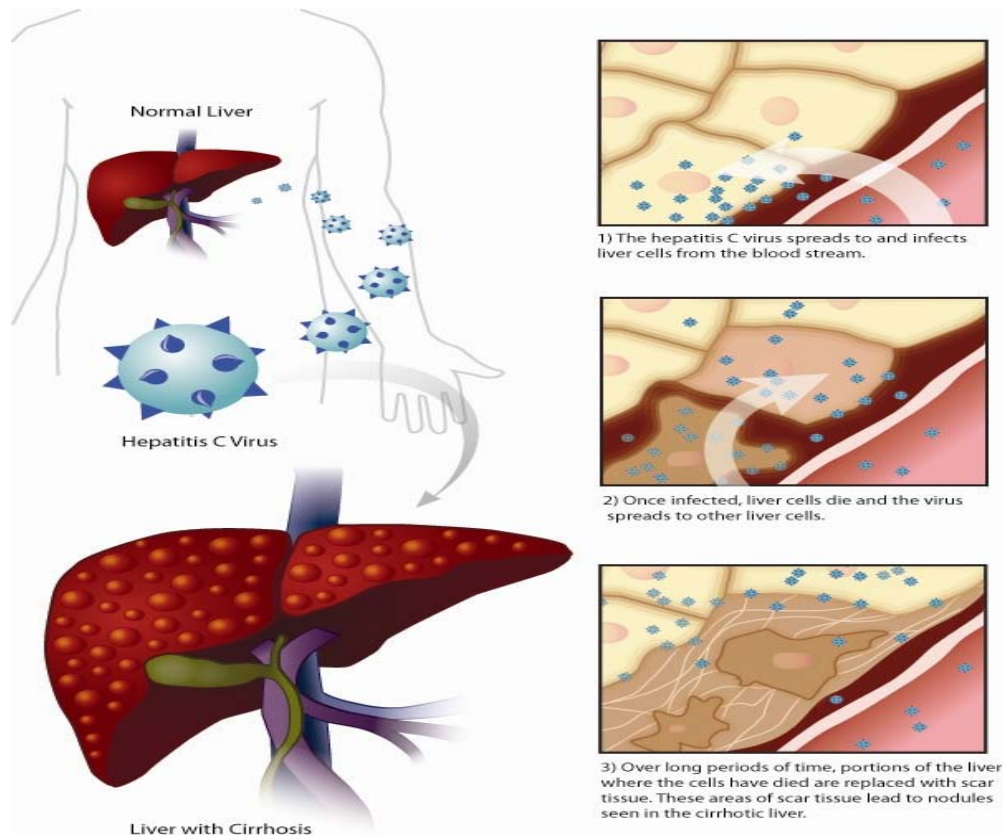


Treatment Topic of the Month

April 2008

Hepatitis C & HIV Co-Infection! A Holistic Treatment Guide



Disclaimer

The Treatment Resources Program at the Toronto People with AIDS Foundation provides information and resources to empower people living with HIV/AIDS to be proactive around their health by working in partnership with their health providers. We do not recommend or promote any treatment in particular. We strongly urge those interested in any specific treatment to consult a wide range of resources including a qualified medical and/or complementary therapy practitioner who has experience working with HIV+ patients.

For treatment information and resources,
Contact Rebecca at 416-506-1400 x627 or by e-mail at
rgower@pwatoronto.org

Hepatitis C

What is Hepatitis C?

The liver, which is located on the right side of your body just below your rib cage, is one of the most important organs in your body. It processes every foreign substance that enters your body such as food and drinks; alcohol and medications. Hepatitis (HCV) is a virus that causes inflammation or damage to the liver. HCV can be serious and can cause serious liver damage such as fibrosis (the replacement of healthy tissue with harder tissue) and cirrhosis (scarring of liver tissue) in HIV-positive people. People who are co-infected with both HIV and HCV are more likely to have more severe forms of Hepatitis C which can cause more serious liver damage and liver failure more quickly. Co-infected people are also more likely to transmit HCV because of higher viral loads. The action of HIV itself and/or in combination with Anti-Retroviral medications (ARVs) can result in reduced liver function in co-infected individuals. It is estimated that there are approximately 110 000 people diagnosed with HCV in Ontario.

