HCV ADVOCATE WEEKLY NEWS REVIEW

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

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Editor-in-Chief

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The Clock Is Ticking

http://www2.canada.com/calgaryherald
Deborah Tetley And Jamie Komarnicki
Calgary Herald

With 110 people on the list for a liver transplant and only 70 donors a year, time is running out and the needy must look for other options

In a final, desperate bid to find a donor liver to replace his own, which had been failing for a year while he languished on a transplant waiting list, Calgarian Terry Ewing travelled to France, where doctors quickly found a match.

But when a major blood vessel was severed during surgery, the 58-year-old went into shock and slipped into a coma.

The good news was Ewing's body showed no signs of rejecting the donated liver.

The sad irony is the burst vessel compromised several of his other organs and the longtime City of Calgary employee never fully recovered.

On Jan. 13, two months after the transplant that was supposed to add years to his life, Ewing died in a Toulouse hospital.

"There was no more that we could do for him," says his widow, Shelley Ewing, who kept a vigil at her husband's hospital bedside for two months while hoping for a miracle and cursing Canada's organ donation program.

"If we didn't go to France for the transplant he was going to die, but by the time we got to France, it had already gone too far and his body couldn't take it. The system failed him."

Health oficials say the system is failing too many people -- roughly 20 patients die each year awaiting a liver.

Organ donations have stalled in Alberta, while the need for transplants has surged, leading to an unprecedented backlog.

"Unfortunately, many of our patients die before we can get an organ in time," said Dr. Kelly Burak, director of the Southern Alberta Liver Transplant Clinic at Foothills Hospital.

There are roughly 110 people on the provincial liver transplant list, and only 70 donors annually.

Geraldine Gerein has been waiting her turn for three years.

"I keep seeing other people get their transplants," said Gerein, who suffers from a chronic liver disease.

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"I keep thinking, when am I going to get mine?"

Ewing asked himself the same question. After a frustrating year in Alberta, he tried to find a solution in France, where the donation system is diff erent.

"There is no end in sight, nothing to grasp on to," Terry wrote in a letter to friends, explaining his decision to travel. "People in my state have died waiting or have ended up on life support."

Family members who watched their loved one slip away say he was caught in a catch-22.

"Terry was so sick he couldn't move off his chair, but he wasn't sick enough to be hospitalized and end up near the top the donor list," said Ron Ewing, Terry's younger brother.

"The list moves so slowly because there just aren't near enough donors in Canada to help all the people that need transplants."

The family's frustration is echoed by Burak, who says Alberta's liver transplant program has fallen dangerously behind.

"It's all a supply and demand issue -- more people needing liver transplants and no increase in cadaveric donors to meet that demand means longer waiting times and more deaths in the waiting room," he said.

An increase in hepatitis C cases is partly responsible for the province's dearth of livers, he said. At the same time, physicians have nearly doubled the number of transplants to treat liver cancer. The system can't handle the strain.

"It's frustrating for patients who are in need of liver transplantation and family members who have patients in need for liver transplantation," Burak said. "It's frustrating for us as physicians who care for these patients, because we see patients waiting longer and longer and while they wait, they get sicker and sicker."

The length of time a patient will likely wait for a liver transplant is about 14 months, compared to about three months in 2000, he said. Many patients wait far longer.

In her southwest Calgary home, Geraldine Gerein keeps her hospital suitcase packed. She's never farther than a two-hour drive from the city, and she's glued to her cellphone.

She'll have only 30 minutes to respond to the phone call that will summon her to an Edmonton hospital where she'll claim a new liver.

In 1987, the 54-year-old was diagnosed with primary biliary cirrhosis, an autoimmune liver disease that progressively destroys the organ's bile ducts.

Last year, Gerein quit her job in finance at the University of Calgary due to a side-effect of the disease that makes it dificult to concentrate. She's also had to quit driving. Her stomach is continually swollen with fluid and she had to have her lungs drained three times last year. Even dinner and a movie are out of the question because of fatigue, said Gerein, a formal social

butterfly.

"I feel kind of isolated," she said.

Three years ago, she qualified for a transplant. Now, she waits. The physical discomfort is worsening. The mental anguish, though, is unbearable.

As her quality of life deteriorates, Gerein can't help wondering when -- or if -- she'll get her transplant. Burak says prioritizing patients for liver transplant is a delicate balance.

Physicians must measure their chances of saving the sickest patients' lives against their odds of success with the transplant.

If they're healthy enough to stay out of the emergency room, patients are likely to wait out the procedure at home.

"Often they'll wait because there are so many people sicker and have a higher chance of dying," Burak said.

Terry Ewing's doctor told him the only way he would survive was to undergo a transplant. He was diagnosed with end-stage liver failure in October 2007, but was warned it could take 18 to 24 months to find a match.

In the meantime, three family members, including Shelley and Ron, began the process to see if they could be live donors, where a portion of the healthy liver is removed and attached to the recipient's failing liver.

It takes six to eight weeks to go through the screening and only one potential donor can be screened at a time. No one was a perfect candidate.

Family friend and City of Calgary co-worker Ron Chapman then volunteered to be a live donor but, when Chapman was tested in April, 2008 to see if he was a match, doctors found a spot on his liver.

"He thanked Terry for saving his life and then he died of cancer less than two weeks later," Shelley said.

By August, Shelley heard of a successful and quick liver transplant performed in the Czech Republic. The recipient was about to celebrate the one-year anniversary of his surgery.

Shelley, who has family in France, began researching Europe's donor system -- a system she now wishes Canada would adopt.

"From birth, everyone in France is a donor, unless they opt out," she said. "In Canada, signing an organ donor card is not something most people think about, so the difference between their system and ours is they have livers and we don't."

On Sept. 1, 2008, the couple boarded a plane headed to France. Nearly a year passed after Terry's

illness struck and, despite several hospital stays -- in which he was comatose twice -- and a deteriorating quality of life, he was no closer to a new liver in Canada.

By Nov. 3, Terry was on a transplant list in Toulouse. Ten days later the couple got the call to go to the hospital.

Terry was excited. Shelley was a little scared. Both of them were very relieved -- but then the surgery went awry. Blood flowed from Terry's burst artery. His organs began shutting down. Eventually his kidneys collapsed and he was placed on dialysis for both his liver and kidneys. Later, when his breathing failed, doctors performed a tracheotomy.

Two months after he entered hospital for a new liver, Terry was taken off life support.

Shelley says her husband's body wasn't strong enough to cope with the risks that accompany major surgery.

Ron says the family has no regrets about going to France.

"He would have died for sure if he stayed here."

The medical costs for the family, however, are significant. Ron estimates it cost as much as $300,000 for the donor liver, hospital stay and other medical and personal expenses -- but for Shelley, money is not the issue.

