

HEPATITIS HEALTH

Liver Disease Plagues Obese Adolescents

By Linda A. Johnson, Associated Press

In a new and disturbing twist on the obesity epidemic, some overweight teenagers have severe liver damage caused by too much body fat, and a handful have needed liver transplants.

Many more may need a new liver by their 30s or 40s, say experts warning that pediatricians need to be more vigilant. The condition, which can lead to cirrhosis and liver failure or liver cancer, is present in kids in the United States, Europe, Australia, and even some developing countries, according to a surge of recent medical studies and doctors interviewed by the Associated Press.

The American Liver Foundation and other experts estimate 2 percent to 5 percent of American children over age 5, nearly all of them obese or overweight, have the condition, called nonalcoholic fatty liver disease.



"It's clearly the most common cause of liver disease," said Dr. Ronald Sokol, a liver specialist at Children's Hospital and University of Colorado Denver.

Some experts think as many as 10 percent of all children and half of those who are obese may suffer from it, but note that few are given the simple blood test that can signal its presence. A biopsy is the only sure way to diagnose this disease.

As fat builds up, the liver can become inflamed and then scarred over time, leading to cirrhosis, a serious condition, which in years past was mostly caused by hepatitis or drinking too much alcohol. Liver failure or liver cancer can follow, but if cirrhosis has not yet developed, fatty liver disease can be reversed through weight loss.

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Name that Tune!

"I'm under your spell like a man in a trance,

But, I know darn well, that I don't stand a chance."

Answer: Page 9

Sex and Liver Disease

By Melissa Palmer, MD

Most people with chronic liver disease have normal sexual function and normal interest in sex. However, some people do complain of decreased libido, decreased ability to achieve and maintain an erection (a condition known as erectile dysfunction), and decreased satisfaction with sex.

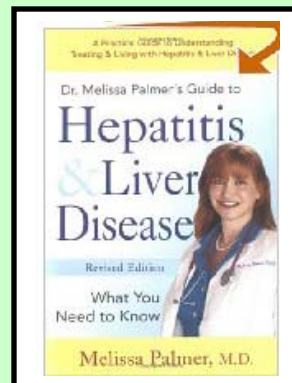
Decreased sexual interest and erectile dysfunction occur in approximately 2 percent of healthy, middle-aged males without liver disease. This is about the same incidence noted in males in the early stages of liver disease. Men with advanced liver disease, however, are more likely to experience testicular dysfunction, decreased sexual desire, and erectile dysfunction. These characteristics are due to the changes in hormone levels that can occur in such men with advanced liver disease. The male hormone, testosterone, is typically low and the female hormone, estrogen, is typically high in such men. These findings are particularly applicable to men with alcoholic liver disease, as alcohol abuse (even in the absence of liver disease) may cause decreased testosterone levels, and thereby lead to sexual dysfunction.

Women with liver disease appear to have normal sexual function, with the exception of women whose liver disease is due to excessive alcohol consumption. Women who have undergone a liver transplant generally experience renewed sexual interest, body image, and sexual intimacy.

Any chronic illness may be associated with sexual dysfunction. This is particularly true for liver disease, since it is so often associated with fatigue and depression, either of which can contribute to a decreased interest in sex. In addition, medications used in the treatment of liver disease (particularly interferon) may cause sexual dysfunction and decreased libido, especially in men.

Women on interferon and ribavirin therapy for chronic hepatitis C often experience vaginal dryness. This may cause pain upon intercourse, vaginal irritation, and vaginal burning and itching, any or all of which decrease sexual interest. Vaginal discomfort may become particularly severe if a condition known as atrophic vaginitis—a condition of decreased estrogen in the body common in postmenopausal women—is present. Women should be aware of this potential side effect, and should use a vaginal moisturizing cream. A topical estrogen and progesterone cream may be needed to improve or alleviate these symptoms. However, oral estrogen supplements should generally be avoided, as they carry a risk of causing or worsening jaundice and cholestasis. And "natural" soy estrogen, which has been linked to causing hepatitis, should be avoided.

