, bossy, generous, and inspiring," recalls her sister, Cara Mastrey. "Tawn was kind to everyone she met. She made strangers and friends alike feel important. And if their music rocked, she was not afraid to tell the world through her sexy airwave voice and professional media influence."

Black Sabbath drummer, Bill Ward, recently crowned Tawn with the venerable title, "Queen Ambassador of Heavy Metal Music."

"A few days before Tawn died, Cara Mastrey, Tawn's sister asked her, 'what can I do for you?'" "Desperately weak, she whispered in my ear, 'please, get the word out to stop the spread of Hep C. Do it through my music friends. I know they'll help.'"

We're talking about raising awareness here, using the power of rock and celebrity to help others avoid the horrific medical ordeal and premature departure that so inevitably accompanies this nefarious affliction. Cara and the Tawn Mastrey Foundation are reaching out to you to help us with this grand task. So far, the responses from the artist community have been incredible. The following individuals and/or bands have confirmed their participation in the project.

Sammy Hagar has offered a live version of the Montrose classic, "Rock Candy" with Neal Schon on lead guitar.

The following artists have also acknowledged to Cara their desire to participate.

- Sammy Hagar
- Ronnie Montrose
- Slash
- Tom Morello/ Rage Against the Machine & Nightwatchman
- Rudy Sarzo/ White Snake, Quiet Riot, Ozzy
- Nadir D Priest/ London
- Fergie Fredrickson /Singer of Toto
- Eric Bloom / Blue Oyster Cult
- Shark Island
- Ratt
- XYZ
- Billy Sheehan/ Mr. Big, David Lee Roth, etc
- L.A Guns
- Rhino Bucket
- Metal Knights

- Witch
- Dodd
- and more...

“I know this is just the beginning,” says Cara. “Tawn knew so many great musicians. She did so much for hard rock music during her long career. I hope anyone and everyone who wants to contribute to this album will contact me.”

Cara also reports that Remy Maxwell, (KNAC, 93X now Sirius), has offered to mix a portion of the record in Minneapolis while Stew Herrera from KNAC and KLOS 95.5, has offered to engineer other tracks in Los Angeles. Veteran DJ, Paul ‘The Lobster’ Wells is also onboard. “I’m in the process of assembling my sister’s audio archives,” reports Cara. “Her vocal presence in the form of carefully selected air checks and sound bites will be very much a part of this wondrous recording.”

On August 20th, Tawn's birthday, her family and friends will be planting a tree for the Leather Nun’s in Landsboro, Minnesota where Tawn had her fondest memories with her family. We’re also planning an eBay auction, collecting memorabilia from famous friends. Alice Cooper has already donated a signed cane.” “Ozzy is donating a signed guitar and Rock Photographer Neil Zlozower is donating 2 photos.

For more information, please visit the following websites. And thank you all for taking the time to read this message.

www.tawnmastreybenefit.com
www.myspace.com/mastreyproductions
www.myspace.com/mastreycara

Aug 13, 2008

Nano Vaccine For Hepatitis B Shows Promise For Third World - Nanoemulsion Could Save More Lives By Removing Current Vaccines' Drawbacks

<http://www.medicalnewstoday.com>

Chronic hepatitis B infects 400 million people worldwide, many of them children. Even with three effective vaccines available, hepatitis B remains a stubborn, unrelenting health problem, especially in Africa and other developing areas. The disease and its complications cause an estimated 1 million deaths globally each year.

In many poor countries, refrigerated conditions required for the current vaccines are costly and hard to come by. It's often difficult in the field to keep needles and syringes sterile. The need to have people return for the three shots currently required also limits success.

Now, a new vaccine that avoids these drawbacks has moved a step closer to human trials. Health researchers hope it will make it possible to immunize large numbers of children and adults in Africa, Asia and South America efficiently and safely.

Scientists at the Michigan Nanotechnology Institute for Medicine and Biological Sciences at the University of Michigan report that a novel, needle-less method for getting an immunity-stimulating agent into the body has proved non-toxic and able to produce strong, sustained immune responses in animal studies. The vaccine is based on a super-fine emulsion of oil, water and surfactants placed in the nose.

The research was supported by the Grand Challenges in Global Health initiative, which is funded by the Bill & Melinda Gates Foundation, the Foundation for the National Institutes of Health, the Wellcome Trust and the Canadian Institutes of Health Research. The findings appear online in the journal *PLoS ONE*.