The 51-year-old is concerned there is not enough public awareness about organ donation to motivate people to sign their donor cards.

"Most people don't even know they sign the back of the health card now, and not their driver's license," she said.

"Unless people are in a situation where it becomes an issue for them, it's not something they think about."

Burak said the province is looking to boost its live donor program, which currently performs an average of one liver transplant a month. In Toronto, where organ donation numbers are dismally low, doctors perform about one live liver transplant a week, he said.

Alberta could also explore harvesting organs after cardiac -- rather than brain -- death. It's a controversial procedure, Burak said, but physicians in Toronto and several U. S. jurisdictions have already begun. Meanwhile, a handful of Calgary patients have sought treatment abroad in transplant clinics in the Czech Republic, France and China, he said.

Burak agrees a campaign urging Albertans to consider organ donation is the only surefire route to deal with immediate need.

"There just needs to be more awareness that this is a very big problem, and it's only expected to become a bigger problem as our waiting list continues to grow."

For Gerein, the clock is ticking on her liver. Her family members don't match up for a live transplant. For now, there's little she can do but sit by the phone.

"I feel helpless. I just have to sit and wait," she said.

A trust fund to help raise money for the Ewing family has been opened at the Lakeview branch of the Bank of Nova Scotia. The address is 6449 Crowchild Tr. S. W. For more information call 403-221-6846.

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Unaware of hep C for 20 years

http://news.bbc.co.uk
By Jane Elliott
BBC News health reporter

Chrissie became infected following a blood transfusion after giving birth. For 20 years Chrissie Semple carried the hepatitis C virus without knowing it.

She had become infected after a blood transfusion in Germany following a Caesarean section for her youngest daughter.

Recent statistics show there are about 100,000 people like Chrissie who are unsuspecting carriers of hep C.

Doctors only discovered she had the disease in 2000 when she had what felt like "a four-day hangover" - but without the alcohol.

"I woke up feeling nauseous and felt my body was sore," she said.

"I went to the doctors because it got to the point where I could not really get out of bed and he thought that perhaps I had ME (Chronic Fatigue).

"It went on for a whole week with me feeling really bad."

Tests
When Chrissie, aged 51, from Cornwall, mentioned that she had been in Cyprus on holiday recently, doctors decided to run the hepatitis test, to see if she had picked up hepatitis A.

"A couple of weeks later I got the call at home and they said I had hep C," she said.

"I asked them what it was and how I could have got it and they said 'drugs'.

"I said I hadn't used drugs and they just said 'I don't know how you got it then'.

As Chrissie had no piercing or tattoos she eventually concluded that the only possible time she could have contacted the disease was at the birth of her daughter - and that it had lain dormant in her system for over 20 years.

'It was a complete shock," she said.

Immune treatment

Today Chrissie is clear of hep C after successfully undergoing Pegasys, or pegylated interferon, treatment.

Interferons are a group of naturally occurring proteins that form an essential part of the immune system.

Interferons operate in two ways, firstly they directly hinder the replication process of the virus and secondly they enhance the immune response.

Her husband John, who she met on a hep C website, is currently having his second dose of Pegasys.

He had the virus for 30 years before it was discovered after he presented at his GP's with a rash.

Hep C was diagnosed, and he traced it back to his taking drugs in the 1970s.

Years to appear

Sir Liam Donaldson, the Chief Medical Officer for England, said: "Around 100,000 people in England are estimated to be unaware that they have hepatitis C.

I felt cancer was more socially acceptable than hep C
"It can take years or even decades for symptoms to appear, if at all, and if left untreated can lead to liver damage and premature death."

But he said there was help available and urged those who suspected they were at risk to come forward.

But an ICM poll show that a third of people still do not know the risks of injecting drugs, or getting tattoos and piercings where equipment may not have been sterile.

Charles Gore, chief executive of the Hepatitis C Trust and President of the World Hepatitis Alliance, said: "Twenty years down the line, it's worrying to see the public still believe so many myths around hepatitis C.

"Education is absolutely essential to eradicating this problem."

GP Dr Rosemary Leonard agreed: "There is general ignorance about hep C, people are not aware of it they have heard about HIV and not hep C.

"Don't use drugs and if you do don't share needles and do practise safe sex and don't go abroad for piercings or tattoos."

Social stigma

Many people believe there the social stigma attached to the disease is holding back progress, and needs to be addressed urgently.

Simon Woods, 36, of London, is living proof of just how difficult it can be to come clean.

He got hep C from taking drugs and is now clear, but says he was so embarrassed about what he called the "junkie's curse" that he lied to family about why he was ill.

"There is a big stigma attached to it. When I started the treatment I told my family I was having chemo as I felt cancer was more socially acceptable than hep C," he said.

Chrissie and John have now set up their own online support forum for those affected with Hepatitis C - The Nomads.

Feb 2, 2009

Extra nurses to help fight hepatitis C

http://www.thisisnottingham.co.uk

EXTRA nurses to treat and test hepatitis C are set to start work in Nottingham.

The three workers will work with hospitals and health centres to tackle the condition – which can lead to liver cancer or cirrhosis if left unchecked.

Nottingham is also one of the first areas of the country to test patients for the disease using a pin prick on the finger.

Current blood tests can be difficult to carry out on hepatitis C sufferers as their veins are often damaged by injecting drugs.

Caroline Jordan, senior nurse for public health at Nottingham City NHS, said: "By doing that we will be able to test more people – a finger-prick is easier than getting blood from a vein."

It comes as the Department of Health starts a campaign to reach out to the 100,000 people nationwide who do not know they have the condition.

A survey carried out in the East Midlands showed that 37% of people in the region are unaware of how the disease is spread. People could have been exposed by injecting drugs or getting tattoos where equipment may not have been sterile.

There are an estimated 1,100 hepatitis C sufferers in Nottingham.

Chief Medical Officer Sir Liam Donaldson said: "It can take years or even decades for symptoms to appear, if at all, and if left untreated can lead to liver damage and premature death.

"Fortunately, effective treatment is available, so it's vital that people who may have been at risk of infection seek medical advice and get tested."

Part-time lecturer Nick Green, from Long Eaton, was diagnosed with hepatitis C in 2004 after suffering years of liver complaints.

The 46-year-old does not know where he contracted the disease but suffered cirrhosis of the liver because of the time spent with it. He underwent a year of treatment and was given the all-clear last year – the same time he heard he was to become a father for the first time.

Mr Green said: "Initial research into the virus scared me and it took time to come to grips with the gravity of my condition. My friends and family have been great and never made assumptions or showed prejudice of any kind."

Nottingham is said to have a higher level of hepatitis C sufferers than the national average because of the high number of intravenous drug users.