Note: Melissa Palmer, MD is the author of *Dr. Melissa Palmer's Guide to Hepatitis and Liver Disease* (Published 2004 Penguin Putnam)



Hepatitis E Surveillance Update

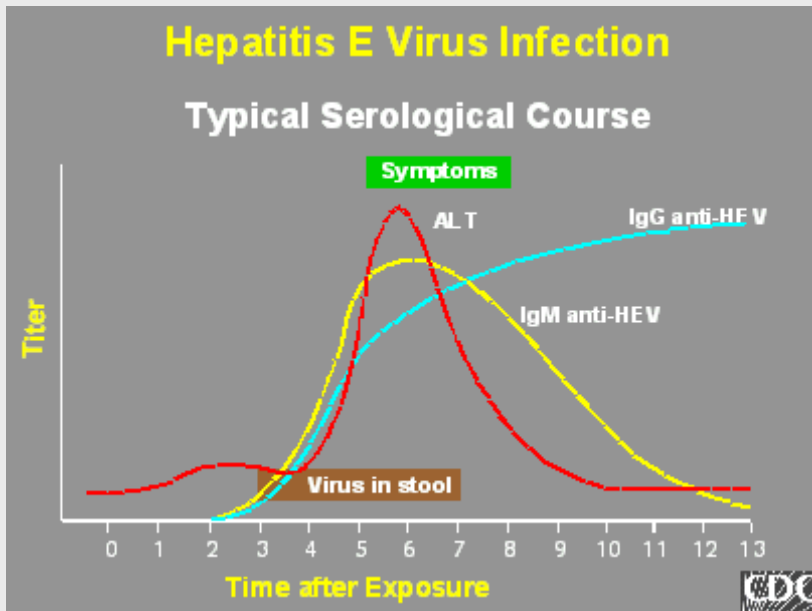
Robyn S. Kay, M.P.H.

The Florida Department of Health Bureau of Epidemiology recently published the surveillance case definition for hepatitis E virus (HEV), which includes clinical and laboratory criteria. Recently, county health departments have investigated several people with positive serologic tests for HEV (i.e., IgM anti-HEV or total ANTI-HEV) whose illnesses were not consistent with the clinical criteria of the hepatitis E case definition.

Testing of people with no clinical symptoms of acute viral hepatitis or known risk factors for HEV infection lowers the predictive value of hepatitis E tests. To improve the predictive value of a positive hepatitis E test, testing should be limited to people testing negative for Hepatitis A, B, and C who have clinical findings typical of acute hepatitis, or to people with a compatible illness who have been exposed to settings where HEV transmission is suspected (i.e., recognized outbreaks or travel outside the US).

Many commercial or private laboratories offer HEV testing, but no confirmatory testing is available by the Florida Bureau of Laboratories. Therefore, it is important to review the serology of HEV to understand the meaning of these tests. The IgM anti-HEV and the IgG anti-HEV are both elevated when an individual has acute HEV infection (Figure 1). The IgM anti-HEV will decline following acute infection.

If your county health department receives a positive laboratory report that meets clinical and laboratory criteria for HEV, or you have questions about positive tests results, please contact your regional epidemiologist. Information on the case will be reviewed and the regional epidemiologist will work with you to determine if it is necessary to send specimens to the Centers for Disease Control and Prevention (CDC) for confirmatory serologic testing and molecular viral characterization.
Figure 1. Serological Course of Hepatitis E Virus Infection



Slide courtesy of the CDC. Time is in weeks.



Robyn S. Kay

Robyn S. Kay is a regional epidemiologist with the Florida Department of Health.

OraQuick(R) HCV Test is Preferred Over Other Rapid Tests

An evaluation by the Walter Reed Army Institute of Research on the OraQuick(R) hepatitis C virus (HCV) Test, currently in clinical development by OraSure Technologies, was recently released at the Advanced Technology Applications for Combat Casualty Care meeting, sponsored by the Department of Defense. The purpose of the evaluation, entitled "Laboratory Evaluation of Hepatitis C Rapid Test for Use in Screening Walking Blood Bank Donors," was to determine the best rapid HCV test to use for screening blood donors for hepatitis C in the theater of war. The OraQuick(R) HCV test was selected as the preferred test based on all facets of the evaluation.



Blood that is donated to commercial or hospital blood banks is subjected to extensive testing for blood-borne pathogens before it is released to be used in transfusions. However, emergency battlefield conditions sometimes dictate that an available soldier, or Walking Blood Bank, donate without these lab tests. A rapid assay such as the OraQuick(R) HCV test can add an important measure of safety against this blood borne virus.

