

HCV/HIV CO-INFECTION

“A patient’s perspective”

by
Gerald Moreno

I remember sitting in my doctor’s office one day in 1996, feeling great and full of hope. This wasn’t the kind of hope that I had been feeling for the last 12 years, but hope that I could actually grab onto instead of visualize. The protease inhibitors were recently approved by the FDA, and I was seeing the dramatic effects they were having on the HIV community as well as on myself. My doctor asked how I was feeling, and I answered him with a confident “GREAT!” Then he gave me my latest lab results. My T-cells were responding and my viral load was down for the first time in 12 years. I was estatic. He then informed me that one lab marker was concerning him. This was a marker that measured enzymes produced by the liver. The liver is an important organ that cleans the blood, makes proteins for muscles, stores energy, helps digestion, boosts the immune system, and is necessary for life. We should all have low levels of liver enzymes in our blood; elevated enzymes indicate liver injury.

The two most common liver enzymes studied are the ALT (SGPT) and AST (SGOT). Mine were elevated, and that was of concern to him. After an extensive history, more lab work was ordered. Two of the tests ordered were a hepatitis C (HCV) antibody test and an HCV viral load (similar to HIV). A week later I received the news. My antibody test came back positive, which meant that I had been exposed to the hepatitis C virus. My viral load came back as greater than 1000, which meant that I was a carrier, or have chronic hepatitis C.

Approximately 85% of people who have been exposed to HCV develop chronic infection. Chronic infection means that the body is not able to rid itself of the virus and is continually trying to fight it. It also means that carriers can pass on the infection to someone else through a transmission route, predominantly blood-to-blood contact with HCV. I remember asking my doctor what this all meant. He answered solemnly that hepatitis C is a very serious disease and could be potentially fatal. I recalled familiar memories of receiving another diagnosis . . . HIV. After a time of self-pity and depression, I called upon the survivor skills that I had learned from HIV: Learn everything that you can because knowledge *does* equal power. Make the effort to explore the options available to you.

What I learned was that Hepatitis C (HCV) is a viral illness that affects the liver. The estimated prevalence of HCV worldwide is approximately 170 million, 3.9 million in the U.S., and 500,000 in California. In 1990 an antibody was identified. Before that, HCV was known as “non-A, non-B hepatitis.” The HCV virus has six genotypes, all with subtypes. A genotype is the specific genetic makeup or “blueprint” of an organism, in this case a virus. Genotype 1 is the most common in the U.S., and is unfortunately the most difficult to treat.

HCV is spread primarily by blood-to-blood contact. Upon learning this, I immediately realized my risk factor. I had been an injection drug abuser, who shared works with people I didn’t even know. Other methods of transmission are transfusion of blood products, tattooing, body piercing, snorting drugs, multiple sex partners, and hemodialysis. The progression of the HCV virus from the acute phase (first six months of infection) to experiencing symptoms is approximately 20 years. For persons co-infected with HIV, this time is shortened to 10 to 15 years. Not everyone experiences symptoms, but those who do may notice fatigue, poor appetite, abdominal and muscle pain, itching, dark urine, and jaundice.

With this information in hand, I decided to seek out a doctor who specialized in both HCV and HIV (another lesson learned from HIV). He ran a few more sophisticated tests and wanted to know all the supplements and medications I was taking. Everything we ingest is filtered through the liver, and many vitamins and minerals are toxic to the liver. Now I never take supplements without informing my physician first, especially because I am on HAART.

Highly active HIV anti-viral treatment regimens usually include protease inhibitors (PIs), which undergo

extensive hepatic metabolism. This means the medications are processed through the liver. The possibility of liver complications exists for all six of the currently available PIs, especially Ritonavir and Crixivan. This is why it is imperative to work with a specialist, so that he/she can sort out whether toxicity, if any, is due to medications, to supplements, or to the virus itself. The toxicity that I experienced was indeed due to my HAART regimen, but my specialist recommended that I stay on this combination and be monitored monthly because the toxicity was not very high.

Because I am aggressive about my health, I asked for a liver biopsy. A liver biopsy is a very small sample taken from the liver and examined under a microscope. Scientists can see the level of liver damage and make correct diagnoses and suggestions for treatment. The results from my biopsy showed minor inflammation, no scarring or cirrhosis, and no treatment was recommended.

As with HIV, there is great momentum in the development of HCV treatment. Today we have combination therapy with Interferon and Ribavirin, and in the near future we will have Pegylated Interferon (a time-released Interferon) and Pegylated interferon and ribavirin. The response rate to HCV treatment with Pegylated interferon and ribavirin in clinical trials is now up to approximately 40% for genotype 1, and 80% for genotypes 2 and 3.

I believe that everybody, with the help of a support team, can find a program that works. Knowing that being co-infected can make HCV or HIV worse, I monitor myself and see my doctor every two months. I am encouraged by the advances we have made and see a bright future. I take care of myself the best that I can, one day at a time, so that I can take advantage of what the future will have to offer. This means that I eat good, healthy food; exercise regularly; and get plenty of rest. I drink lots of water, no caffeine, and *definitely* no alcohol. (If you want to do one great thing for your liver, stop all alcohol consumption and replace it with water!) As with HIV, living with co-infection has many challenges that may warrant a lifestyle change. I just celebrated 10 years of sobriety / recovery, and if I can meet that challenge, anyone can. My mission statement in life is *empowerment*: *Empowerment* to live, *empowerment* to grow, and above all, *empowerment* to give back.

The UCSD Treatment Center is a research facility that conducts clinical studies for people who are living with HIV and HCV. We are currently conducting clinical trials for co-infected individuals, and some of these studies include Pegylated Interferon. For more information please contact me, Gerald Moreno, at 543-8080 ext. 237.