Health officials say anyone with concerns about hepatitis C should visit one of the city's GPs. – who are getting extra training about dealing with the condition. For more information visit www.nhs.uk/hepc or call the Hepatitis C Information Line on 0800 1814114.
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Cancer rates soaring in developing countries

http://www.google.com/hostednews/afp

PARIS (AFP) — Cancer now kills more people in developing countries each year than AIDS, tuberculosis or malaria, health experts said here on Monday.

Issued ahead of World Cancer Day on Wednesday, their report said more than 12 million new cases of cancer were diagnosed worldwide in 2008, resulting in 7.6 million deaths.

More than half of all new cases and around 60 percent of the fatalities occurred in developing countries, where poor medical infrastructure often means that cancer is a sure-fire death sentence.

"Cancer in the developing world is a hidden crisis that goes largely unreported, undiagnosed and untreated," said David Kerr, a professor of clinical pharmacology and cancer therapeutics at the University of Oxford, who contributed to the report.

"Cancer survival rates in developing countries are exceptionally poor. Lack of awareness, stigma and reliance on traditional healers mean most people do not seek medical help until their disease is advanced, and often incurable."

According to the report, issued by health foundation and consultancy Axios International, there could be 20 million new cases of cancer each year, and 13 million deaths, by 2030.

It points to several reasons why cancer -- which previously found a stronghold in rich economies

-- is expanding so fast in poorer countries.

One is that people there are living longer, and the risk of cancer rises as one ages.

Another is the spread of modern lifestyles, characterised by smoking, drinking, little exercise and diets that are high in fat and sugar and poor in roughage.

But a third factor is cancers that are related to infection, such as the human papillomavirus (HPV), which is linked to cervical and colorectal tumours; liver cancer, linked to hepatitis B and C viruses; stomach cancer, caused by the bacterium Helicobacter pylori, and Kaposi's sarcoma, caused by the herpes virus.

Vulnerability has been boosted by immune systems that are damaged by the AIDS virus.

In low- and middle-income countries, the three most commonly diagnosed cancers are lung, stomach and liver in men, and breast, cervix and stomach among women.

But early warning infrastructure to alert people at risk-- and doctors and drugs to treat them effectively -- can be pitifully absent.

For instance, in the developed world, 63 percent of women have access to cervical screening, but this is only 19 percent in developing countries.

"Today, significant progress has been made in the early detection of many cancers, in particular breast and cervical, yet nearly four out of five people with cancer in developing countries are not diagnosed until they have late-stage disease," Axios' chief executive officer, Joseph Saba, said in a press release.

Adherence to HCV Therapy Helps Boost Response

www.medscape.com

NEW YORK (Reuters Health) Jan 30 - High adherence to hepatitis C virus (HCV) therapy prompts significantly better response than does suboptimal drug exposure, Philadelphia-based researchers report in the January 15th issue of *Clinical Infectious Diseases*.

As lead investigator Dr. Vincent Lo Re III told Reuters Health, "we found that adherence of 85% or more to the hepatitis C treatment regimen of PEG-interferon and ribavirin, as measured by pharmacy refill data, was associated with increased hepatitis C viral suppression and early virologic response to treatment."

Dr. Lo Re of University of Pennsylvania School of Medicine in Philadelphia and colleagues studied 188 patients and compared the relationship between drug refills and HCV suppression.

At 12 weeks, patients with 85% or greater adherence showed a mean decrease in HCV load that was 0.66 log IU/mL greater than was the case in those with lower adherence. In those with high adherence, the mean decrease amounted to 1.0 log IU/mL.

Early response was also more common in the higher than the lower adherence group. For pegylated interferon, the proportion was 73% versus 29%. For ribavirin, the corresponding values were 73% and 55%. The researchers note that "adherence level to one medication corresponded in most cases to a similar level of adherence to the other medication."

Dr. Lo Re concluded that "identifying suboptimal...adherence to PEG-interferon and/or ribavirin using pharmacy refill data could allow hepatitis C providers to help patients to improve their adherence during treatment, which could help improve response rates."

Clin Infect Dis 2009;48:186-193.

Embolization Remains Good Option for Unresectable Liver Cancer

www.medscape.com
Nick Mulcahy

January 24, 2009 — New research into transarterial chemoembolization, or the vascular delivery of chemotherapy to the liver using microspheres, shows promising results for patients with unresectable hepatocellular carcinoma, according to 2 small studies presented at the 21st annual International Symposium on Endovascular Therapy (ISET), held in Hollywood, Florida.

A third small study that used embolization without chemotherapy in this patient population also showed promising early results.

The studies represent the ongoing efforts of researchers and medical-device companies to improve or refine approaches to embolization. Although surgery is the most effective way to treat hepatocellular carcinoma, more than two thirds of liver cancer patients are not candidates for surgery because of the size or location of the tumor, or because the tumor has grown into the blood vessels. Embolization typically is not curative but slows disease progression. However, according to a statement from ISET, improvements in miscrospheres are making them more effective.

An Expanding Microsphere
In a multicenter Italian trial of 53 patients with liver cancer, investigators used HepaSphere beads (BioSphere Medical, Rockland, Massachusetts) loaded with chemotherapeutic agents. The beads expand after lodging in the arteries that feed the tumor, and blood flow is theoretically more effectively blocked. The microspheres release chemotherapy directly into the tumor, according to a statement. HepaSphere beads are the only expanding microspheres and are not currently available in the United States.

A month after treatment, 27 of the patients (51%) showed a complete response, 18 (34%) showed a partial response, and 8 (15%) showed stable disease.

Complete response was defined as complete vital tumor tissue disappearance and absence of new lesions. Partial response was a decrease of 50% or more of the vital tumor tissue.

Six months later, 34 patients remained, 3 died, 4 were lost at follow-up, and 12 received other treatments. Of the remaining patients, 19 of the 34 (55.9%) had complete tumor response, 8

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(23.5%) had a partial response, and 7 (20.5%) had disease progression.

Postembolization syndrome, which consists of fever, pain, and nausea, occurred in 14 of the 53 patients (26.4%).

"Patients who still had good liver function and who had tumors in only 1 lobe of the liver did better with this treatment," said Maurizio Grosso, MD, chair of the Department of Radiology at Santa Croce and Carle Hospital, in Cuneo, Italy, in a statement. "We're hopeful that treatment with HepaSphere will be an improvement over traditional chemoembolization."

Doxorubicin-Emitting Beads Superior

In a study at St. Joseph's Hospital and Medical Center, in Tampa, Florida, researchers compared microspheres emitting doxorubicin with those emitting irinotecan in patients who had colorectal cancer that had metastasized to the liver and in patients with primary liver cancer.