Five rapid tests were initially selected from the rapid HCV tests available worldwide, based on an evaluation of published claims and sensitivity testing using HCV positive samples. The tests were then compared in a comprehensive evaluation of test performance using plasma and blood specimens. The study indicated that the OraQuick(R) HCV test had the highest sensitivity (99.4%) and the highest specificity (99.7%) among the tests evaluated. In addition, the evaluation indicated that the OraQuick(R) HCV test detected HCV antibodies approximately three days sooner than available laboratory-based enzyme immunoassays and approximately 16 days earlier than the next most sensitive rapid HCV test. Early detection of seroconversion is an important measure of the sensitivity of a test and means that hepatitis C infection can be identified even with relatively recent exposure.

Hepatitis B Nasal Vaccine

From http://www.nanobio.com/Hepatitis_B.html

A new study has shown that a nasal hepatitis B vaccine elicits a dramatic immune response in animals without requiring three vaccinations, sterile syringes, or refrigeration—three factors that impede the delivery of current hepatitis B vaccines.

In the study, a single dose of the nasal vaccine triggered a protective response in animals roughly 450 times greater than that elicited by currently approved human vaccines. The animal studies demonstrate a magnitude of immunity that has not been seen in advanced preclinical testing of other nasal vaccines, according to the scientists at the University of Michigan and NanoBio Corp.

Moreover, the mucosal vaccine produced three distinct types of immunity—mucosal, cellular, and systemic—that enabled a rapid immune response that could kill virus-infected cells and prevent future infections. Traditional injected vaccines do not elicit mucosal or cellular immunity.

“The study, reported in the online August 13 issue of the journal PLoS One (Public Library of Science), has critical implications for developing countries where hepatitis B presents a serious health threat,” said James R. Baker Jr., M.D., lead author on the paper and a founder of NanoBio Corporation.



Infectious Disease in Correctional Facilities Summit

**December 3-5, 2008
Florida Hotel and Conference Center
1500 Sand Lake Road
Orlando, Florida 32809
Direct: (407) 859-1500
Reservations: (800) 588-4656**

The Florida Department of Health, Department of Corrections, Department of Juvenile Justice, Florida Sheriff's Association, and The AIDS Institute are hosting their first Infectious Disease in Correctional Facilities Summit.

Rates for sexually transmitted diseases, hepatitis C, and HIV/AIDS cases are two to three times greater in prisons and jails than in the general population. This summit will highlight a variety of best practices including those for inmate healthcare and infectious disease control from around the state.

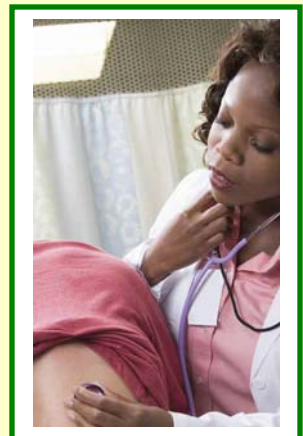
To view summit information, please visit:

http://www.doh.state.fl.us/disease_ctrl/aids/Prevention/Corrections/IDCFS_Summit.pdf

To register for this summit, please visit:

http://www.doh.state.fl.us/disease_ctrl/aids/corrections/IDCFS.html

Registrations must be received by November 19, 2008.



Evaluation Tips By Phil Reichert

At the Florida Public Health Association meeting in July, Mary Davis, who holds a doctorate in public health, presented on the myths, pitfalls and tricks of evaluating programs. She is the Director of Evaluation Services at the North Carolina Institute for Public Health at the University of North Carolina.



Mary Davis

According to Davis, some of the myths of conducting evaluation are: 1) people often believe evaluation is difficult, complex, and expensive, 2) evaluation requires producing a long report of findings, 3) nothing ever happens with the evaluation results, 4) evaluation starts after the program has ended, 5) evaluators are the only ones who know the right questions to ask, and 6) evaluation should only happen because the funder requires it.

