# Hepatitis B Fact Sheet

A Publication of the Hepatitis C Support Project

a series of fact sheets written by experts in the field of liver disease

**Fa**ct Series

Written by: Christine M. Kukka, and Alan Franciscus

## HBV: Managing Treatment

## **Side Effects**

M any who are treated with pegylated interferon (Pegasys) to boost their immune systems or with antiviral medications to inhibit reproduction of the hepatitis B virus (HBV) notice some side effects.

Often, these side effects may be hard to distinguish from the fatigue, abdominal discomfort, and other symptoms people chronically infected with HBV may experience.

**Antivirals:** When people take an antiviral medication, some report an immediate improvement in their well-being and more energy as the number of HBVs replicating in their livers declines. In rare cases, antivirals may cause stomach aches, diarrhea, headache, fatigue, and chills. However, when antivirals are taken for several months or years, they can cause muscle weakness and pain (myopathy), kidney problems (resulting in increases in creatinine levels), and neuropathy (numbness, pain or tingling in hands or feet). There have also been reports of some reduction in bone mass after long-term antiviral treatment. Women, who are risk of osteoporosis, should be aware of this potential side effect.

It is important to remember, though, that side effects vary considerably from person to person. Everyone experiences some side effects, but few experience severe or life-threatening side effects.

**Interferon:** This treatment, administered by injection, can cause challenging side effects. While some children and adults have few side effects, others experience intense fatigue and moderate to severe depression.

## **General Tips for Patients Treated with Interferon:**

• If possible, line up support, ranging from meals to help with house cleaning and child care if needed, before beginning treatment.

Also, it might be helpful to take a week or two off work when starting treatment. If a child or teen requires treatment, try starting treatment during summer or school vacation.

- Take medication before bedtime; this may help patients to sleep through the worst of the side-effects because the majority occur within 4 to 6 hours after injection.
- For children, designate a "shot" room, such as a guest room, where the child does not regularly play, eat or sleep. Have the swab and syringe ready and perform the injection as quickly as possible to cut down on pre-shot anxiety.
- Drink plenty of fluids (without caffeine or alcohol) to relieve side effects. It's important to drink water or clear fruit juices (apple, cranberry, or grape) right before and right after self-injection.



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- Some take an over-the-counter pain reliever one hour before the injection to lessen side-effects. Others find taking a pain reliever 2 to 3 hours after the injection works better. **Caution:** Alcohol and acetaminophen, such as Tylenol, an ingredient found in many over-the-counter cold preparations, taken together can cause fulminant hepatitis, and may lead to liver failure.
- Headaches are often relieved by rest, massage, or application of heat to the back of the neck.
- Fever may be reduced by sponging with lukewarm water (do not use hot or cold water).
- Interferon can induce dry mouth, which can result in tooth decay and gum disease. Regular dental checkups and good oral hygiene are extremely important.

## Flu-like symptoms

 Use pain relievers as recommended by a physician; drink plenty of clear fluids each day; self-inject at bedtime to sleep through the symptoms.

## **Skin irritation**

- If it occurs at injection site, rotate injection site and use local topical creams.
- Keep hands moisturized and use small bandages if nail cuticles become raw or bleed.

Some children, who experience anxiety on interferon, may pick at their cuticles.

## **Fatigue**

- Rest as much as possible.
- Get regular, moderate exercise.
- Change work or school schedule, if possible.

## Irritability, depression anxiety

Anxiety and depression can occur in those taking interferon. Get help from support groups, family, and friends if you notice excessive sleeping, anxiety or depression in vourself or other family members who are receiving therapy. Try relaxation techniques. Anxiety may be treated with medications recommended by a doctor; and depression may be treated with antidepressants. However, it may take a few weeks for the antidepressants to build up in the system and reduce symptoms. Consider professional help if symptoms become severe.