The nanoemulsion represents a new delivery method for an antigen already used in existing hepatitis B vaccines to activate the body's immune defenses.

"Our results indicate that needle-free nasal immunization, using a combination of nanoemulsion and hepatitis B antigen, could be a safe and effective hepatitis B vaccine, and also provide an alternative booster method for existing vaccines," says James R. Baker, Jr., M.D., the study's senior author and director of the institute. He also is Ruth Dow Doan Professor and allergy division chief in the U-M Department of Internal Medicine.

The nanoemulsion is made up of soybean oil, alcohol, water and detergents emulsified into droplets less than 400 nanometers in diameter.

The study suggests that the new type of hepatitis B vaccine will not have rigid cold storage requirements and could require fewer administrations than current vaccines, which require three shots given over a period of six months. Protective immunity with the new vaccine required only two immunizations in animals. The vaccine also avoids the risk of spreading needle-borne infections.

The nanoemulsion vaccine also avoids the temporary pain and redness that results after people get shots with the current vaccines, in which an irritating compound, alum, is used as an adjuvant, or enhancer of a vaccine's effect. There was no local inflammation at the nasal site of administration with the new vaccine.

This finding may be significant, because one of the major concerns for nasal administration of vaccines is that they can find their way to the olfactory bulb in the brain and cause side effects, says Paul E. Makidon, D.V.M., co-first author of the study and a U-M research fellow. "Our studies, however, indicate no inflammation and no evidence of the vaccine in the olfactory bulb," he says.

Baker's team has published earlier studies affirming the promise of nasal nanoemulsions as a strategy for smallpox, influenza, anthrax and HIV vaccines. The nanoemulsion technology is patented by U-M and licensed to Ann Arbor-based NanoBio Corporation. Baker is a founder and equity holder of NanoBio.

Research details:

The research team determined effective doses of the antigen and nanoemulsion. In results obtained in mice, rats and guinea pigs, the nanoemulsion vaccine proved effective at producing

three types of immunity: systemic, mucosal and cellular. Further toxicity studies in rodents and dogs showed the vaccine was safe and well-tolerated.

The vaccine was as effective as current hepatitis B vaccines in eliciting systemic protective antibodies in the blood of animals. The nanoemulsion acted as an effective adjuvant, without the need for a traditional adjuvant or inflammatory compound as in the current hepatitis B vaccines.

In addition, the nanoemulsion vaccine produced sustained cellular immunity in Th1 cells, which could make the vaccine useful in treating people with chronic hepatitis B whose own cellular immune responses are inadequate.

The animals given the nasal nanoemulsion in the study also activated a third type of immunity, mucosal immunity, which is gaining recognition among immunologists as a key first-line response to infectious agents in diseases such as hepatitis B where mucosal tissues are involved in transmission. Baker and his team found the same effect of activating mucosal immunity that was seen in their previous studies of other nanoemulsion-based vaccines.

The researchers tested whether the vaccine could remain stable and effective even if not refrigerated. They found the nanoemulsion vaccine retained its effectiveness for six months when kept at 25 degrees Celsius (77 degrees Fahrenheit), and even was stable and effective for six weeks at 40 degrees C (104 degrees F). This suggests that refrigeration will not be needed for the final distribution of the vaccine in developing countries, making it easier to vaccinate underserved people.

Current studies are focused on developing the preclinical data required to enter human trials, Baker says. The researchers hope that the first human trial can begin within a year.

Additional U-M authors include: Anna U. Bielinska, Shraddha S. Nigavekar, Katarzyna W. Janczak, Jessica Knowlton, Alison J. Scott, Nicholas Mank, Zhengyi Cao, Sivaprakash Rathinavelu, Michael R. Beer, J. Erby Wilkinson, Luz P. Blanco and Jeffrey J. Landers.

Citation: PLoS ONE, <http://dx.plos.org/10.1371/journal.pone.0002954>

Aug 13, 2008

Hepatitis B virus genotype and mutations affect risk of cancer

<http://www.medicexchange.com>

In patients infected with hepatitis B virus (HBV), HBV genotype C and certain variants in the precore and basal core promotor (BCP) regions of the viral DNA are associated with an increased risk of hepatocellular carcinoma, according to a report in the Journal of the National Cancer Institute for August 20.