Some of the pitfalls, or difficulties, of the evaluation process include: collecting data that will never be used (why would anyone do this?), conducting evaluation without involving the stakeholders (the people who run the program need to be involved in the evaluation process from the beginning), assuming that evaluation does not evolve over time (if something is not working, change it), collecting data without knowing how it will be analyzed and reported (this must be worked out ahead of time—during the planning process), and using evaluation to report only positive findings (programs and organizations often use evaluation as a public relations tool or to promote a product or service).

Dr. Davis offered these suggestions for evaluators, calling them “tricks of the trade.” Identify and engage stakeholders and find out what they want to know. Evaluation should always be part of the planning process before a program is implemented. Focus on the design by creating specific evaluation questions, identifying appropriate data collection methods, and pilot-testing collection instruments (surveys, focus groups, key-informant interviews, etc.). Gather credible evidence by providing incentives and collecting the only the data that will be used. Justify conclusions by sharing data with the stakeholders. Ensure that the results of the evaluation efforts get used. And, according to Davis, make sure to frame results to “point the way forward.”



Reports on evaluations should be concise and understandable, and even creative. Evaluation results should always be written and shared with the individuals doing the program that is being evaluated.

-September 12, 2008

Guess who has their arm around Phil Reichert? Find the answer on page 10.

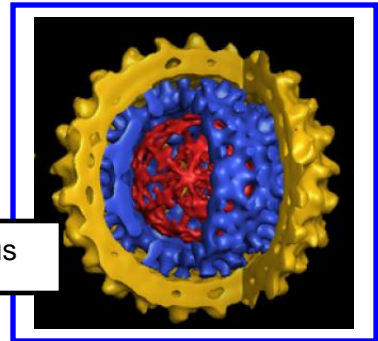


FDA Approves DNA Test to Measure Hepatitis B Virus Levels

On September 4, 2008 the US Food and Drug Administration (FDA) approved the first nucleic acid test for the hepatitis B virus (HBV) that measures the amount of viral DNA (viral load) in a patient's blood. Assessing a patient's viral load provides healthcare professionals with a highly sensitive method for gauging the progress of antiviral therapy in patients with chronic HBV infections.

The COBAS TaqMan HBV Test extracts and then amplifies sections of viral DNA from human plasma or serum. The viral DNA sections are measured to establish a baseline level before beginning treatment, and then used again during treatment to assess an individual's response to therapy. (The baseline level of hepatitis B virus should decrease with successful treatment.) The test is used with other clinical findings, such as results from biochemical and serological testing.

"Measuring a patient's HBV viral load is an important aspect of managing chronic hepatitis B infections," said Daniel G. Schultz, M.D., director of FDA's Center for Devices and Radiological Health. "The COBAS TaqMan test gives healthcare providers a new and sensitive tool for this process."



The Hepatitis B virus

Florida Viral Hepatitis Council Update

The Florida Viral Hepatitis Council met in Tampa on August 26 and 27 to put the finishing touches on four major position papers that are about to be released statewide.

Deborah A. Orr was named Community Co-Chair. Dr. Orr has a Ph.D and M.A. in clinical psychology and a B.S. in nursing. She is currently the Vice President of Clinical Research at the Center for Drug Free Living in Orlando.

Philip E. Reichert, M.P.H., not only became a member of the Council, but was also elected as the Public Health Co-Chair. Phil is the Program Administrator for the Hepatitis Prevention Program, and a contributing editor and author for *Hepatitis Health* newsletter.

Lorene Maddox from the Bureau of HIV/AIDS Surveillance Section gave an excellent presentation on HIV-HCV Co-Infection in Florida by area, sex, and mode of exposure. Other presenters included **Dante Ross** from the Pinellas County Health Department and **Michelle Scavnicky** from The AIDS Institute.

To see a photo from the August Council meeting, please go to page 10.



Mother and Daughter "SISTA" Dinner

On Saturday, Sept 13, Hope and Help Center of Central Florida, Inc., in Sanford, held their First Mother and Daughter "SISTA" Dinner.

Enid & Melanie



Enid Santiago-Cruz, with the Seminole County Health Department (along with her daughter, Melanie), set up a display and handed out loads of information on viral hepatitis. Enid also gave a 15-minute presentation on hepatitis A, B, and C during this event.

The Hope and Help Center provides assistance with programs such as Case Management, Peer Support Services, Food Pantry, and much more.

