New Cures for Chronic Hepatitis C

This often-silent virus that can ruin your liver can now be stopped.

According to the Centers for Disease Control and Prevention, more than 75 percent of the people who have chronic hepatitis C (HCV) are of the baby boomer generation (born between 1945-1965). Most people with HCV feel fine, even though the virus may be slowly damaging the liver.

“Many believe they cannot have hepatitis C if they don’t have symptoms, or signs of liver problems,” says hepatologist Sammy Saab, MD, MPH, UCLA Division of Digestive Diseases. “And most are unaware of the common risk factors.”

The National Institute of Allergies and Infectious Diseases estimates that 4 million people in the U.S. are HCV-positive, and most don’t know it. HCV infection is a leading cause of complications from chronic liver disease in the United States. It is the most common cause of cirrhosis, the biggest risk factor for liver cancer, and the most common indication for liver transplantation. Nationally, hepatitis C-related end-stage liver disease accounts for more than 30 percent of liver transplants. Screenings and new treatments, however, can cure HCV and prevent liver failure, if it’s caught in time.

Why Screening Is Crucial

“Early treatment prevents liver disease, cirrhosis and liver cancer,” says Jeffrey Klausner, MD, MPH, UCLA Division of Infectious Diseases.

Under the joint leadership of the Division of Digestive Diseases and the Division of Infectious Diseases, UCLA Health embarked on a major initiative to screen baby boomers for HCV. The initiative began with the education of UCLA Health’s primary-care leaders on the importance of hepatitis C screening. A reminder about screenings was introduced into UCLA’s electronic health record to alert primary-care physicians about patients born between 1945 and 1965, who have not yet been screened.

“The initiative has resulted in a more than three-fold increase in the number of persons tested,” says Dr. Klausner. “Through increased screening we have found more cases of chronic infection. More than 90 percent of those treated will be cured.”

A similar initiative is underway at the University of Michigan Health System (UMHS) where electronic medical record alerts also remind primary care physicians to include HCV screenings as part of routine exams. Of the 16,773 baby boomers targeted for screening via electronic alert at UMHS, fewer than 1 percent tested positive for the hepatitis C antibody.

Despite that low rate, the alert system nonetheless helped identify people who would benefit from curative hepatitis C treatment, according to University of Michigan hepatologist Monica Konerman, MD, who presented the findings in May 2016 at the Digestive Disease Week conference in San Diego.

What Blood Tests Reveal

Several different blood tests are used to test for hepatitis C. The first looks for antibodies to the disease. Antibodies arise in the presence of a disease. But having an

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Poor Sleep Compromises Immune System, Quadruples Risk of Getting Sick

New findings add to the growing body of evidence that poor sleep is linked to increased susceptibility to catching a cold. The aim of the study, led by a UC San Francisco sleep researcher, was to determine whether sleep, measured behaviorally using wrist device called an actigraph, predicted cold incidence following experimental viral exposure. Prior research relied on sleep diaries kept by study participants, which are subject to recall bias, according to the researchers. An actigraph automatically monitors and logs sleep. Study recruits included 164 volunteers that underwent two months of health screenings to establish baselines for factors such as stress, temperament, alcohol and cigarette use. The researchers also measured participants’ normal sleep habits. Volunteers were then sequestered, administered the cold virus via nasal drops, and monitored for a week. Daily mucus samples were collected to see if the virus had taken hold. Subjects who had slept less than six hours a night the week before receiving the nasal drops were four times more likely to catch a cold, compared to those who got more than seven hours of sleep. This association was independent of season of the year, body mass index, psychological variables, and health practices. Sleep fragmentation (episodes of waking that disrupt sleep) was also unrelated to cold susceptibility. The study was published in the October 2015 edition of the journal Sleep.