In prior studies, researchers have identified eight genotypes of HBV and numerous variants in the precore and BCP regions. Whether these genetic factors influence the risk of hepatocellular cancer, however, was unclear. The new findings, which are based on a study of 2762 HBV-infected subject in Taiwan, suggest that they do.

When initial blood samples were taken in 1991 and 1992, none of the patients had liver cancer, report Dr. Chien-Jen Chen, from Academia Sinica in Taipei, Taiwan, and colleagues. During 33,847 person-years of follow-up, 153 subjects were diagnosed with the malignancy.

Relative to infection with genotype B HBV, infection with genotype C increased the odds of hepatocellular carcinoma by 76 per cent. Similarly, the A1762T/G1764A double mutation in BCP raised the risk of cancer by 73 per cent.

Not all of the mutants, however, had an adverse effect. The precore G1896A variant cut the risk of hepatocellular cancer by 66 per cent, the report indicates.

"These genetic features of HBV, in addition to age, sex, HBV viral load, and serum ALT levels, may help identify those who are at increased risk for liver disease progression and would therefore potentially benefit from early interventions, such as regular screening to detect disease progression, and treatment," the authors conclude.

"Several mechanisms have been proposed to explain the higher incidence of hepatocellular carcinoma in patients infected with genotype C HBV vs. genotype B HBV," note editorialists Dr. Josep M. Llovet, from Mount Sinai School of Medicine in New York, and Dr. Anna Lok, from the University of Michigan Medical Center in Ann Arbor.

"It is possible that variations in viral sequence may contribute to this difference: several studies have found that subgenotype C2 is associated with a higher incidence of hepatocellular carcinoma than other subgenotypes of HBV genotype C," they add.

J Natl Cancer Inst 2008;100:1134-1143

Court Upholds Compensation Cut-off For NHS Hepatitis Victim

<http://www.thefirmmagazine.com>

A widow, whose gardener husband died after contracting hepatitis C from infected blood has lost her action to overturn her decision that denied her compensation, because her husband died 5 months prior to the cut off date for qualification.

George Fargie died on 7 March 2003 and it was established that he had contracted hepatitis C from infected blood. The compensation fund, run by a private company which administers the ex gratia scheme on behalf of the Department of Health, makes payments to "all people who could demonstrate, on the balance of probabilities, that they had received blood, blood products or tissue from the NHS in Scotland and were subsequently found to be infected with the Hepatitis C virus," but only to those who were still alive at a selected cut off date, which was 29 August 2003.

"The burden of the submission for the petitioner was that the only reason for the cut-off date of 29 August 2003 being fixed by the respondents was because they took the view that victims alive on that date had a legitimate expectation to an award," said Lord Uist in his judgement.

"I do not think that view, which seems to proceed upon a narrow reading...is correct. It seems to me plain that another, and at least equally significant, consideration for the respondents was the need to have regard to limited financial resources when fixing the eligibility criteria of the scheme,"

"It is obvious that having a cut-off date would be bound to result in some savings to public funds, as otherwise claims on the fund could be made by all those who had been infected by the virus in the course of NHS treatment."

"I appreciate that on 29 January 2003 the Minister stated: "If somebody is alive now and has the virus because of NHS treatment they will get the initial payment." Despite the apparently clear nature of that statement, I do not think it can be taken to have conferred upon a person alive on 29 January 2003 who had the virus because of NHS treatment a legitimate expectation to an initial payment out of any fund to be established."

Fargie's widow had sought a judicial review of the decision to restrict payments in this fashion, but the action was today dismissed by Lord Uist.

The full judgement can be read here:

<http://www.scotcourts.gov.uk/opinions/2008CSOH117.html>

Aug 15, 2008

Older Donor Grafts Suitable for Liver Transplant Recipients With Hepatitis C Virus

www.medscape.com

NEW YORK (Reuters Health) Aug 14 - New research suggests that use of older donor grafts does not compromise outcomes in liver transplant recipients with hepatitis C virus (HCV).

HCV cirrhosis is the main reason for liver transplantation in the United States, but it is linked to HCV recurrence, an increased risk of graft loss, and reduced survival, Dr. William C. Chapman, from Washington University School of Medicine in St. Louis, and colleagues note in the *Archives of Surgery* for July. Whether older donor grafts are suitable for transplant recipients with HCV was unclear.