What Causes Hep C?

Hepatitis C is a virus that is transmitted through infected blood which can occur by sharing drug equipment such as needles, straws, stems as well as unclean tattooing and piercing equipment. HCV can be transmitted through sex. It can also be spread from mother to child through vaginal birth and Caesarian sections because of the possible exposure by the baby to the mother's blood.

Am I At Risk?

Although anyone can get Hepatitis C (HCV), there are some risk factors that can increase your chances of getting HCV. It is estimated that eighty percent of injection drug users have Hepatitis C. This is because you can get HCV from sharing other drug equipment such as stems, cookers, and nasal equipment such as straws used in snorting cocaine and ketamine. It is important to be aware that increased sexual activity will increase the risk of acquiring HCV through sexual activity. However, it is easier to get HCV if you enjoy "rough sex" or have sex that causes cuts or abrasions. In addition to the above factors, your liver may not be working at its optimum in cases of;

- Repeated antibiotic use
- Excessive alcohol use
- Recreational drug use with sharing of drug equipment
- A nutrient-poor diet with a lot of processed and fatty foods
- Opportunistic Infections such as Tuberculosis, CMV and MAC

Signs & Symptoms

Hepatitis C (HCV) is often called "the silent epidemic" because it is largely asymptomatic until it develops into a more advanced stage of the disease. Many people are unaware that they have HCV unless they get very sick or their doctors perform specific blood tests (ALT and AST) that measure liver enzymes. As is the case with HIV, early signs of HCV infection are similar to the flu. This includes symptoms of fatigue, weakness, aches and pains; and nausea. Symptoms of more advanced hepatitis include pain, swelling or enlargement of the liver (hepatomegaly); fever, and jaundice (yellowing of the skin or eyes). Hepatitis C is of concern because it can lead to serious liver damage that can lead to liver failure, liver cancer and death.

Managing HCV with Medical Treatment

The 411 on Hepatitis C Testing

There are several types of tests a doctor can use to diagnose Hepatitis C. The anti-HCV and the HCV RIBA tests detect the presence of antibodies to the virus and only indicate that you have been exposed to the virus. It is important that you have a follow-up test to confirm whether you have the Hepatitis C virus in your blood. The HCV RNA test identifies whether you have an active infection of HCV.

Treatment

The first step in treatment is to find out which genetic type (genotype) of the Hepatitis C (HCV) virus you have. There are six genotypes of HCV; the most common ones in North America tend to be 1, 2 or 3. Your doctor will decide whether to treat HIV or HCV first based on the extent of liver damage and your HCV viral load. HCV can negatively impact the effectiveness of HIV medications in raising CD4 cell counts. There was a large study of co-infected patients in Milan between 1985 and 2002. It found that the degree of fibrosis (the development of tougher, fibrous tissue on the liver) grew significantly worse in 50% of participants and this was connected to at least 10% decrease in CD4 cell counts between liver biopsies.

Medications for HCV

The most common medical treatment for Hepatitis C is a combination of two drugs; pegylated interferon and ribavirin. Interferon is a chemical messenger (cytokine) that protects your cells from infection by HCV. Pegylated interferon, which is injected 2-3 times per week, has a protective barrier that shields the interferon from being broken down, thus prolonging the time it stays in the blood. Ribavirin is a nucleoside reverse transcriptase inhibitor ('nrti' or 'nuke') that is often taken at an oral dose of 800 mg/day. Most commonly, treatment lasts for 6 or 12 months depending on which Hepatitis C genotype you have and the amount of liver damage that the virus has caused.

