Legitimacy of FDA Safety Concerns for Comfrey

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I have mixed feelings about whether or not the FDA's concern for internal use of comfrey is 100% legitimate, hence the controversial nature of this plant. It is accurate that comfrey contains hepatotoxic Pyrrolizdine Alkaloids (PA), which " have a reputation for toxicity, but not all PAs are toxic". (Hoffmann 2003)

According to Dr. James Duke, Comfrey contains 448 different chemical constituents. Only five of those chemicals, echimidine, lasiocarpine, lycopasmine, niacin and symphytine, have hepatotoxic activities. Interestingly enough, five chemicals in comfrey which are hepatoprotective include caffeic-acid, chlorogenic-acid, choline, tannins and niacin. Notice that niacin exhibits both hepatotoxic and hepatoprotective activities, just as caffeic-acid is both hepatocarcioneginic and hepatoprotective. Most whole plants contain a variety of chemicals which act synergistically with one another.

According to the article *Safety Issues Effecting Herbs: Pyrrolizidine Alkaloids* by Dharmananda, there have been few reported cases (four, maybe five) of comfrey related PA toxicity in humans. In each situation, each individual who became ill from ingesting comfrey were all in compromising situations such as excessive consumption in both amounts and for extended periods of time, pre-existing medical conditions which would normally be contraindicated for this herb, and mixing pharmaceutical medications.

Ironically, many pharmaceuticals have reports of serious side effects, including liver disease and death, with far higher numbers than the mere 4 reported cases for comfrey; yet every day, these legal drugs continue to be sold and distributed. Surprisingly, many consumers seem to

turn a blind eye to the risky side effects of these medications, which may also include hepatoxicity. On occasion, a drug may be pulled from the market, yet it seems to me that the billions of dollars at stake seem to allow these dangerous medications to remain on the shelves far longer than they should be.

There are several factors which determine the potency of any plant chemical constituent, including PAs. For instance, there are higher levels in the root vs. the leaves, higher levels in younger leaves vs. old. Where the plant was grown, what conditions it grew in, time of year of harvest, which species of comfrey was used, etc.

As a practicing herbalist, as well as someone with liver disease, I feel comfrey can be safely used internally for short periods of time (no longer than 30 days), best diluted in a formula with other herbs, and appropriately administered for serious injuries, such as broken bones. Topical comfrey works just as well. I use it in a few of my topical formulas for repairing damages connective tissue, and the testimonials for comfrey's powerful and speedy healing abilities continue to pour in.

The FDA's is truly committed to public safety, I feel they should reinvestigate the pros of comfrey by continuing research using whole plant vs. isolated constituents and human studies vs. animal and in vitro models. I believe more research is needed, using whole plant vs. isolated constituents and human studies vs. animal and in vitro models.

References:

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