Big Data Uncovers Earliest Signs of Late-Onset Alzheimer’s Disease

Researchers at the Montreal Neurological Institute and Hospital have used a powerful computational tool to better understand the progression of late-onset Alzheimer’s disease (LOAD), and to identify its first physiological signs. LOAD is the most common cause of human dementia. There is no single cause, and the current understanding is that it results from multiple coexisting factors. Which comes first? And which factors are most responsible for disease development? According to the researchers, understanding the sequence of events is important in developing treatments. In attempt to figure this out, researchers analyzed more than 7,700 brain images from 1,171 diseased and healthy subjects. Patient data for the study came from the Alzheimer’s Disease Neuroimaging Initiative (ADNI), a partnership of more than 30 institutions across Canada and the United States. Compiling and analyzing the data took thousands of computer hours to complete, and could not have been possible without current sophisticated software and terabytes of hard drive space. Data included in the analysis came from magnetic resonance imaging (MRI), positron emission tomography (PET), blood and cerebrospinal fluid as well as the subjects’ level of cognition. Contrary to the understanding that an increase in amyloid protein is the first sign of the disease, this study suggests that a decrease in blood flow in the brain may be an earlier physiological sign of Alzheimer’s disease. The study also found that changes in cognition may begin earlier in the progression than previously believed. Although still subjected to the sensitivity of the algorithms and biomarkers used, researchers hypothesize that their results might contribute to the development of preventive therapies. The study was published in June 21, 2016 edition of the journal Nature Communications.

Parents’ Longevity Associated With Better Heart Health for Their Children

Filling out those cumbersome family history forms may hold more value than you think, according to new research funded by the UK’s Medical Research Council. The longer your parents lived, the more likely you are to stay healthy in your sixties and seventies. The researchers used data on the health of 186,000 middle-aged offspring, aged 55 to 73 years, followed for up to eight years. They found that those with longer-lived parents had lower incidence of multiple circulatory conditions including heart disease, heart failure, stroke, high blood pressure, high cholesterol levels and atrial fibrillation. For example, the risk of death from heart disease was 20 percent lower for each decade that at least one parent lived beyond the age of 70 years. Although factors such as smoking, high alcohol consumption, low physical activity and obesity were important, the lifespan of parents was still predictive of disease onset after accounting for these risks. The study was published in May 2016 edition of the Journal of the American College of Cardiology.
Getting Clear on Genetic Tests for Macular Degeneration

It’s better to look toward prevention and treatments to slow down disease progression.

Age-related macular degeneration (AMD) is the leading cause of vision loss in people over age 50. This irreversible disease damages the macula, located in the middle of the eye. It’s the area responsible for central vision, which enables us to see objects that are straight ahead. Losing the middle field of vision makes it difficult, and eventually impossible, to read, recognize faces, cook, or drive.

Losing any part of vision is, of course, very scary. That might make it especially tempting to get a genetic test for AMD to see if you are at risk. After all, healthcare providers constantly remind us that it’s better to catch problems early when treatments can be more effective. But despite the many ads that claim they can genetically detect AMD, there are currently none that predict AMD with any certainty. Therefore, the American Academy of Ophthalmology advises against genetic tests for AMD, and insurance generally won’t cover the cost.

“It’s also difficult to know what is genetic, what is age-related, and how the environment is affecting our eyes,” says ophthalmologist Gad Heilweil, MD, UCLA Doheny Eye Institute. “Many genetic factors have been discovered in last two years, and we maybe understand 50 percent about the genetic part of this disease.”

Stem Cell Studies Underway

Multiple studies using stem cells are attempting to find solutions to other forms of AMD, including geographic atrophy, for which there are currently no treatments. For example, researchers from the UCLA Jules Stein Eye Institute used specialized eye cells created from stem cells to treat severe vision loss in 18 patients with dry age-related macular degeneration and went legally blind if they got wet macular degeneration. Now, they can be treated with eye injections.

“Wet AMD (also called neovascular) is when abnormal blood cells grow beneath the macula. The vessels can leak, which damages the macula. Vision loss is typically more sudden, rapid and severe with wet AMD.

Treatment and Prevention for AMD

Studies show that taking high-dose vitamins and minerals can slow the progression of dry macular degeneration. The first AREDS (age-related eye disease studies) trial showed that combination of vitamin C, vitamin E, beta-carotene, zinc, and copper can reduce the risk of late AMD by 25 percent. A number of manufacturers offer supplements based on these studies. These are the clinically significant doses from these trials:

- 500 milligrams (mg) of vitamin C
- 400 international units of vitamin E
- 80 mg zinc as zinc oxide (25 mg in AREDS2)
- 2 mg copper as cupric oxide
- 15 mg beta-carotene, OR 10 mg lutein and 2 mg zeaxanthin

Consult with your physician before taking supplements, especially high-dosage ones. According to studies, it’s pointless to take these supplements if you don’t have AMD.

