

Post Office Box 144345 Austin, Texas 78714-4345 Phone 512/926-4900 Fax 512/926-2345 Email: abc@hetbalgram.org <u>www.hetbalgram.org</u>

Mark Blumenthal *Editor*

Wayne Silverman, PhD Underwriting Coordinator

Betsy Levy Densie Webb, PhD Leela Devi, MSN, RN Summary Writers

Karen Newton Database Manager

Susan McFarland Ginger Webb *Co-coordinators*

Dawnelle Malone Research Assistant

The American Botanical Council provides this summary and the enclosed article as an educational service. By providing this article, ABC does not warrant that the data is accurate and correct, nor does distribution of the enclosed article constitute any endorsement of the information contained or of the views of the authors.

ABC does not authorize the copying or use of the original articles. Reproduction of the summaries is allowed on a limited basis for students, colleagues, employees and/or customers. Other uses and distribution

HERBCLIP

FILE: • Uterine Tonics • Phytoestrogens • Women's Herbs • Eclectic Medicine • Black cohosh (*Cimicifuga racemosa*) • Blue cohosh (*Caulophyllum thalictroides*) • Helonias root (*Chamaelirium luteum*) • Stargrass (*Aletris farinosa*) • Wild yam (*Dioscorea spp.*) • Jamaican dogwood (*Piscidia erythrina*) • Pulsatilla (*Pulsatilla* spp.) • Hops (*Humulus lupulus*) • Black haw (*Viburnum prunifolium*)

HC 033084

DATE: July 1, 1998

RE:

Herbs Used by 19th Century Eclectic Physicians to treat Female Genito-Urinary Conditions

Brinker, F. A comparative review of eclectic female regulators. *Journal of Naturopathic Medicine*, Winter, 1997, Vol. 7, (1), pp. 11-26.

Botanical medicines have been used for centuries to regulate abnormal menstrual patterns, especially following childbirth. Refining the medical use of many of these plant remedies, however, occurred only during the last 150 years. The use of uterine tonics, sedatives, phytoestrogens, based primarily on the writings of Eclectic Medical Doctors of the late 19th and early 20th centuries, subsequent scientific research findings as well as their clinical applications are discussed in this lengthy review article.

Reputed Uterine Tonics

Caulophyllum and Cimicifuga

Uterine tonics are described as agents that add tone and strength to the uterus. They are typically used for chronic conditions over long periods of time. *Caulophyllum thalictroides*, known as blue cohosh, was commonly used by Native American tribes. Members of the Fox, Menominee and Potawatomi tribes used an infusion or decoction of *Caulophyllum* root to control profuse menstrual bleeding. Ojibwa women used it for painful menstruation and some Cherokees took it to relieve inflammation of the womb. The first written report on *Caulophyllum* occurred in 1828. By the early 1900's indications for its use included uterine pain, weight and fullness

in the pelvis and pain extending into the legs. It was considered a superior remedy for uterine subinvolution, prolapse, anteversion or retroversion. It was also utilized for acute and chronic ovarian disorders and dysmenorrhea and amenorrhea. For dysmenorrhea with severe pain, the indicated dose was 10 drops of tincture every half hour.

Cimicifuga racemosa, commonly known as black cohosh, has also been called squaw root. It was introduced to the medical profession in 1832 and came into general use about 1850, becoming one of the most popular eclectic remedies. It was believed that high concentrations of alcohol (90%) were important for making the most effective extract and that extracts were of value only when made from recently dried roots. It was indicated for ovarian pain, dysmenorrhea, and it was employed as a uterine tonic to treat subinvolution of the uterus. The presence of salicylic acid may help explain its benefits in pain relief. The dose of *Cimicifuga* tincture was 2 to 4 milliliters and for the fluid extract, 5 to 30 drops. While *Caulophyllum* has uterine stimulant activity, *Cimicifuga* has a sedative and antispasmodic influence.

Helonias and *Aletris* have long been confused for one another. Both have been designated by various authors as unicorn root, false unicorn root, blazing star, star grass and starwort. *Chamaelirium luteum* is the correct modern scientific name for helonias (*Helonias dioica*). The early eclectics used it as a restorative, particularly for women suffering fatigue and depression. It was also found effective in cases of amenorrhea and menorrhagia. The indications for *Chamaelirium* as a uterine tonic, were fullness or heaviness and congestion in the pelvis with lumbar pains, restlessness, mental irritability and weakness. The dose of the powder was 0.6 to 1.8 milligrams and the fluid extract, from 5 to 30 drops.

Aletris farinosa, another Native American herb indigenous to the eastern U.S., is commonly called stargrass. Much *Chamaelirium* has been sold as *Aletris*. The root was used by the Micmac Indians to stimulate menstruation, by the Cherokees to strengthen the womb and by the Rappahannock tribe as an infusion for "female troubles." It was considered especially helpful in anemic women who were constipated or had leucorrhea, an engorged or prolapsed uterus, or any pelvic discomfort. It was also used for too frequent menstruation with dysmennorhea from labor-like pains. It was also said to improve the function of the ovaries. The dose of the fluid extract was 10 to 15 drops. The data on animal research with *Chamaelirium* is insufficient to draw conclusions concerning its true effectiveness, and the findings on *Aletris* are so inconsistent as to be relatively worthless. Clinical assessments alone, however, suggest that *Chamaelirium* is more effective as a uterine tonic and *Alestris* as a digestive tonic.