Efficacy

The HCV genotype that you have is an important factor in the efficacy of medical treatment. Approximately 40% of people with genotype 1 and 80% with genotype 2 or 3 have an undetectable HCV viral load after treatment. However, the success rates for people co-infected with HIV and HCV are lower with approximately 25% success for genotype 1 and 50% for genotype 2 or 3. Other factors that can impact success rate are;

- Having a lower HCV viral load
- Starting treatment before liver damage occurs
- Women have a higher success rate than men
- Being younger than age 40
- Refraining from drinking alcohol

Side-Effects

The medical treatment for HCV is very difficult to tolerate because of side effects; it also often requires patients to put their lives on hold from three months to a year. There are mental health warnings that include depression, suicidal thoughts, hopelessness, irritability and anger. Other potential side effects are high levels of lactic acid in the blood (lactic acidosis); heart problems (low blood pressure, tachycardia, and chest pain); anemia (lowered red blood cell counts); leukocytopenia (lower white blood cells) or thrombocytopenia (reduced platelets). You may also experience flu-like symptoms, fever or chills, headaches, muscle or bone pain, reduced concentration, shortness of breath, temporary hair loss, psoriasis and tiredness. Both Pegylated Interferon and Ribavirin can temporarily affect the bone marrow as well as hormones such as the thyroid. Women and men trying to conceive should avoid trying to get pregnant during treatment and for at least 6 months after completing treatment.

Managing Hepatitis with Nutrition

Tips for your Liver:

Detoxification and repairing your liver can be one of the most important things that you do to be able to handle the long-term effects of ARVs especially if you have Hepatitis C. Here are some important tips;

- Eliminate (or at least reduce) recreational drugs and alcohol
- Don't share any drug equipment including needles for drugs, piercing and tattoos; or nasal instruments for cocaine and ketamine
- Use antibiotics cautiously and only for bacterial infections
- Eliminate chemically loaded junk foods and drinks including caffeine
- Decrease the fat content in your diet
- Make sure you don't take supplements that can cause additional liver problems
- Discuss the possibility of getting off ARVs that are toxic to your liver

Herbs:

It is important to consult a trained practitioner to make sure specific herbs are safe and won't interact with medications.

Silymarin (Milk Thistle)

Silymarin is an anti-oxidant that protects healthy liver cells from toxicity by promoting healthy cell membranes and repairing liver damage. It is sometimes used in conjunction with Alpha Lipoic Acid (ALA) and N-Acetyl Cysteine (NAC). There are no documented studies that Silymarin will interact with Anti-Retrovirals (ARVs). However, Silymarin has the potential to affect levels of Protease Inhibitors (PIs) and non-nukes in the blood. It may have less of an effect on PIs that are boosted with Ritonavir (Norvir). A suggested dosage is 2 capsules/3x per day to be continued until liver enzymes return back to normal.

Glycyrrhizin (Licorice Root Extract)

Studies in Japan have shown that Glycyrrhizin reduces liver inflammation and is effective against herpes and possibly CMV and Hepatitis B. It has been used in Japan for over 40 years as a treatment for chronic liver disease. It shouldn't be taken if you have high blood pressure, low blood potassium, heart disease or kidney problems.

Ganoderma (Reishi Mushroom)

Ganoderma lucidium is used in the treatment of viral hepatitis. It has been shown to improve symptoms such as anorexia, insomnia, malaise and liver swelling. In one study, the level of AST liver enzymes decreased in 70% of patients.

Supplements:

There are several supplements that are important for optimizing your liver. They include;

- ***Glutathione*** is an important intracellular antioxidant that is important for protecting the liver against toxicity. N-Acetyl Cysteine (NAC), Vitamin C and L-glutamine help the body produce glutathione. Suggested doses of NAC are 500 mg/3 times per day taken with food and 2-6 grams daily of Vitamin C. L-glutamine can also help increase glutathione but anyone with seriously compromised liver or kidney function shouldn't take it without a doctor's approval.
- ***Alpha Lipoic Acid*** has been shown to be effective for those with cirrhosis of the liver due to alcoholism. A suggested dose is 300-400mg/twice daily in an extended release format.
- ***Acetyl L-Carnitine*** may help to reduce mitochondrial toxicity and has been shown to be effective in lowering blood fats. The usual dosage is two capsules of 500 mg twice daily.