WHAT YOU SHOULD KNOW

With prompt detection of AMD, there are steps you can take to further reduce your risk of vision loss. Age is a risk factor as are:

- Smoking. Any smoking doubles the risk of AMD.
- Race. Caucasians are more at risk than African-American or Hispanics.
- Family history and genetics. People with a family history of AMD are at higher risk.
- Age. AMD typically begins after the age of 60.
At-Home Moves for Balance and Coordination

Simple and effective exercises you can do daily.

Hiking on uneven terrain, or simultaneously reaching for your car door while holding a sack of groceries on your hip, are two examples of using your body’s natural ability to balance and coordinate movements. According to physical therapist Ellen Wilson, director of therapy services, UCLA Department of Rehabilitation Services, as we age, our bodies do not function as optimally, including in the areas of balance and coordination. Loss of balance is one of the leading causes of falls in older adults, which can lead to devastating consequences including sprains, fractures, or even concussions.

But, performing balance and coordination exercises on a regular basis can significantly reduce the risk of falling, and improve overall health and well-being. “These exercises should be performed at least four times per week, if not daily,” says Wilson. “For older adults, these exercises are equally, if not more important, than other aspects of fitness, such as strength and flexibility.”

These simple exercises can help improve and regain your balance and coordination. You can do them at home or anywhere you happen to be. A few minutes each day can make a difference.

**SWISS BALL BALANCES**
- Sit on exercise ball with feet flat on the floor.
- Lift one leg up and hold balance for five seconds (start on toe tip if lifting leg is too difficult).
- Repeat with other leg.
- Do four to five on each side.
- For added challenge, stretch arms out to side in “T” position.

**SINGLE LEG BALANCES**
- Stand near chair to brace yourself lightly with fingertips, if needed.
- Lift one leg, hold for ten seconds and repeat on other side.
- Do two to three times on each leg.

**QUADRAPED BALANCES**
- Start on all fours.
- Keep head and neck in neutral position.
- Lift one arm and opposite leg.
- Hold for ten seconds then repeat on other side.
- Do two to three times on each side.
Does Winter Make You Depressed?

Talk therapy may help you overcome seasonal affective disorder.

As the season transitions from autumn to winter, the waning daylight can trigger seasonal affective disorder (SAD). It’s different than just feeling sluggish about going out because it’s cold and grey. SAD is a type of depression distinguished by its seasonality. Symptoms include sluggishness, sadness, and losing interest in previously enjoyed activities. These symptoms are not occasional, rather, they persist throughout the season.

“For most people with SAD, symptoms start in the fall and continue into the winter months, sapping your energy and making you feel moody,” explains geriatric medicine specialist Michelle Eslami, MD, UCLA Medical Center. “Less often, SAD causes depression in the spring or early summer.”

People living in the northern parts of the United States are more at risk for SAD than those living in southern states. In Florida for example, only about 1 percent of the population is likely to have SAD whereas about 10 percent of people living in Alaska or New England may be affected. Women are four times as likely to be diagnosed with SAD than men. Those who have depression or a family history of it are also more likely to suffer from SAD. While older people can have SAD, younger adults are more at risk.

What Light Has to Do With It

The lack of daylight can disrupt the body’s natural sleep/wake clock, known as the circadian rhythm. This internal rhythm is controlled by brain cells that react to light and dark. The brain cells receive signals by way of the eye’s optic nerve. When light is sensed, cells tell the internal clock it’s time to be awake. The light also triggers other parts of the brain that affect hormones and body temperature, which play a role in feeling sleepy or awake.

Light suppresses melatonin but dark signals its release. Melatonin, a hormone, naturally helps usher in sleep as night begins. Because it gets darker earlier in the winter, that may trigger people with SAD to overproduce melatonin making them sleepier sooner, and making it more difficult to wake up in the morning. Too much melatonin may be why people with SAD sleep more and lack energy.

