

HERBS THAT MAY HARM THE LIVER OR CAUSE HEPATITIS

As mentioned previously, the mere fact that herbs are natural does not mean that they are harmless. In fact, there have been many reports of people suffering serious health problems or even dying as a result of their use of herbal remedies. Since everything that enters the mouth is metabolized through the liver, the liver is a prime target for the toxic effects of some herbs. People with normal functioning livers and no history of prior liver disease have suffered adverse consequences to the liver as a result of taking certain herbs.

Obviously, the potential for adverse consequences in people with liver disease is greatly increased. Remember, it is the liver's job to rid the body of potentially harmful substances. A liver that is already damaged will have to work overtime to clear a toxic herb from the body. Quite obviously, it is inadvisable to subject a poorly functioning liver to this type of stress. A doctor, unaware that a patient with liver disease has taken herbal remedies, or unaware of the hepatotoxic effects of certain herbal remedies, may attribute any worsening of the patient's condition to the natural course of the liver disease.

The following is a brief discussion of some of the herbs that have been determined to be dangerous to the liver along with an extensive list of herbs that have been linked to hepatitis, liver damage, and liver failure. Although not proven, it appears that women appear to be more susceptible to herbal-induced liver disease than men. Also, some significant drug-herb interactions specifically relevant to people with liver disease are discussed.

In general, a key point to keep in mind is that any herb containing pyrrolizidine alkaloids is potentially hepatotoxic (toxic to the liver). Hepatotoxicity due to pyrrolizidine-containing herbs can result from

either small amounts ingested over long periods of time or from large amounts ingested over a short period of time. Pyrrolizidine alkaloids have been found in approximately 350 different plant species. The most toxic of these has been noted to be from the senecio, heliotropium, crotalaria, and symphytium species. Pyrrolizidine poisoning is common in Africa and Jamaica, two areas of the world where herbal teas containing this substance are consumed as folk remedies for a number of ailments. The pyrrolizidine alkaloids have been associated with a severe type of liver disorder known as veno-occlusive disease. In this disease, the hepatic vein becomes clogged, blocking off the blood supply to the liver. This can result in abdominal pain, vomiting, ascites, hepatomegaly (an enlarged liver), edema (leg swelling), cirrhosis, liver failure, and even death due to extensive liver damage.

The most well-established example of a liver-toxic pyrrolizidine alkaloid-containing herb is comfrey (*Symphytum officinale*). Comfrey has been used to relieve joint and stomach aches and is commercially available as a tea or in tablet or capsule form in the United States. Many herbal preparations that contain a mixture of herbs include comfrey, but due to the lack of labeling regulations of herbal products, comfrey may or may not be listed as an ingredient on these products.

Germander, an herb marketed as safe and natural, was at one time widely used in France as a weight-loss remedy. Since 1992, this herb has been banned from the French market because it was discovered to be the cause of twenty-six cases of severe hepatitis. Additional cases of hepatitis due to germander were also reported in Canada. It is thought that the diterpenoid content of germander is the culprit causing hepatotoxicity.

Chaparral, an herb proclaimed to be an aging retardant, has been reported to cause jaundice, fulminant hepatitis, and liver damage. In

one reported case, the damage was so extensive that the patient required a liver transplant. Jin Bu Huan, typically used as an herbal sedative, has been reported to cause acute hepatitis. Some herbs may be dangerous to ingest while pregnant. In fact, death of a newborn baby was reported in a woman who consumed a hepatotoxic herbal preparation during pregnancy.

The above are just a few examples of herbs that have led to liver damage, which is often permanent and occasionally fatal, though sometimes reversible. The following is a list of herbs that are known to have caused liver problems. Although this is long, it cannot be considered complete due to unreported data. Herbs that have been associated with liver disease include the following:

- **Black Cohosh**
- **Buckthorn (*Rhamnus cathartica*).**
- **Callilepis laureola (*Impila*)**
- **Cascara Sagrada**
- **Celandine (also known as greater celandine) (*Chelidonium majus*)**
- **Chaparral (also known as creosote bush or greasewood) (*Larrea tridentata*).**
- **Comfrey and other herbs containing pyrrolizidine alkaloids (*heliotropium, senecio, crotalaria, symphytum*)**
- **Doxidan (*Danthron 1,8-hydroxyanthroquinone and dioctyl calcium sulfosuccinate*)**
- **Germander (*Teucrium chamaedrys*).**
- **Green tea leaf**

- **Groundsel (Senecio vulgaris).**
- **Impila root**
- **Jin Bu Huan.**
- **Kava (also known as kava kava or Piper methysticum) -**
- Kombucha**
- **Lobelia (Lobelia inflata).**
- **Ma huang (ephedra).**
- **Mate (also known as paraquay tea) (Ilex paraguariensis).**
- **Mistletoe (Viscum album).**
- **Nutmeg (Myristica fragrans)**
- **Pau d'arco (La pachol).**
- **Pennyroyal (Mentha pulegium).**
- **Poke root (Phytolacca americana).**
- **Ragwort (Senecio jacoboea).**
- **Sarsparilla (Smilax species).**
- **Sassafras (Sassafras albidum).**
- **Saw palmetto – the main ingredient of the herbal preparation known as “Prostata”.**
- **Senna (Casio acutifolia).**
- **Skullcap (Scutellaria laterifolia).**
- **Soy phytoestrogen**
- **Sweet clover (Melilotus officinalis).**
- **Tansy (Tanacetum vulgare).**
- **T'u-san-chi.**
- **Valerian (Valeriana offinalis).**
- **Woodruff (Galium odorata).**
- **Certain Chinese herbal formulas—typically a complex mixture of a variety of different herbs.**
- **Herbal preparations containing the recreational drug**

“ecstasy” (3,4-Methylenedioxymetamphetamine).

It is also important to be aware that there are many known drug-herb interactions of potential significance to a person with liver disease. For example garlic, ginko, dong quai danshen, devil’s claw and papaya extract (papain) all may increase the tendency to bleed. Thus, people with liver disease undergoing a surgical procedure or any invasive procedure, such as a liver biopsy should be aware of this potential effect. Furthermore, people with esophageal varices may also be at increased risk for hemorrhage when taking these herbs. People who have had a liver transplant should avoid the herb St. John’s wort. This herb may cause cyclosporine levels (a medication used after transplantation to prevent rejection of the new liver) to decrease, thereby putting one at risk for rejection of the transplanted liver. As discussed in my book, licorice may reduce prednisone levels, thus putting a transplant recipient at risk for rejection of the transplanted liver.