Managing HCV with Homeopathy

It is important to consult a qualified and trained Homeopathic Physician in the treatment of acute and chronic conditions. Please do not attempt to treat yourself.

Homeopathy is a naturally-based form of medicine which targets the underlying cause of disease by assisting the natural tendency of the body to heal itself. The most effective homeopathic treatment is always based on assessing the unique symptoms of each patient. This means that in most cases, there are no specific remedies for hepatitis or liver damage. Homeopathy has a very successful record in treating many forms of Hepatitis including Hepatitis C. Some symptoms that may be considered include;

- Irritability, dullness and sluggishness in the morning (especially 4 a.m.)
- Right-sided symptoms
- Craving for sweets and alcohol; intolerance of fats
- Right-sided frontal headaches in the morning
- Yellowness of the sclera (eyes) or skin
- Bitter taste in the mouth
- Right-sided shoulder/scapula pains

The following are ***some remedies*** useful in the treatment of hepatitis.

Chelidonium Majus:

Chelidonium is frequently used in many cases of hepatitis including Hepatitis C. It has an affinity for liver and gall bladder disease marked with pain. Other symptoms that indicate its use include; right upper quadrant pain (hypochondria) radiating to the right scapula; cramping or constricting pain; enlarged, hard and painful liver; jaundice even of newborns; irritability with discomfort; lethargy and weakness; lack of appetite and intense vomiting and nausea. People who need this remedy may be aggravated at 4 a.m., by fats and feel better from warm drinks and lying on the left side with legs drawn up.

Magnesium-Muriaticum:

This remedy has an affinity for acute or chronic hepatitis even in children. It is especially used to address symptoms of liver weakness; hepatitis with fatigue and depression; pressing pain /heaviness in the liver; pains which extend to the back and are worse from walking and touch; grogginess in the morning on waking; inability to lay on the left side with acute hepatitis but prefer the left-side in more chronic forms and are aggravated by fatty foods.

Carduus-Marianus:

It is indicated in liver inflammation especially the left lobe nearest to the stomach. Other symptoms include stitching or burning pains with a dragging sensation that can radiate to the scapula; bitter taste in the mouth; jaundice with clay-coloured stools and dark urine; enlarged, hard and swollen liver and varicosities. People who need this remedy are aggravated by lying on the left side and from alcohol, especially beer and feel better lying on the right side.

Leptandra:

This remedy is known for treating chronic liver disease with gastrointestinal bleeding. Other symptoms include burning pains and heat in the liver; pains that radiate to the umbilicus, spine or left scapula; great weakness with jaundice and black tar-like stools associated with jaundice. Patients who need this remedy are worse from cold drinks and motion and feel better lying on their abdomen or side.

Managing HCV with TCM

Traditional Chinese Medicine (TCM) was developed in China over 2000 years ago. TCM consists of acupuncture, herbal therapy and tuina (massage and manipulation involving acupressure). TCM is an energy therapy in which the body's life force (qi) controls the body's mechanisms of homeostasis, immunity and energy flow. Qi is connected through a series of networks called meridians. In this philosophy, health encompasses the whole body as well as the mind and emotions.