Less sunlight can lead to lower levels of vitamin D. The vitamin is thought to play a role in serotonin activity. Serotonin, a neurotransmitter, is a chemical that helps move information from one part of the brain to another. It influences a wide variety of brain and body functions, including mood and social interactions.

Seasonal Serotonin Changes

A small study from the University of Copenhagen found that people with SAD showed seasonal differences in the way they regulate the serotonin compared to those without the disorder. Researchers scanned 11 SAD patients and 23 healthy individuals using positron emission tomography (PET) scans. They found summer-to-winter differences in the levels of the serotonin transporter (SERT) protein. SERT decreases serotonin in the brain. Low levels of serotonin are linked to depression. SAD patients showed higher levels of SERT in the winter months, corresponding to a greater removal of serotonin from the brain in winter.

Beyond Light: CBT Lasts Longer

Light therapy has been the primary treatment for SAD since the 1980s. To be effective, daily use is required. The general recommendation is to sit in front of a lightbox first thing in the morning for at least 30 minutes. While light therapy has shown to improve SAD symptoms, the challenge for many people has been adhering to the daily regime.

According to a recent study published in *American Journal of Psychiatry*, a longer-term fix for SAD may be cognitive behavior therapy (CBT).

“It appears that CBT, a type of talk therapy, had a better long-term effect than light therapy, with less return of symptoms,” says Dr. Eslami. “The therapy gave patients practical tools to continue with beyond the office visit, which is helpful for people of all ages.”

Researchers taught study participants to challenge negative thoughts about dark winter months, and to resist behaviors, like social isolation, that affect mood. To compare the two treatments, study participants received either 30-minutes daily of light therapy, or two 50-minute sessions of CBT per week for six weeks. Two winters after the initial treatments, 46 percent of research subjects given light therapy reported a recurrence of depression. But only 27 percent of those who had CBT reported recurrence. While both treatments work, CBT is a longer lasting and potentially preventive treatment, according to the researchers.
Statistics show that the average person gains about five pounds during the holiday season. While that might not seem like much, the problem is most people don’t lose the weight. And year after year, those pounds add up.

Culprits include richer foods, high calorie beverages, more parties, and snacks at every step. A little nibbling instead of dinner may seem innocuous, but it’s probably not.

“Holiday parties often include buffets with lots of small bites and appetizers,” says registered dietitian Nancee Jaffe with the UCLA Digestive Health and Nutrition Clinic. “This can lead people to believe they are eating less. For instance, that inevitable platter of cheese cubes looks harmless, but just two cubes can add up to 100 calories and nine grams of fat.”

Below are some strategies to help you partake in holiday festivities without packing on the pounds, or feeling like a curmudgeon.

Be Beverage Aware
Sipping on adult beverages is certainly part of holiday celebrations. It’s fine to have a little alcohol, but know that alcohol can be a hidden source of calories. It’s obvious that eggnog, is loaded with fat, sugar, and calories. A cup has more than 200 calories and about 20 grams of sugar. But other popular mixed drinks, can be caloric too. A typical 8-ounce margarita has 240 calories. A five-ounce glass of wine or a 12-ounce beer contains 160 calories. A 12-ounce can of cola has more than 150 calories, and fresh orange juice has just over 100 calories; add alcohol and calories can double.

How can you better manage your consumption? Alternate each high calorie beverage with sparkling or still water. You can also make that juice festive and fizzy with sparkling water, or have a white wine spritzer. Fragrant and delicious hot or chilled fruit teas are other delicious low calorie choice.

Smart Snacking Strategies
It may seem counterintuitive to snack before you go out to a holiday party, but it can help you avoid over eating. Choose protein and fiber combinations that help sustain hunger. Good choices include hard-boiled eggs and whole-grain bread; a whole banana with a tablespoon of peanut butter; or skinless chicken breast on bed of baby spinach. The key is not to arrive to a party starving, and thus being tempted to eat everything in sight.

“The fun of eating during the holidays is a to try a little bit of everything,” says Jaffe, “The problem is most people serve themselves a normal, or greater than normal portion size of every dish, and then over-consume. Instead, focus on two bites worth of each dish, so you get to try each without over-indulging.”