Dr. Chapman's team analyzed outcomes in 489 adults who received liver transplants at one center between 1997 and 2006. Overall, grafts from "carefully selected" donors aged 60 years or older were used in 24 of 187 recipients with HCV (12.8%) and 48 of 302 without HCV (15.9%).

Five-year patient and graft survival rates in HCV-positive recipients were 69.2% and 65.6%, respectively, which did not differ significantly from the rates seen in their HCV-negative peers.

In both HCV-positive and HCV-negative recipients, there was no evidence that use of grafts from older donors impaired short- or medium-term patient or graft survival, the report indicates.

"Data from this series suggest that the continued use of selected older donors is a safe method of expanding the liver donor pool, even for HCV-positive recipients," the authors conclude.

Waiting times double for transplants

<http://edinburghnews.scotsman.com>

SCOTS patients face the longest wait ever for a life-saving organ transplant, campaigners today revealed.

The average waiting time for organ transplants for Scots patients has doubled from 18 months to three years over the last decade because of a severe shortage in donors.

A new drive to ensure would-be donors to speak to their families about the choice was launched today in conjunction with National Transplant Week.

About 30 per cent of registered donors are lost after being vetoed by relatives after their death.

A spokeswoman for charity TIME today said: "The main thing we're trying to get across is that after people sign on to the donor registry and carry their card they have to tell their next of kin their wishes.

"The next of kin have the final say, so if they don't know that you want to be a donor they'll have to make that decision themselves at the crucial time."

Lothian has one of the highest rates of organ donation in the country, but there are about 550 people currently on Scotland's waiting list for organs will wait two-and-a-half to three years for a donor.

Recent studies have shown that around 70 per cent of the population would be willing to donate organs after their death, but only 15 per cent of people have signed up for the NHS register. Support is growing for a "presumed consent" system to be adopted in Scotland.

Health Minister Malcolm Chisholm has pledged up to £210,000 over three years to establish a Hepatitis C resource centre to provide information and advice to patients.

Speaking at a conference in Edinburgh yesterday, he said: "I am deeply conscious of the anxiety and anguish that Hepatitis C can bring to those affected.

"This should be a real asset and a valuable addition to the resources already committed to tackling Hepatitis C."

Staff recruitment is underway with the centre set to open in September.

Music helps Kenny Neal get over the blues

<http://www.dailynewstribune.com>

By Jay N. Miller

GateHouse News Service

Three family deaths, a band member's death and being diagnosed with hepatitis C haven't kept Louisiana bluesman Kenny Neal down.

It's made him stronger.

"The events of the last few years made me understand the cathartic, healing role of the blues more than ever," Neal said. "This wasn't about a guy feeling bad because his woman had gone. This was about stuff that hit me close to home and really hurt."

On the new album "Let Life Flow," Neal sings like someone who appreciates life like never before. Neal will perform Sunday at the North River Blues Festival at the Marshfield Fair.

Neal's woes started in September 2004 when his father (the musician Raful Neal) died after a long battle with cancer. Not long after another relative died.

Then, in the same week, Neal lost a sister and Kennard Johnson, who'd been his drummer for 20 years.

"Kennard really felt like part of our family, so losing him was very hard," said Neal, 50, who lives in California with his wife.

Since nine out of his 11 siblings followed in dad's footsteps and became musicians, Neal said they've always been a family band from the start.

"I've got so many brothers who play, if one gets ill, we just call up another one. It's a good thing about playing with your family; we've had almost no changes in 20 years.

"I can't fire 'em, and they can't quit, but we all have to answer to my mom," Neal said.

So family-oriented is Neal that he said "even the guys who aren't related feel like family, not like a band. And, hey, if things get desperate on the road, we can always bunk in one hotel room."

Doctors diagnosed Neal with hepatitis C in Sept. 2006. Forced to stop touring, Neal found an interim gig as a TV host. The 30-minute show, "Neal's Place," was entered in a national contest of 3,000 such community access shows, and won first place. Past guests include Taj Mahal and James Cotton.

"I was doing nothing but going to my treatments every week, and I was honestly bored to death," Neal explained. "I noticed that Palo Alto had this cable access thing where anyone could come in and do a show. My first idea was to just sit and talk with some of my friends from the music world, and maybe play a little, acoustically, with them. I was just doing it to keep myself occupied. I brought in some old friends like Jimmy McCracklin, and old timers like that. The community loved it. We have 30,000 viewers."