"Colorectal metastasis and primary malignant hepatic neoplasms have a poor prognosis with dismal survival rates of 31% at 1 year and 26% at 2 years," explained the study authors, led by Glenn Stambo, MD, vascular and interventional radiologist at St. Joseph's.

In the study, patients with primary liver cancer (n = 11) received beads that emitted doxorubicin. Of the patients with colorectal cancer and a related liver cancer (n = 25), 13 received doxorubicin-emitting beads and 12 received irinotecan-emitting beads. All of the microspheres were LC Beads (AngioDynamics, Queensbury, New York).

At 2 years, the patients who received the doxorubicin-emitting beads had superior mortality outcomes; 10 of 11 (91%) of the primary liver cancer patients and 10 of 13 (77%) of the colorectal patients were still alive. Only 1 of 12 (8.3%) of the irinotecan patients was alive after 2 years.

Researchers are studying why doxorubicin seemingly works better in these patients.

"There is definitely a chance of cancer cure with this procedure, beyond just palliation," said Dr. Stambo in a statement. "The more isolated the tumor and its blood vessel feeders, the better the chance for a complete cure."

Embolization Without Chemotherapy

Matching bead size with blood vessel size in the liver was the focus of an Italian study in which embolization without chemotherapy was used in the treatment of 25 patients with liver cancer.

Vessels within a liver tumor range of 20 to 120 µm and should be the target for achieving ischemia and necrosis with embolization, said principal investigator Franco Orsi, MD, chief of interventional radiology at the European Institute of Oncology, in Milan, Italy, in a poster presented at the meeting.

The bigger the microspheres used, the further from the tumor the embolization will be, Dr. Orsi and his coauthors noted.

To address these concerns, the researchers used 40 and/or 100 µm Embozene microspheres

(CeloNova BioSciences, Newnan, Georgia) to embolize 34 target liver lesions in the 25 patients.

After 1 month follow-up, 18 tumors (52%) had shrunk in size, and 16 (48%) remained stable with no tumor growth detected. In a group of 16 tumors with a follow-up ranging from 6 to 12 months, 2 tumors (13%) completely disappeared, 7 (44%) continued to shrink, 2 (12%) were stable, and 5 (31%) grew. To date, 14 patients have had more than 1 year of follow-up care, with a 93% survival rate.

Dr. Orsi and colleagues emphasized that pulmonary shunting must be carefully excluded when 40 µm particles are used, and recommended performing Tc-99 macro-aggregated albumin liver perfusion scintigraphy in all patients.

The researchers have disclosed no relevant financial relationships.

21st Annual International Symposium on Endovascular Therapy (ISET): Abstracts 8, 125, 126. Presented January 19 and 20, 2009.

Feb 3, 2009

Human Genome hepatitis C drug may work, but will it pay?

http://www.forexpros.com
By Jennifer Robin Raj

BANGALORE, Jan 30 (Reuters) - When Human Genome Sciences Inc releases data from a crucial late-stage trial of its drug to treat hepatitis C, analysts will be looking for more than just positive results.

The question on their mind: will the data show the drug albuferon is capable of making money?

Analysts believe the trial, called ACHIEVE 1, will meet its main goal of showing albuferon's non-inferiority compared with the standard of care, but they will be keeping a close watch on the drug's sustained virologic response (SVR) rate to see if the data shows numerically that albuferon has comparable efficacy.

"We do need to see comparable efficacy. It's a non-inferiority trial and there's a certain band of what would be considered non-inferior. (But) if the trial were to show numerically better SVR rates, that would go a long way to convince the market place that the drug has commercial legs," Thomas Weisel Partners analyst Ian Somaiya said.

Albuferon, which could be worth several hundred million dollars, is a type of protein called interferon, and would be taken by patients once every fortnight.

It is differentiated by its dosage from the standard of care, which is administered once a week.

"There's been a reluctance in the investment community to believe a drug given once every other week in this setting, given the side effects of interferon, offers enough of an incentive for physicians to move away from Pegasys," Thomas Weisel's Somaiya said.

The current standard of care for Hepatitis C is antiviral ribavirin in combination with an interferon. Interferons currently in the market are Roche's Pegasys and Schering-Plough Corp's PegIntron.

Human Genome's albuferon is also being studied in combination with ribavirin.

Interferon treatment is difficult to tolerate and its side effects include flu-like symptoms.

"People often do it on a Friday so that they don't miss work, but it ruins their weekend," Leerink Swann analyst Joseph Schwartz said.

Hepatitis C is an inflammation of the liver caused by the hepatitis C virus (HCV), and analysts estimate that the worldwide market for hepatitis C is about $3 billion.

Human Genome, which is developing albuferon in partnership with Swiss drugmaker Novartis, expects to release data from ACHIEVE 1, the second of its late-stage trials for the drug, in March.

If the results are positive, the company expects to file for marketing approval in the fall of 2009.

"2009 is a make-or-break year for Human Genome. The stock is pretty depressed, but they have a couple of huge data points coming up. Albuferon's ACHIEVE 1 is the first of the series of phase 3 data, and is definitely the most crucial," Stanford Group analyst Han Li said.

Competition or Complement?
A successful ACHIEVE 1 trial will lead companies such as Vertex Pharmaceuticals Inc that are developing a class of new antivirals to run combination studies with albuferon.

"That's the real market driver," Thomas Weisel's Somaiya, who projects peak sales of $750 million to $900 million worldwide for albuferon, said.

But there is a debate about how these new antivirals will impact the commercial standing of interferon, as they could shorten the course of therapy or limit the use of interferons, Leerink Swann's Schwartz said.

However, some analysts such as Piper Jaffray's Edward Tenthoff believe that "interferon will remain the backbone of HCV therapy to which new antivirals will be added, with no meaningful change in the duration of the therapy."

Quality of Life Better?
The company's first late-stage trial for albuferon, named ACHIEVE 2/3, met the goal of non-inferiority, but patients enrolled in Asia responded to Pegasys with better SVR rates.

However, analysts said the ACHIEVE 1 trial will not be affected by that geographical variance as it is testing patients with Genotype 1 -- a strain of the hepatitis C virus prevalent in North America.

Genotype 1 is harder to treat than other strains with interferon, but makes for a bigger market.

Analysts were disappointed that ACHIEVE 2/3, from which the company reported data in December, did not show significant differences between albuferon and Pegasys with respect to quality of life (QOL) measures and missed work days.

The lack of differences on these measures calls into question the overall commercial profile and potential of the drug, JP Morgan analyst Cory Kasimov said in a note reviewing the results from ACHIEVE 2/3.

Kasimov said QOL and missed work days have been cited as drivers of albuferon uptake in the company's market research.

But some analysts such as Stanford Group's Li, who estimates peak worldwide albuferon sales of $700 million, believes QOL will not hurt the drug's commercial prospects significantly.