Size Matters
Studies have shown that people tend to eat more when the plates, bowls, and even serving utensils are large. The same is true when huge platters of food are actually on the dinner table. A simple solution is buffet-style serving where guest have to get up and go to a separate table for a second helping.

“It sounds trite, but eat off a smaller plate,” says Jaffe. “We eat with our eyes. Smaller plates look more full with less food. Research has shown we get the same satisfaction and level of fullness off less food on a smaller plate.”

The exception is vegetables and fruits. Platters filled with salads, fruits, and other simply prepared steamed veggies can encourage people to eat more of these lower calorie foods. Finally, if you’re hosting, offer your guests take-home containers so they know that they can have some goodies to savor later.

Get Physical
While you may not be ready for a game of touch football after a meal, a simple stroll will aid digestion. You could have a little fun along the way by setting up a scavenger hunt ahead of time. Or if there are dogs in the home, there’s no better time to take your four-legged friend for a walk. Especially if he or she has been hanging around the table to help clean up those stay bits of food that guests have “accidently” dropped on the floor. Dancing is another way to get a little movement, and encourage social interaction among your guests. Have your guests suggest their favorite tunes to inspire everyone to get into the act.

Most older adults require fewer calories than in their younger years. The Academy of Nutrition and Dietetics recommends the following for adults over age 50: moderately active women should consume 1,800 calories per day, and men no more than 2,400 calories per day. To find out how many daily calories you need, go to this American Cancer Society web page: www.cancer.org/healthy/tool-sandcalculators/calculators/app/cal-o-rie-counter-calculator.
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antibody does not mean you have chronic HCV, it just means you were exposed to the virus at some point in time. It does, however, mean that a second test is needed to see if the virus is still present.

Medicare does cover one screening, ordered by a primary care doctor. There are also FDA approved home kits available online from Home Access. According to Dr. Klausner, they are highly accurate, and very useful for people who want to test privately.

HCV can be detected during routine blood tests that measure liver enzymes. But, it is possible for liver enzymes to be normal, even if the liver is damaged. That is why a specific HCV screening is recommended.

New Treatments Can Cure HCV

There are different subtypes of the virus, referred to as genotypes. A number of medications to treat those different genotypes have been on the market for several years, but not all are equally effective.

This year, the FDA approved two combination drugs. Marketed under the brand name Epclusa, the medication treats all six genotypes of HCV. It is a fixed-dose combination tablet containing sofosbuvir, a drug approved in 2013, and velpatasvir, a new drug. Clinical trial results demonstrated that 95–99 percent of patients who received Epclusa had no virus detected in the blood 12 weeks after finishing treatment, suggesting the patients’ infections had been cured. The second drug approved, branded Zepatier (contains elbasvir and grazoprevir), treats HCV genotypes 1 and 4 infections.

While HCV can be cured, the drugs are pricey, especially in the U.S. A 12-week course can cost from $75,000 to $120,000.

“The new drugs are expensive but are covered by insurance companies,” says Dr. Saab. “It is a very uncommon that someone is not able to be treated because of insurance barriers.”

Insurers require preauthorization to treat. The timeframe to receive authorizations vary per insurer as does criteria for receiving treatment. Working with a liver specialist may help expedite the process. Medicare does cover HCV treatments through part D plans.

Once these drugs clear the virus from a patient’s system, the liver begins to regenerate itself. Curing HCV from a patient’s system also eliminates the possibility of transmitting it to others.

WHAT YOU SHOULD KNOW

About 30 percent of people have symptoms after infection. They can be mild or severe.

> Fever
> Nausea and/or vomiting
> Abdominal pain
> Dark urine and/or clay colored bowel movements
> Jaundice (yellow color in skin or eyes)

Risks Factors for Hepatitis C

Hepatitis C (HCV) is a contagious blood disease. Thus, an infected person can spread it to another person via blood-to-blood contact. The most common way HCV is spread today is through sharing needles or other equipment to inject drugs. But, before 1992, when widespread screening of the blood supply began in the United States, Hepatitis C was commonly spread through transfusions, and organ transplants.