Uterine Sedatives

Dioscorea and Piscidia

Uterine sedatives are agents that primarily lessen or decrease uterine contractions. Some act as anti-abortifacients. *Dioscorea villosa* (wild yam)

was used by early Native Americans to relieve the pain of childbirth. Early Eclectic use suggested it acted by overcoming irritation of mucous membranes. It was used to treat uterine cramps and ovarian pain. It is believed to act best for menstrual cramps when given in hot water. The dose of the powder was 0.3 to 3.6 grams. A dose of 2 to 6 fluid ounces of a decoction made by boiling 1 ounce of dried *Dioscorea* rhizome in 1 pint of water was also used. *Dioscorea* contains the sapogenin diosgenin, which may be the antispasmodic component. *Dioscorea* species vary up to 5-fold in their diosgenin content. The compound also has potential hormonal effects, which would add to the overall influence of *Dioscorea*.

Piscidia erythrina (Jamaican dogwood) is an eclectic remedy that lacks a recorded history of use. It has been found effective for painful spasms, pelvic pain, dysmenorrhea and ovarian pain. It is ineffective in small doses. The dose range for the fluid extract was 2 to 4 milliliters or 5 to 60 drops. The dose for the root bark was 0.3 to 3.6 grams. (Jamaican dogwood is one of the ingredients in Lydia Pinkham's vegetable compound, a famous patent medicine for women.)

Of these two remedies, *Dioscorea* was the preferred antispasmodic by the early eclectic doctors, probably because it was more commercially available at that time. *Piscidia* has demonstrated greater uterine sedative activity in the lab, but its sedative actions on overall mental and motor functions make its effects less specific.

Pulsatilla and Humulus

The species Anemone pulsatilla (formerly called Pulsatilla vulgaris) and Anemone pratensis (formerly *P. pratensis*) are both recognized as legitimate sources of the remedy known as pulsatilla, also called pasque flower or wind flower. It was found helpful in chronic uterine disorders and for the treatment of dull pain during menstruation. In some cases it was effective for promoting menstruation. The dose of the tincture was from 5 to 30 drops and the fluid extract was used at 1/2 to 2 drops per dose. Large doses, however, produced sensory and motor paralysis and toxic doses led to stupor, coma or convulsions. Anemone has a uterine sedative component that makes it specifically applicable as a female regulator. But the risk of toxic side effects and the availability of other botanicals make its current application less widespread than in years past.

Humulus lupulus, also known as hops, was used among the Cherokee to alleviate pain, produce sleep and for female complaints. The Mohegans used the blossoms for pain and along with the Shinnecocks, for nervous tension. Among the eclectics, it was used as a sedative for nervous excitement and for uterine pain. It was considered to be both a sedative and an antispasmodic. *Humulus* was shown to be useful in the treatment of dysmenorrhea, especially when taken prior to the onset of pain. Though *Humulus* has similar activities to *Anemone*, its stronger hypnotic effect limits its usage.

The Viburnum Species

Prior to 1940 there was much misidentification and substitution among the *Viburnum* species, which may have led to their being discredited as valuable remedies. *Viburnum prunifolium* under the name of black haw was the first to draw the attention of white physicians. The Cherokees had used an infusion to prevent recurrent spasms and the Delaware tribe used the root bark as a tonic for female organs. Though the eclectics were not the first to introduce *V. prunifolium* to medical practice, they popularized it through their extensive use. It was used as the base for many proprietary compounds advertised for female reproductive complaints. It was considered a mild sedative, but was decidedly antispasmodic. It was used as a uterine sedative more than any other botanical and relieved cramp-like pains of dysmenorrhea and chronic uterine inflammation and it was believed to influence ovarian function in infertile women. The eclectics used the bark of the root. The fluid extract was taken in doses of 2 to 4 milliliters and the powdered root bark was 0.3 to 3.6 grams.

Phytoestrogens

Phytoestrogens are plant compounds that are capable of producing estrus in animals. They consist mostly of sterols, cournestans and isoflavones. Phytoestrogens compete with estradiol for estrogen binding sites in the reproductive tracts of animals *in vivo* and in human breast cancer cells *in vitro*. In high concentrations they can exert a significant estrogenic effect in animals. In lower concentrations they can act as antiestrogens by competing for estrogen-receptor proteins and by influencing the neuroendocrine centers of the brain that control the menstrual cycle. Most of the herbs used as uterine tonics and sedatives contain phytoestrogens. In humans, it is assumed that their effects in low-estrogen conditions such as menopause would be estrogenic, whereas in hyperestrogenism the competition for the receptor would actually result in lowering the overall estrogen effects.

The author encourages taking valuable information from all contributing disciplines such as history, botany, pharmacognosy, chemical analysis, pharmacology, pharmacy, toxicology, physiology, psychology, clinical diagnosis and pathology to make the best decisions in selecting herbal medicines. And he calls for appropriate clinical trials to accurately evaluate the effectiveness of traditional botanical medicines such as these as female regulators. —Densie Webb, PhD

Bin #138