"(Albuferon) cuts the injections by half. That's the potential selling point," he said.

"QOL is an added benefit. If they don't have it, it doesn't hurt." (Editing by Pratish Narayanan)

Hepatitis C radio program back for 2009

http://www.healthnews.infoxchange.net.au
Piergiorgio Moro.
Hepatitis C Victoria.

Hep Chat, the radio program of Hepatitis C Victoria, is recommencing after its summer break.

The first program of the year will be Thursday 5 February 2009 at 10.30am. The main interview will be with Danny Jeffcote, NSP Team Leader of the newly expanded Inner Space, the Primary Health Care Centre in Collingwood.

Hep Chat can be heard on 3CR Radio, 855 on the AM band in Melbourne.

The show is also streamed live on the internet through 3CR's website and is available as a podcast.

Effort to help officer gets boost from lawmakers

http://www.dailypress.com
Kimball Payne

House panel backs plan for the workers' compensation fund to pay medical bills.

RICHMOND - House lawmakers want the state workers' compensation account to help Suffolk Police Lt. Kurt Beach cover costs linked to his liver transplant.

On Tuesday, a House panel backed a proposal that would help Beach's family pay for thousands of dollars worth of medication that he will need when he finally gets a liver transplant.

Beach has been in and out of the hospital recently because of hepatitis C, which he contracted in 1988 when he gave mouth-to-mouth resuscitation to a dying infant.

Beach didn't find out about the disease until the mid-'90s, and by then the window to file for damages had already closed.

While the state isn't at fault for Beach's health problems, lawmakers decided that the workers' compensation fund should pay any costs not covered by Beach's insurance company.

"There's been a lot of voter sentiment and support for this," said Del. William Barlow, D-Isle of Wight, who sponsored the bill to get Beach about $250,000. "We just wanted to get some help for the guy and the Appropriations Committee was very receptive."

Barlow's bill now moves to the full House Appropriations Committee with the unanimous support of a lower panel. The outlay for Beach's recovery comes as lawmakers continue to fret about impending budget cuts that could bring state spending down more than $3 billion.

Barlow said some legislators were concerned that they could set a precedent that the state's main pool of tax money — called the General Fund — could be on the hook for future claims. Lawmakers opted to use the workers' compensation fund instead.

Barlow noted that medical advances and increased information about the dangers of blood-borne viruses make it unlikely that a similar situation could arise in the future. Police officers and other first responders rarely wore protective gloves or took other precautions during the 1980s. But the emergence of HIV, AIDS and hepatitis means that nowadays even school children learn the dangerous viruses carried in human blood.

"The chances of this happening again are very slim," Barlow said.

Still, Barlow is carrying a second bill that would open up the window for workers to file compensation claims linked to viruses like hepatitis. Barlow said he expects some opponents to ask if this change would raise the cost of workers' compensation around the state.

"Well, how many Kurt Beach cases have we had?" Barlow asked.

Beach is still waiting to find a liver donor and doctors estimate that he would need $50,000 worth of medication in the first year after the surgery to keep his body from rejecting the new tissue.

Barlow said he is cautiously optimistic that his proposal to help Beach pay for the drugs will get through the General Assembly and be signed by Gov. Timothy M. Kaine.

"You always have to be guarded and alert," Barlow said. "But at this point the chances of its passage are very good."

Fundraiser

Smithfield employees are holding a $10-a-plate barbecue and fried chicken dinner fundraiser for Kurt Beach this Sunday between 12 p.m. and 5 p.m.

Location: The Smithfield Center, 220 N. Church St., Smithfield
For more information call: 757-356-9939

Prestigious fellowship for young Nottingham researcher

http://www.eurekalert.org
A promising young researcher at The University of Nottingham has been awarded a prestigious national fellowship to support her work investigating the molecular biology of hepatitis C virus.

Dr Catherine Jopling, of the University's School of Pharmacy, has received more than £1 million in funding over five years from a David Phillips fellowship given by the Biotechnology and Biological Sciences Research Council (BBSRC).

Dr Jopling said: "I'm delighted to have been awarded this fellowship. It will be enormously helpful in allowing me to set up my own group and to pursue this exciting research."

The fellowship will cover her salary and provide research funding to allow her to continue with work started while a postdoctoral researcher at Stanford University in the US looking at micro-RNAs, tiny molecules that play a major part in controlling gene expression in cells.

Dr Jopling's research focuses on miR-122, a specialised liver microRNA which interacts with hepatitis C virus (HCV) in an unusual way and plays an important role in helping the virus to replicate itself, an essential part of the viral life cycle.

Hepatitis C is a blood-borne infectious disease which currently affects around two per cent of the population. The infection can go undetected for a long period of time because it often produces no or few symptoms but as the disease becomes more chronic it can lead to serious scarring of the liver (cirrhosis) and even cancer.

Dr Jopling's research looking at how HCV hijacks miR122 to help in its attack on the liver has been recognised by the BBSRC because of the important role it plays in developing our understanding of gene expression and the basic biology of microRNA activity. In the future, the work may also have implications for medical advances — if more can be understood about the process by which HCV replicates and spreads, new drugs which act by blocking this action could be developed to help halt the progression of the disease.

The BBSRC awards six to 10 David Phillips fellowships a year to young scientists who have shown huge potential in their early research work and allows them to become well established in their chosen field.

Dr Jopling carried out her PhD from 1998-2001 at the University of Leicester, before obtaining a Wellcome Trust International Research Fellowship, which allowed her to work as a postdoctoral researcher at Stanford University. The fellowship provided a further year of funding to return to a UK-based lab and she spent a year working at the University of Cambridge. She joined Nottingham in 2007 as part of the RNA Biology Group in the School of Pharmacy.

iTherX Pharmaceuticals to Initiate Proof of Concept Clinical Study for First-in-Class Treatment for Hepatitis C

http://www.centredaily.com

ITX5061 Inhibits Ability of Virus to Enter Liver Cells

SAN DIEGO — iTherX Pharmaceuticals Inc, a privately held biopharmaceutical company developing novel antiviral products, today announced that it will initiate a Phase 2a clinical study of **ITX5061**, a potential therapy targeted at inhibiting the entry of the Hepatitis C virus (HCV) into liver cells. The placebo-controlled, randomized trial is a parallel-group dose-response study of the ability of ITX5061 to reduce viral load in treatment-naive and previously treated patients with HCV infection, when ITX5061 is administered as a single agent.