When Neal felt healthy he had found a new depth in his writing. Many of the songs came naturally, and he decided to use a few covers that fit the overall theme. The title cut is a smooth number about taking every day as it comes, while "Blues, Leave Me Alone" is a lively, and self-

explanatory romp. His father is remembered with two tunes, “Starlight Diamond” and “Bleeding Heart.”

“I felt these things very intensely, and there is nothing phony about this CD,” Neal said.

The songs flowed straight from his heart. “They were not hard to write – they were songs I had to write. It couldn’t have come out any other way than it did,” Neal said. “I had been thinking about a new CD, then all those things happened, and my illness hit, and I was off a year. These lyrics started to come to me, and some of the best ones just came almost instantly.”

While Neal has built his reputation as a singer/songwriter/guitarist, he’ll be showcasing his harmonica talent at the Marshfield Fair gig. Neal’s performance will also be a tribute to his dad and Slim Harpo. (Neal also recorded a full-length 2005 CD tribute to that pair.)

“They were real close to me, and my dad and Slim were good friends, and they were my main influences. Those are the mentors I came up under, and I’m proud to be continuing their music. And the best part is, I don’t have to lug my guitar through the airports and worry about what happens to it on the plane – I just put a harp in my pocket and go.”

Harpo supposedly gave a bawling 3-year-old Kenny a harmonica to quiet him, and that started a music career that includes mastery of bass, trumpet, piano and guitar.

Jay N. Miller covers popular music for The Patriot Ledger. If you have information or ideas for Jay about the music scene, bookings, recordings, artists etc., send it to him by e-mail to features@ledger.com, attn: Music Scene in the subject line.

Spreading the word on Hepatitis C

<http://www.standard-freeholder.com>

By Thane Burnett, Sun Media

Chinese man wages lonely battle against disease

BEIJING — Tibet is not the only game in town.

For days now, Ten Xiaojun has stood beside a major street in Beijing — in the heart of the Olympic venues and under the watchful eye of security officials — and held up his placard, hoping to get noticed.

Ten, a 30-year-old from Hunan Province, a plane flight away, believes Chinese officials should be doing more to educate the public on the perils of contracting Hepatitis C.

His hand-made sign, penned in red and in both English and Chinese, reads: “The Hepatitis C is as dangerous as the AIDS. Please pay attention to it and control it if you have the ability.”

Ten contracted Hep C during a tainted transfusion following a car accident about nine years ago.

He believes he has infected his wife, but is afraid to have her tested. If she is found positive, said Ten, she likely would not accept the reality of the infection.

“I want the government to pay attention,” said Ten, standing on the street here yesterday, next to Olympic pin traders.

He said he knows Chinese leaders take the problem seriously, but wants them to push education even further among the population.

But his message could as easily have been for the athletes as well.

Australian competitors have been warned about getting an Olympic tattoo while here, even if it's to celebrate a medal victory.

It's a tradition among many athletes to have the rings of the Games inked in the host city. However, Hepatitis Australia has a campaign to warn Olympians the practice “seriously risks” the transmission of blood-borne diseases.

“It's only natural our athletes will want to remember their achievements by getting a tattoo of the iconic Olympic rings, but tattooing involves risks which many people don't realize,” the organization's chief executive, Helen Tyrrell, told Australian media.

Both Hepatitis B and C can be transmitted through needles used by tattoo artists.

On the Beijing street, a passing Chinese doctor applauded Ten's campaign, but said the government is trying hard to educate the people.

“It's not a problem getting the message out in the cities,” said the doctor, who declined to be named. “It's more in the rural areas, where there is a lack of resources.”

As Ten complained that he has sent a letter to Chinese leaders, but has not got an answer back, the doctor told him there's a proper bureaucratic process the sick man should use to push for more government attention on Hep C.

In the last figures available, an estimated 41 million people in China had contracted the hepatitis C virus in 2004, killing 280,000 people here annually, according to the Chinese ministry of health.

Doctors here have a long history of developing new methods of treating the chronic blood-borne infection, often combining western and traditional Chinese medicines.

Worldwide, one in 12 people have chronic hepatitis B or C.

thane.burnett@sunmedia.ca