## **Loss of appetite**

 Eat small meals regularly, even if you have little or no appetite; treat foods as medicine (they are necessary for good health); drink clear juices in addition to water; brush teeth often to help eliminate any metallic taste in your mouth.

### **Weight loss**

• Choose foods that are high in calories and protein; drink clear juices in addition to water for extra calories; try products designed to promote weight gain, such as nutritional supplements, canned formulas, instant breakfast powders, high-calorie puddings, etc.; add ingredients to increase nutritional value.

## For example:

- Add powdered milk to regular milk, milk shakes, casseroles, soups, eggs, mashed potatoes, hot cereal, and puddings;
- Spread peanut butter or bread;
- Add cooked beans or hardboiled eggs to soups, casseroles and pasta which already contain cheese or meat;
- Melt cheese on sandwiches, hamburgers, vegetables, rice or noodles.

## **Nausea/Vomiting**

Take over-the-counter medication for nausea as recommended by a doctor; avoid foods or odors that trigger nausea; avoid foods that are spicy, greasy, or deep-fried; eat small amounts of food every 2-3 hours; during periods of nausea, avoid citrus juices (orange, pineapple, and grapefruit) — instead, try clear juices, ginger ale, weak tea, or sports drinks; eat slowly and sip drinks slowly; eat foods

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at room temperature (neither very hot nor very cold); if morning nausea is a problem, eat some dry crackers when first awakening and get out of bed slowly.

#### Diarrhea

- Diarrhea is more common when taking high doses of interferon
- Ask the medical provider about dosage; try medications such as Immodium and bulking agents such as Metamucil or psyllium bran.

### **Dry Mouth/Dental Care**

Visit your dentist before, during, and after treatment; drink plenty of water or clear fluids (avoid soda, coffee, tea); use artificial saliva; brush and floss your teeth, and rinse your mouth after every meal; use a soft toothbrush.

#### **Rashes**

 Moisturize daily with over the counter lotions; use oatmeal based lotions; over the counter hydrocortisone creams, oral antihistamines and other anti-itch medications. Avoid perfumed soaps or lotions; apply sunscreen when needed; consult with a dermatologist for more serious skin problems or rashes.

#### Insomnia

Use relaxation techniques that include meditation, warm baths, visualization, and massage; develop consistent routines before going to bed; try over the counter medications such as Benadryl as recommended by a physician. Avoid exercise, vigorous activity, caffeinated drinks or medications that contain stimulants prior to bedtime; consult with a physician for prescription medication if insomnia persists for more than a few days.

## Nerve, muscle and kidney problems

 If you find your lab reports show kidney problems, or if you experience muscle weakness or numbness or tingling in your hands and feet, talk to your doctor. These may result from your HBV infection and/or antiviral treatment.

The information in this fact sheet discusses a wide variety of side effects that some people may experience while on therapy. It is important to remember, though, that side effects vary considerably from person to person. Everyone experiences some side effects, but few experience severe or lifethreatening side effects. While unpleasant, the majority of people can get through treatment if given proper care and support.

It is important to be proactive in dealing with the potential sides and to plan in advance for any potential problems that may come up during therapy or as a result of therapy. This can be accomplished by enlisting the help and support of family, friends, loved ones, employers and health care providers. Prepare others around you well in advance before starting therapy so you can be assured of their support and care. It is also a good idea to designate at least one person who can watch for anxiety and/or depression and who can contact family and/or medical professionals if the side effects become severe or life-threatening.

Getting through treatment is a process that may require drawing on every reserve and resource available. It can be done, and it doesn't have to be done alone.

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The information in this fact sheet is designed to help you understand and manage HBV and is not intended as medical advice. All persons with HBV should consult a medical practitioner for diagnosis and treatment of HBV.

For more information about hepatitis B, visit the following websites. **Hepatitis B Foundation: www.hepb.org** • **HIVandHepatitis.com** 

Executive Director, Editor-in-Chief, HCSP Publications Alan Franciscus

Managing Editor / Webmaster C.D. Mazoff, PhD



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