"ITX5061 is an inhibitor of the entry of HCV into liver cells with a potency in the picomolar range, and is equally potent against both genotype 1 and genotype 2 viruses," said Jeffrey McKelvy, Chief Executive Officer of iTherX. "This molecule has exhibited a good safety profile in preclinical studies and in previous clinical studies involving over 250 subjects. Our Phase 2a study represents a first-in-class clinical efficacy study for a small molecule HCV entry inhibitor. We look forward to carrying out further clinical studies to demonstrate the value of ITX5061 in the treatment of this serious illness, which is poorly treated with current therapy."

"Viral entry inhibitors represent a novel and interesting new class of antiviral agents," said John McHutchison, MD, Professor of Medicine at Duke University and Chairman of iTherX Scientific and Clinical Advisory Board. "Such agents could potentially be combined with current standard of care and emerging therapies for the treatment of HCV, since viral entry is involved in both the initiation and maintenance of infection. Moreover, studying combinations of antiviral agents that work through multiple mechanisms of action can be scientifically important, as it enables us to understand the potential clinical applications from both an efficacy and safety point of view. Such combination studies are especially interesting if the compound has a novel mechanism and is highly potent, as ITX5061 is."

The Phase 2a study will enroll approximately 40 patients at three centers in Europe. Primary endpoints for the study will be efficacy as measured by reduction in viral load. Safety and pharmacokinetics will also be assessed.

About iTherX
iTherX Pharmaceuticals is a private pharmaceutical company focused on the discovery, development and commercialization of innovative products for the antiviral marketplace. Additional information on the company can be found at http://www.itherx.com.

Feb 4, 2009

Beware of Reused Syringes When You Get a Shot

http://blogs.wsj.com/health
Posted by Sarah Rubenstein

For all of the discussion of fancy new technologies that pose problems in health care, it's

sometimes the simple things that create daily trouble.

Like shots. Unsafe injection practices have contributed to outbreaks of hepatitis in the U.S. in recent years, and are a leading cause of infections in doctors' offices, outpatient clinics and long-term care facilities, Laura Landro writes this morning. Also, take a look at our posts from last year about a Nevada outbreak of hepatitis C tied to unsafe use of syringes.

Even if health-care workers replace needles each time, reusing a syringe can be enough to infect someone with HIV or hepatitis. Diseases can also be passed on if an unclean needle or syringe is used to draw more medication from a multiple-dose vial, contaminating the vial and putting subsequent patients at risk.

Another mistake is to inject a sterile needle into a patient's IV tubing to flush it with saline solution, then to reuse the needle for another patient, figuring it only came into contact with the sterile solution. But it might have become contaminated with microscopic amounts of disease.

To combat these kinds of mistakes, the CDC and some private medical groups plan next week to start an educational campaign with the slogan, "One Needle, One Syringe, Only One Time."

Prevention Bonus: To learn more, check out this nonprofit educational group, Hepatitis Outbreaks National Organization for Reform or HONOReform, which was started with funds from a malpractice settlement over a reused contaminated syringe. The WSJ article also has tips for avoiding problems, such as requesting single-dose vials of medicine and using clinics affiliated with major hospitals, which are likely to better train workers.

Grant funds liver cancer research

http://www.press-citizen.com

A University of Iowa assistant research scientist in internal medicine is leading a study funded by a $30,000 American Cancer Society seed grant through Holden Comprehensive Cancer Center at UI.

Dr. Zhaowen Zhu's team will study whether and how three hepatitis C proteins increase the activity of telomerase as a possible explanation for how hepatitis C causes cancer. Hepatitis C affects about four million Americans and causes liver cirrhosis. In some patients with this type of cirrhosis, liver cancer may develop, but how this happens is not clear.

Telomerase is an enzyme that promotes the longevity of most cells, including liver cells, and has been associated with the development of cancer.

All on alert for signs of hepatitis B, C dangerous, though no local outbreaks so far

http://www.pressrepublican.com
Jeff Meyers
Staff Writer

PLATTSBURGH — The region's hospitals are taking any concerns over the spread of hepatitis B and C seriously.

New York State Commissioner of Health Richard F. Daines recently forwarded a request to health-care providers that they follow proper infection-control techniques to minimize the potential spread of infectious diseases, such as hepatitis B and C.

"Several investigations conducted by the New York State Department of Health and local departments of health have identified patient-to-patient transmission of hepatitis B and C associated with unsafe injection practices," Daines said in his signed letter to providers.

No Local Outbreaks

None of those outbreaks took place in the tri-county region, though Daines stressed that the state's entire health-care system needs to stay alert to reduce and eliminate accidental exposure.

"It's typically in some of the larger urban areas, where things are sometimes a little relaxed on techniques," said Nancy Smith, coordinator of health services for the Clinton County Health Department, who noted that virus transmission is usually found in the community, not health-care settings.

Hepatitis

Hepatitis B and C are blood-borne infections that can be transmitted from person to person, typically through contaminated needles.

Hepatitis A is a food-borne infection and is not of serious concern in health-care settings.

"Hepatitis C is not all that easy to transmit, but hepatitis B is much more efficiently transmitted," said Dr. Wouter Rietsema, an infection-control specialist and medical director for CVPH Medical Center in Plattsburgh.

"Hep B was the scourge of dialysis settings in the late 1980s in the absence of well-defined prevention measures," he added. "Now, it is less an issue in dialysis units but remains a global health-care issue."

Both hepatitis B and C are chronic infections that often remain with a person for life and can cause serious liver damage over extended periods of time. People infected with either virus will often not know they are carriers and can spread the disease.

That makes it even more important for health-care settings to play a major role in protecting both patients and providers.

Treat as if Infected

Nietta Rogers, infection-control coordinator at CVPH, said the hospital adheres to Centers for Disease and Control and Occupational Safety and Health Administration recommendations related to hepatitis B and C.

"We emphasize education and require personal protective equipment, such as gowns and gloves for each employee working with patients," she said.

"All health-care workers have to treat everyone as if they were infected with hepatitis," Rietsema said. "Anytime there is potential contact with someone (such as with blood draws), we need to take all precautions."

Most of the concerns Daines focused on occurred in free-standing clinics, such as private dialysis units or ambulatory care centers. Most of those services in the North Country are connected to hospitals, which Rietsema said was an advantage for the community.

"In non-hospital settings, there are fewer regulations, fewer inspections and less monitoring. We have well-established infection-control procedures in place to protect both patients and staff."

Multi-Use Vials
A major culprit for patient transmission has been the use of contaminated multi-use vials, a system where a provider will draw several doses from the same batch of medicine.

"To ensure that doesn't happen here, we've been making every effort to get rid of multi-use vials," said Tom Gosrich from the hospital's pharmacy.

He said some medications come in multi-use vials, but those are only used for individual patients.

"We've tried to develop our systems and practices to ensure everyone is protected. We have a very controlled environment and very strict measures that we adhere to."