A recent study in The Lancet Infectious Diseases suggests that the spread of hepatitis C has more to do with the use of needles for medical purposes rather than risky personal behaviors, which is the prevailing belief among many people. According to the study, “Many medical procedures have been linked to the spread of hepatitis C virus including use of contaminated multi-dose vials, finger-stick devices, and surgical procedures. Before 1950, injection technology was characterized by machine-made glass and metal syringes, which were typically sterilized manually, and reused because of their high cost. Between 1950 and 1960, such syringes were phased out, and replaced by disposable plastic, single-use syringes.”

Lower Risk Activities

While HCV can be spread through sexual activity, the risk is actually low according to the National Institutes of Health. Likewise, concern over infection from a tattoo is not necessary as studies have not shown HCV to be spread through licensed, commercial tattooing facilities. But, transmission of any infectious disease is possible when poor infection-control practices are used during tattooing or piercing.

It’s also possible, though less common, to get HCV through sharing personal care items such as toothbrushes or razors that have come into contact with an infected person. The virus can survive on surfaces at room temperature for up to three weeks.
Q I’ve heard that fiber can help with weight control. But how does it work and how much of it do I need?

A Like all nutrients, fiber plays many important roles in keeping you healthy. It’s most well-known for helping food move through the digestive tract. But it also helps control blood sugar, lower cholesterol, and tends to make you feel fuller faster—which can prevent overeating. The Institute of Medicine recommends adults older than 50 aim for at least 30 grams per day for men and 21 grams for women. When it comes to fiber, most people simply don’t get enough. There are two types of fiber, soluble and insoluble. Most fruits, vegetables, and whole grains contain both types. Soluble fiber dissolves in water, forming a gel-like substance that sticks to bile and other debris to transport it out of the body. Insoluble fiber acts like a sponge, attracting water and mopping up your intestines. Because insoluble fiber absorbs a lot of water, be sure to drink plenty of fluids (water, herbal tea, juice) when you increase fiber intake, or it could lead to constipation. The ability to sense thirst can decline with age, so make an effort to drink at least 8 to 10 glasses daily. The extra fluid will also help you feel fuller, and potentially help with weight loss. For delicious high fiber recipes, check out the DASH diet and Mediterranean diet, both include high fiber foods in their meal plans.

Q My mother’s voice got raspy and thin as she got older. Is there anything I can do to avoid that old-age voice?

A Vocal cords lose muscular strength and their elasticity with age, making the voice sound weaker. The good news is yes, there are some preventative measures that can help protect vocal cords. Reduce your exposure to smoky environments. Smoking and even secondhand smoke can damage delicate vocal tissues. Stay well-hydrated. Fluid provides a thin layer of cushion for your voice. Water is best. Avoid acidic drinks such as wine and soft drinks. Vocal exercises can help your voice stay strong. Vocal cords vibrate about 120 times per second for men and about 200 times for women. Humming and singing for a few minutes a day is good way to exercise vocal cords and keep pitch variety and vibration strong. Constant throat clearing and speaking too loudly, however, is bad for your voice. Those issues may also be symptoms of other health problems. Loud speech, for example, may be the result of poor hearing, which can usually be treated with hearing aids. Also, if you voice changes suddenly, that could signal nerve injury or a growth on the vocal cords. Get symptoms checked out sooner rather than later to prevent further damage.

Q During the summer Olympics this year, I saw a lot of athletes with those purple marks from cupping. Why are they doing it and does it really work?

A Cupping is a Chinese medicine treatment that’s been in use for thousands of years. At UCLA’s Center for East-West Medicine, Dr. Andrew Shubov, MD, advocates for cupping as way to reduce pain and restore smooth motion of muscles, and enhance local circulation. Cupping suctions a portion of skin up through a cup, typically glass, and in doing so brings more blood flow to the area. It’s said to speed healing and recovery of sore muscles. For elite athletes, the muscular benefits may provide the millisecond needed to win a gold medal. For patients with chronic muscule pain, the same effect may provide a drug-free alternative to ease pain. An analysis of 135 randomized, controlled trials showed encouraging results for disorders such as shingles and neck pain. A small study found it relieved osteoarthritis pain. However, it’s impossible to conduct blind trials where participants don’t know if they are receiving the treatment or not. Some critics therefore refute the claims of cupping. Though the purple marks look like big bruises, they reportedly don’t hurt. As for where to find practitioners, start with chiropractors and traditional Chinese medicine doctors.