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HERBCLIPTM

FILE: · Herb Safety
· Toxic Plants
· Clinical Use of Unsafe Herbs

DATE: May 14, 1999

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RE: Potential Clinical Use of "Unsafe" Herbs

Yarnell, Eric, N.D. Misunderstood "Toxic" Herbs, *Alternative and Complimentary Medicine*, February 1999. pp 6-11.

The growing debate about herbal safety includes the opinions of those who have never given herbs to patients: researchers, manufacturers, bureaucrats, and academics. This article reviews the safety of some useful herbs typically branded as unsafe from a practicing clinician's point of view. According to this author, a trained naturopath, in order to use all botanicals safely, it is important to be a medical professional with specialty training in botanicals.

Chaparral or creosote bush (*Larrea tridentata*) is a native southwestern plant historically used by Native Americans. It has both internal and external applications. Since the 1980's, approximately two dozen cases of acute, nonviral hepatitis, some leading to liver failure, related to chaparral intake have been reported in literature. These reports generally involved persons taking large dosages in the form of capsules. Capsules are not a traditional dose route and prevent persons from an important protection against overdose: unpleasant taste. Internal use of smaller doses of tea or tincture is safe for most people. One study of fifty-nine patients with terminal cancer who were treated with either 16-24 oz of chaparral tea or 250-3000 mg of NDGA daily demonstrated no signs of liver toxicity. 1-2 milliliters of tincture three times daily in addition to topically applied oil extracts also are not associated with hepatotoxicity. Chaparral tincture in formulas treats mild to moderate severe infections, allergies, autoimmune diseases, and as an antioxidant. Chaparral is rarely used alone and is primarily antimicrobial. Topical application of chaparral in castor (*Ricinus communis*) oil is used for dysmenorrhea, intestinal cramping and applied to the joints for mitigating pain in rheumatoid complaints. Contraindications include pregnancy, lactation, and for use by children.

Comfrey (*Symphytum officinale*) and coltsfoot (*Tussilago farfara*) have been linked to a small number of cases of hepatic veno-occlusive disease (HVOD) over the last 20 years. The author considers the clinical evidence of toxicity of these herbs to be weak. In all cases of reported HVOD from comfrey there were numerous complicating circumstances, including ingestion of other po-

tential hepatotoxins or the presence of other diseases. A separate study of 29 persons who took a wide range of comfrey products and doses evidenced no signs of liver injury, even though some used comfrey for as long as 20 years. Pyrrolizidine alkaloids (PAs) have been identified as hepatotoxins in comfrey and coltsfoot. Since the roots of comfrey contain the highest levels of PAs, the leaves and flowers are used mostly and considered safer. Internally, comfrey and coltsfoot are used for gastrointestinal (GI) tract inflammations, inflamed pharynx, and coughs. European physicians practicing phytotherapy recommend coltsfoot for emphysema and silicosis. Topically, comfrey is most often used for wounds and ulcers. PA-free extracts are becoming more available and are considered safer for internal use. A safe dosage of comfrey tincture is up to 5 mL three times a day or 3 cups of PA-free comfrey or coltsfoot tea daily. Creams or poultices of comfrey and/or coltsfoot can be used indefinitely by adults and in lower dosages internally for children.

Lobelia (*Lobelia inflata*) is used often as an emetic when poisoning is suspected. In subemetic dosages, lobelia has antispasmodic and nervine properties. Nausea may occur if more than 1/2 mL of tincture is taken three times a day is administered and more serious toxic effects can occur when more than 1 mL of tincture is taken more than three times daily. Toxicity symptoms include dizziness, headache, tremor and tachycardia. Severe overdose could result in death. A recent review of allegations of toxicity from lobelia has found little documentation of serious toxicity. Clinical use of lobelia includes treatment for spasmodic coughs, facilitating release of kidney stones and relief of symptoms of spasmodic irritable bowel syndrome. The sedative properties of lobelia are also useful for epilepsy. Topical application of the herbal oil is effective for muscle spasms, coughs, and for easing a rigid os when applied directly to the cervix. Lobelia suppositories can reduce irritable bowel syndrome. No more than half the adult dosage is recommended for children. Contraindications include pregnancy or lactation, except direct application for a rigid os.

Wormwood (*Artemisia absinthium*) has similar toxicity to lobelia at high dosages. Thujone, a terpenoid found in wormwood's essential oil, was blamed for addiction, neurotoxicity and death from the now banned alcoholic drink, absinthe. Wormwood essential oils are not safe for internal use, and so the dilute tinctures (1:5-10) are safer and more effective. The author states that less than 1 ml of tincture should be used three times daily at most. Clinical use of wormwood includes poor digestion, gallbladder problems, or minor parasitic infections. The bitterness of wormwood, like chaparral, protects against chronic overdose. Wormwood is often combined with other bitters such as yellow gentian (*Gentiana lutea*) or dandelion (*Taraxacum officinale*) root for digestive problems. Wormwood is useful postoperatively and after serious infections to assist recovery. Animal studies indicate antimalarial properties. Contraindications: pregnancy, lactation and for use by children.

Belladonna (*Atropa belladonna*) has a definite toxic effect but can be used safely as well. Overdose symptoms include significant dryness around the mouth, though slight dryness around the mouth may indicate the correct dos-

age. Tincture dosage for adults is between 6 to 8 drops three times a day. Belladonna acts as an antispasmodic in the GI tract and so is helpful for relieving symptoms of spastic constipation, biliary dyskinesia and many other conditions. Because belladonna decreases secretions of all kinds, it is not recommended for use more than several weeks at a time as it suppresses the body's self-healing abilities. The root are generally more toxic than the leaves, and thus the tincture of the root should only be used by persons with the most severe and stubborn conditions. Contraindications: pregnancy, lactation and for use by children.

Botanicals with no known safe dosage but that may have valid clinical use (i.e., dispensed by a qualified practitioner) include: pasque flower (*Anemone pulsatilla*) as an anodyne; arnica (*Arnica montana*) for topical treatment of wounds and bruises; ipecac (*Cephaelis ipecacuanha*) as an antitussive; lily of the valley (*Convallaria majalis*) for mild congestive heart failure; male fern (*Dryopteris filix-mas*) for parasitic infections; blue flag (*Iris versicolor*) and poke (*Phytolacca americana*) as a lymphagogue; Indian snakeroot (*Rauwolfia serpentina*) and European mistletoe (*Viscum album*) for hypertension; and bloodroot (*Sanguinaria canadensis*) for topical use. —*Susie Epstein*

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