It is important that you have a thorough examination by a Western and a Chinese Medical Doctor to determine a diagnosis of Hepatitis C. Most people infected with HCV do not notice acute symptoms. Therefore, most people who are diagnosed with HCV are often in the chronic TCM stages of *Qi* Stagnation, and the *Qi* and *Yin* Deficiency stages. Advanced chronic disease includes a development of the patterns of *Xue* (Blood) Stagnation and *Xue* (Blood) Deficiency. According to Chinese medicine, HCV is usually associated with excess damp heat or damp cold conditions. Toxic heat which enters the body with HCV infection is manifested in symptoms that include;

- Feelings of warmth
- Hot sensations
- Sweating
- Agitation
- Itching skin

Self-Care Treatments:

Massage

Abdominal massage is helpful to harmonize the Large and Small Intestine, Liver, Spleen, Stomach, and Gallbladder. To increase the massage's effectiveness, warm the abdomen first with a hot pack or ginger compress. You may also massage using a warming oil infused with cinnamon.

Dietary Recommendations:

Here are some additional dietary tips;

- Eat cooked foods- they help the digestive system to digest more easily
- Drink warm or hot drinks- don't drink liquids straight from the refrigerator
- With Heat syndromes, avoid hot or warm foods such as ginger, garlic, turkey, chicken, mutton, shrimp, and heavy oils.
- With excess Dampness, fried foods and dairy products should be completely avoided. Limit tofu –eat it cooked preferably with ginger and garlic.
- Eat carrots, barley, rice, corn, adzuki beans, mustard greens, chicken, potatoes, alfalfa, and rye.
- Drink green tea for its liver protective and anti-cancer effects- drink decaffeinated green tea if you are sensitive to caffeine or suffer from depression or anxiety.

Acupuncture:

HIV+ people use acupuncture to enhance the immune system, reduce pain and to minimize side effects of HIV medications. A 1995 study conducted with people co-infected with HIV and Hepatitis (both HBV and HCV) at San Francisco's Quan Yin Healing Arts indicated that acupuncture alone may have an effect in lowering and/or normalizing liver enzyme levels. There is also a study underway in Australia that is looking at the success rates of treating hepatitis with acupuncture.

Wellness Resource Guide

Health Promotion Services at PWA:

Contact Rebecca, Treatment Resources Coordinator for;

- Student Massage Clinic
- Holistic Treatment Counselling
- Community Naturopathic Clinic for People with HIV
- Harm Reduction

Contact Kevin, Programs Coordinator for;

- Volunteer Massage Program
- Reiki
- Therapeutic Touch

Contact Greg, Speakers Bureau Coordinator for;

- The Energy Healing Circle

Contact Llewellyn, Treatment Access Coordinator for;

- Trillium
- Compassion Access to Medications (H-MAP)

Treatment Websites:

CATIE

www.catie.ca

The Body

www.thebody.com

AIDSInfonet (New Mexico AIDS Project)

www.aidsinfonet.org

AIDS Map

www.aidsmap.org

AIDS Treatment News

www.aidsnews.org

HIV/AIDS Medications

www.aidsmeds.com

Multilingual HIV Treatment Information

www.treathivglobally.ca

The Well Project (geared towards women)

www.thewellproject.org

Project Inform

www.projectinform.org

Nutrition:

Jon Kaiser [Immune Power: The Comprehensive Healing Program for HIV](#)

Jon Kaiser www.jonkaiser.com

Lark Lands www.larklands.net

CATIE [A Practical Guide to Nutrition for People Living with HIV](#)

Complementary Therapies:

CATIE

[Practical Guide to Complementary Therapies](#)

Complementary Therapists List

www.actoronto.org

Homeopathy

http://www.csoh.ca/Homeopathy_Introduction.htm

Traditional Chinese Medicine

www.docmisha.com

Nutrition Services:

www.stmichaelshospital.com/programs/nutrition

Community Naturopathic Clinic

416-324-4187 (to book an appointment)

Community Resources:

Toronto People With AIDS Foundation

www.pwatoronto.org

VOICES of Positive Women

www.vopw.org

Black Coalition for AIDS Prevention

www.black-cap.com

Asian Community AIDS Services

www.acas.org

Alliance for South Asian AIDS Prevention

www.asaap.ca