Sisters Informing Sisters on Topics about AIDS (SISTA) was developed by African American women for African American women in response to increasing rates of HIV in this group. This program includes discussions and role playing scenarios, as well as the use of artwork and poetry to educate women, increase self esteem, and give them the tools for maintaining their sexual health.



Enid at the display



L to R: Anita Thomas, Health Educator of Hope and Help, Regina S. Miller, Executive Director of International Black Women's Congress, Enid Santiago-Cruz, and Alyssa Brown, Project Manager of Hope and Help.



Answer to Music Trivia from Page 1: “Unchain My Heart” by Ray Charles

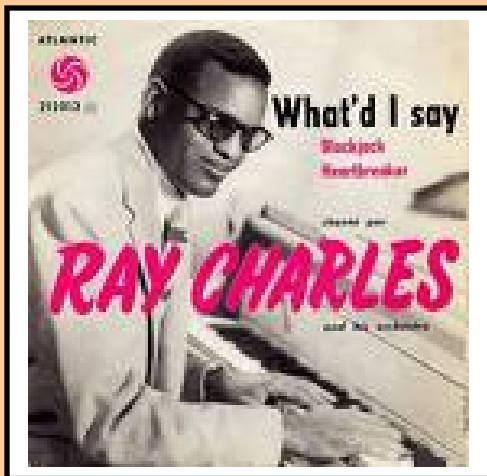
From blues to jazz, through rock 'n' roll and gospel, Ray Charles was a master of many styles. His intense renditions of classic songs earned him the nickname The Genius. Charles' struggle with drug and alcohol addiction eventually lead to alcoholic liver disease and **hepatitis C**.

He was born Ray Charles Robinson in Albany, Georgia, in 1930 and shortened his name to avoid being confused with the boxer, Sugar Ray Robinson.

He was already learning to play the piano at the age of six, when he was struck by blindness.

Ray Charles was sent to a school for the blind in St. Augustine, Florida, joined local bands as a teenager, and formed his own group in the early 1950s, singing and playing the piano and alto saxophone.

At that time his hero was Nat King Cole, who made an early impression on his style. Charles had taught himself to compose and arrange music in Braille, and his early efforts, heavily influenced by gospel music, were rhythm and blues songs.



His first success was his own composition “Hallelujah! I Love Her So,” recorded in 1956. Three years later came his biggest hit, the atmospheric Hoagy Carmichael classic, “Georgia on My Mind.”

Ray Charles' distinctive, emotionally-charged style made him one of the most influential musicians of his time. Stars from the Beatles to Van Morrison cited as an inspiration the remarkable man who, almost single-handedly, created a whole new musical form: gospel blues.

On June 10th, 2004, the leader of a great expedition through the pages of American music history made his final journey.

<http://news.bbc.co.uk/1/hi/entertainment/music/3605789.stm>

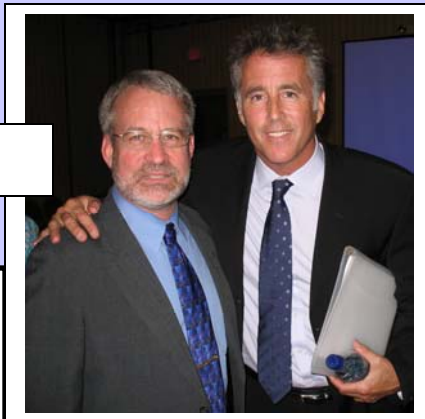




Florida Viral Hepatitis Council members and guests at the August meeting in Tampa

From Page 6: That's **Christopher Kennedy Lawford** with his arm around Phil Reichert. Lawford is the son of the late actor Peter Lawford and nephew of President John F. Kennedy. Diagnosed with hepatitis C in 2001, Lawford is an advocate for disease awareness and is dedicated to sharing his experience with hepatitis C with others to help increase diagnosis and treatment of the disease.

Reichert & Lawford



If we couldn't laugh, we would all go insane.
-Jimmy Buffett



NOTE FROM THE EDITOR

Hepatitis Health is brought to you by the Hepatitis Prevention Program, Bureau of HIV/AIDS in the Division of Disease Control at the Florida Department of Health. We want to know what you are doing in your community to prevent viral hepatitis. Please submit your articles and photos to: April.Crowley@doh.state.fl.us