Local Standards
Other hospitals in the region have to follow the same protocols.

"Standard precautions are used at all times with all patients to protect against blood-borne pathogen exposure," said Mim Tracy, a registered nurse and infection-control expert for Adirondack Medical Center in Saranac Lake.

"Upon hire, staff are offered the hepatitis B vaccine if they haven't had it before to further protect them."

The hospital uses safety devices to prevent accidents from needle sticks, she added.

"We work to support a culture of safety."

The public can also play a role in preventing any spread of the virus by getting vaccinated against hepatitis B.

No vaccine for hepatitis C exists at this time.

"It's important that everyone do what they can, not just the medical establishment," Smith said.

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Forum addresses sex and hep C

http://www.ebar.com
Liz Highleyman
liz@black-rose.com

No one was more surprised than Tom Kelly when he was diagnosed – not once but twice – with hepatitis C.

"I thought I was safe," he said at a recent community forum on sex and hep C. "I didn't do IV drugs and I thought I couldn't get it, but I got it anyway."

Organized by an informal group of community members with the assistance of the San Francisco Department of Public Health, the January 27 forum at the LGBT Community Center brought out nearly 150 participants, underlining the growing concern about an emerging new epidemic.

A growing epidemic

Kelly is among a growing number of people – mostly HIV-positive gay men – who appear to have contracted hepatitis C virus (HCV) through sex.

"It's a lot like deja vu all over again," said Dr. Michael Allerton of Kaiser Permanente, "but the big difference is that we have a test and treatment for HCV," unlike the early years of HIV.

About 3.2 million people in the U.S. have chronic hepatitis C, compared to about 1.1 million with HIV. Over time chronic HCV infection can cause liver cirrhosis or cancer, but it often remains asymptomatic for years, and many people do not realize they are infected.

Historically, most hep C cases have been linked to blood transfusions, accidental exposure in health care settings, and sharing needles and other injection drug equipment. Thanks to greater awareness and precautions, the overall number of new HCV infections has fallen dramatically – to about 19,000 cases annually, compared to more than 50,000 for HIV – but the epidemic seems to be expanding among gay and bisexual men.

Starting in 2002, researchers began reporting unusual clusters of acute, or recently acquired, hepatitis C in HIV-positive men who have sex with men, first in London and then in other large European cities. These clusters have since grown to include several hundred men, and genetic analysis of their HCV strains has shown closely related virus among men in common sexual networks.

Dr. Brad Hare of the Positive Health Program at San Francisco General Hospital reported some of the first similar cases in the U.S., starting around 2006. Today, he said, 42 percent of HIV-positive men in his program are coinfected with HCV, with a majority reporting only sexual risk factors.

Allerton reported that 10 percent of HIV-positive patients at Kaiser also have HCV. In an informal survey, Kaiser doctors estimated that 70 percent to 100 percent of these individuals likely contracted HCV through sex, and Kaiser now considers hep C a sexually transmitted disease.

But this view is not yet widely shared. Several speakers and audience members recounted providers who refuse to authorize HCV antibody tests for people who have never injected drugs, and some were even unaware that effective treatment is available.

What's sex got to do with it?

Traditionally – and this is still the position of the Centers for Disease Control and Prevention – experts have maintained that HCV is rarely spread through sex, a claim based on studies of monogamous HIV-negative heterosexual men and women, who have a sexual transmission rate under 5 percent.

But this low figure does not apply to other groups. Most of the recent apparently sexually transmitted cases have occurred among HIV-positive men who have sex with men, but in 2007 researchers in Brighton, U.K., reported a handful of cases among HIV-negative gay men screened at a sexually transmitted disease clinic.

HIV-positive people taking antiretroviral therapy receive regular medical monitoring that can reveal HCV-related liver inflammation at the earliest stages of infection in people with no symptoms. Since HIV-negative people usually don't get regular HCV tests, their rate of acute infection is unknown. Magnet director Steve Gibson said his agency will be teaming up with the DPH to test all HIV-negative clients for HCV.

"I think if we start looking for it, we're going to start finding it," Allerton predicted.

Epidemiological studies of European and American acute hepatitis C clusters have found an association with sex practices including so-called rough sex, fisting, rimming, unprotected anal intercourse, group sex, and sharing sex toys, as well as nasal use of recreational drugs.

HCV is harder to kill than HIV, and can live longer in blood outside the body. Microscopic amounts of blood on surfaces and equipment – including whips, canes, urethral sounds, and needles for play piercing – can potentially spread the virus.

"BDSM involves a lot of potential for blood exposure," said Larry Shockey, who hosts the Hell Hole fisting parties. But if you're not into that, don't assume the warning doesn't apply to you. "Say you consider yourself completely vanilla, but you like shaving scenes. You can get blood on your sheets from a cut. Or if you bite somebody's nipple and it bleeds, and your lips are chafed."

At his events, Shockey strongly encourages gloves for fisting and uses a strong quaternary disinfectant on all play equipment before and after each use.

"I sound like Nancy Reagan, but if someone wants to do something with you that involves [unprotected] blood contact, just say no," said Kelly, after describing his struggles with the notoriously difficult side effects of pegylated interferon and ribavirin hep C treatment. "If I'd have known I could have worn a glove to avoid this, it would have been so worth it!"

Time to get active

Forum participants also raised the issue of hepatitis C advocacy and activism.

"Within the HIV community, we've built a great system of care through advocacy, but that's not the case if you have any other disease," said Ryan Clary of Project Inform. "If you have HCV but are not [HIV] coinfected and are uninsured, you may not be able to access care."

Project Inform is expanding its hepatitis C work at the national, state, and local levels. Nationally, the Hepatitis C Advocates United network is campaigning for increased funding and a comprehensive federal hepatitis C research and prevention program. Locally, District 8 Supervisor Bevan Dufty has called for a Board of Supervisors hearing on the issue.

"We need a sex positive movement. We don't want to follow the HIV example, saying have fewer sex partners, stay home, and jack off," Shockey concluded. "If you're sexually active, get tested for HCV. We need the public health community to help us with testing and treatment so we can protect each other."

Feb 5, 2009

Staff shortages impact on liver patients' care

http://www.onmedica.com
OnMedica Staff

A survey of gastroenterologists has revealed shortages of clinicians and variable management of people with liver diseases in district general hospitals (DGHs).

61 consultant gastroenterologists replied to the Royal College of Physicians questionnaire - a response rate of 53% from all the 116 DGHs in the UK.

With only six transplant and 28 non-transplant liver centres in England, most liver medicine is carried out in these hospitals but little is known about their capacity to cope as demand increases due to the rise in numbers of liver disease patients.

88% of consultants said they felt that their workload due to liver disease was increasing with an inadequate numbers of consultant colleagues and limited availability of nurse specialists, hepatobiliary pathologists and radiologists.

There is also patchy access to facilities such as laboratory tests and interventional radiology, they said.

Conditions such as hepatitis C, variceal bleeding and hepatorenal syndrome are not managed consistently and liver databases and outcomes are rarely kept, the respondents reported.

Although a National Plan for Liver Services was developed in 2004, 66% didn't know about it and most were unaware of how it would affect their practice, the authors from Derby City General Hospital found.

Commenting on their findings lead author Dr Michael Williams said: "The British Society of Gastroenterologists recently calculated the workload for an average DGH and estimated a need for six full-time consultant gastroenterologists. Current levels are only half of this and this will restrict opportunities for consultants to subspecialise as hepatologists."

They have called for implementation of the National Plan for Liver Services and for managed clinical networks in hepatology to be set up.

The article is published in *Clinical Medicine* journal.

Army: Insulin error put 2,100 patients at risk

http://www.katc.com

EL PASO, Texas -- More than 2,100 diabetic patients treated at William Beaumont Army Medical Center could be at risk for hepatitis or HIV because of potentially flawed insulin injections, Army officials said Thursday.

Last week's discovery that injection pens might have been used on multiple diabetics led to an Army-wide review and the El Paso medical center contacting patients who may be infected, William Beaumont spokesman Clarence Davis III said.

The warning covers WBMAC patients who received insulin injections between August 2007 and January 2009. The mistake was uncovered Jan. 30 following 18 months of potentially incorrect use.

None of the 2,114 patients identified had been screened for blood-borne diseases by late Thursday. WBMAC said the staff believes the risk of infection is low.

"There is an ongoing investigation," Davis said.

WBMAC said each needle used was new and sterilized. But the pen portion of the multi-dose injectors, which are designed for repeated use on a single patient, may have instead been used on more than one person.

Following the discovery at WBMAC, an Army-wide review found the same pen model was used in nine facilities. Officials said it may have also been used incorrectly at Fort Polk's Bayne-Jones Army Community Hospital in Louisiana, where 15 or fewer diabetic patients were potentially affected. All have been contacted, Fort Polk spokeswoman Kathy Port said.

The review found the other facilities used the pen correctly.

WBMAC provides medical care for soldiers, retirees and their families.

Poor people suffer disproportionately from chronic infections

http://www.physorg.com

(PhysOrg.com) -- Kids from low-income families are much more likely to suffer from serious infections such as herpes or hepatitis A than their counterparts in wealthier households.

Two recent University of Michigan studies show a startlingly strong correlation between income and chronic infection in both adults and children, with lower income populations suffering much

HCV ADVOCATE
www.hcvadvocate.org

higher rates of chronic infections and clusters of infections than higher income families.

"There is a large body of research showing that people of lower socioeconomic status are at greater risk for numerous chronic diseases," said Allison Aiello, senior author on the studies and an assistant professor of epidemiology at the U-M School of Public Health. "In this study, we found that lower income populations are also more likely to be exposed to a cluster of persistent infections."

For example, in the context of six infections measured, results showed that while the higher income populations might have been exposed to one or two of these common infections, lower income populations in the same age range may have been exposed to as many as four or five. This is concerning since most of these persistent infections are carried throughout life and have been implicated in several chronic diseases, Aiello said.

For instance, researchers looked at H. Pylori, a bacterium that causes peptic ulcer disease; hepatitis A and B, which can cause liver disease; and herpes simplex 1 and cytomegalovirus (CMV), both implicated in cardiovascular disease, Alzheimer's disease and other ailments.

Similarly, there is a large difference in the prevalence of infection among people who hold only a high school diploma when compared to those who have a four-year college degree, Aiello said.

For instance, in the adults study, results showed:

- Individuals without a high school education had roughly 50 percent higher odds of having an additional infection compared to those with a degree.
- Those with a postsecondary education had 50 percent lower odds.
- Low income was associated with 33 percent higher odds of additional infection.
- High income was associated with 45 percent lower odds compared to the middle income group.

The paper examining children showed similar startling results:

- Non-Hispanic black children are over twice as likely to be infected with H Pylori, and 1.4 times as likely to be infected with HSV-1 compared to white children.
- Each additional year of parental education is associated with roughly 8 percent lower odds of a child being infected with H Pylori, and roughly 11 percent lower odds of HSV-1.
- As family income doubles, a child's odds of having CMV decline by 21 percent; HSV-1 by 32 percent; and Hepatitis A by 29 percent.

"The primary infections and their long-term effects are both a concern," said Jennifer Dowd, principal investigator on the child paper and co-author on the adult paper. Dowd completed the research as a U-M Robert Wood Johnson Foundation Health & Society Scholar in SPH epidemiology. Dowd is now an assistant professor of epidemiology and biostatistics at Hunter College, City University of New York, and the CUNY Institute for Demographic Research. The lead author on the adult paper is Anna Zajacova, research fellow at the Population Studies Center, U-M Institute for Social Research. She also collaborated on the child study.

The youth paper looked at children 6 and older and the association of infections with height-for-age and socioeconomic status with asthma or other chronic respiratory conditions. The adult paper looked at people ages 17-90 and the types, prevalence and clustering of infections in lower

versus higher socioeconomic groups.

The studies are unique because they used data from Third National Health and Nutrition Examination Survey, a national study that is representative of the general U.S. population. The next step is more research on exactly what factors, such as exposure to chronic stressors and poor nutrition, lead to these disparities, Aiello said.

Feb 6, 2009

Hepatitis C is killing liver cells

http://www.eurekalert.org

It has long been thought that liver disease in hepatitis C patients is caused by the patient's immune system attacking the infected liver, ultimately killing the cells. University of Alberta researchers have discovered something different though.

Michael Joyce and his team transplanted human liver cells into mice, which lack an adaptive immune system. The researchers then infected the liver cells with the hepatitis C virus. The researchers found that the virus itself damages liver cells and leads to liver cell death. They also found hepatitis C causes inflammation, which is the second step in liver disease.

Joyce's finding sheds new light on the virus and gives researchers more targets for therapy.

His study is published in the February edition of *PLoS Pathogens*.

State continues hepatitis B vaccine program

http://newsminer.com
ASSOCIATED PRESS

ANCHORAGE, Alaska (AP) - The state's Health Department will continue offering free hepatitis B shots to high-risk adults.

The program is funded with a federal grant and covers the costs for a three-shot series. The department says it expects vaccines to be available into next year.

Ginger Provo, the state's adult hepatitis program coordinator, says vaccine coverage among high-risk adults remains low.

The state defines high risk as those who have been diagnosed with a sexually transmitted disease, those with multiple sex partners, men who have sex with men, those with HIV and people who inject street drugs.