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RE: Herbal Approaches for Treatment of Pandemic Influenza

Abascal K, Yarnell E. Herbal treatments for pandemic influenza. *Altern Complement Ther*. October 2006:214-221.

Eclectic physicians (see HC 090462.324) treated influenza with herbs. In the 1918 pandemic they reported a death rate of 0.6% among their patients compared to an overall death rate of approximately 3%. One of the primary Eclectic influenza remedies was gelsemium root (a.k.a. yellow jasmine, yellow jessamine; Gelsemium sempervirens) administered for a symptom picture that included a high fever. It became standard treatment at one U.S. military hospital in France, after doctors there studied eight remedies: herbs aconite (Aconitum spp.), belladonna (Atropa belladonna), and gelsemium; and aspirin, sodium salicylate, arsenic, quinine, and Dover's powder (opium and ipecac [Cephaelis ipecacuanha])* "Those treated with gelsemium improved in a manner far exceeding... any other... With the exception of belladonna, none of the other treatments [had] the slightest effect." Results were "so striking that [they then used] gelsemium to treat all [flu] patients", giving gelsemium and belladonna to 937 soldiers, with a death rate of 2.77%. (Soldiers at the front often experienced a high death rate, up to 30% in some areas.) Gelsemium is not widely used today but is still prescribed in flu with fever, muscle weakness, myalgia, neuralgic headache, and as a cardiac sedative. It protected mice against nerve damage and gastric erosion due to stress, and had anti-seizure activity in rats. Gelsemium is safe in appropriate doses, but toxic in excess, and should be used only by experienced practitioners.

Boneset (a.k.a. thoroughwort; *Eupatorium perfoliatum*) was used in illnesses causing pain such that "patients felt... their bones were breaking." It was said to fit symptoms of more flu cases than any other single remedy, and one doctor reported that many cases were averted by early use. Some Eclectic physicians found that a combination of boneset and gelsemium was able to control most flu symptoms. There is little research on boneset. It is mildly antibacterial against *Staphylococcus aureus* and *Bacillus megaterium* in vitro, and antineoplastic. In mouse studies, it is an immunostimulant. It contains eupatorin, an antioxidant flavone that modulates inflammation. It belongs to a plant group which produces hepatotoxic pyrrolizidine alkaloids, but is considered safe for short-term use.

 $^{^*}$ Quinine, derived from *Cinchona officinalis*, and the plant-based Dover's powder, might be considered herbal medicines by some. – mg-w

Black cohosh (*Actaea racemosa* syn. *Cimicifuga racemosa*) was used by Native Americans as a tonic, for arthritis and pulmonary conditions. Eclectics used it for sore throats, rheumatism, neuralgia, muscle pain, and flu's headache and fever. Combined with boneset, it was considered by many physicians the "best remedy" for "bone-breaking" pain. One doctor used gelsemium, black cohosh, and eyebright (*Euphrasia officinalis*) in 200 cases of flu, and estimated that 75% of his cases could be handled with these herbs.

Pleurisy root (a.k.a. butterfly weed; *Asclepias tuberosa*) is widely used for respiratory problems. The Eclectics often used it in pneumonia. In the pandemics they saw, it was used for chest pain, lung inflammation, coughing, and to reduce bronchial symptoms. There is no clinical research on pleurisy root. It has cardiac glycosides, and should be used cautiously with drugs such as digoxin. It is contraindicated in pregnancy.

Eclectics used sponge baths to reduce fever, since fever interfered with vital sleep. Some hospitals used heroin (from poppy; *Papaver somniferum*) to ensure rest, but most Eclectic doctors preferred herbs (e.g. passionflower [*Passiflora incarnata*]). Eclectics believed aspirin to worsen the outcome in influenza patients and discouraged the use of stronger nervous system depressants, such as codeine. Flu vaccines were available in 1918 but "the viral nature of the disease was not understood... and [they] were prepared against... bacteria." The Eclectics commented that patients who were vaccinated and also got flu "seemed to fare poorly."

A sidebar examines chest applications which were widely used by Eclectic physicians. A recipe for one such application is given. It combines powdered lobelia (*Lobelia* spp.), bloodroot (*Sanguinaria canadensis*), skunk cabbage (*Symplocarpus foetidus*), ipecac, and cayenne (*Capsicum annuum*), placed on a "larded or oiled cloth" and applied warm Vick's VapoRub® (Proctor & Gamble Manufactura, Mex.; dist. Proctor & Gamble, Cincinnati, OH) were used albeit less frequently. Vick's is commonly used for chest congestion. It contains oil of eucalyptus (*Eucalyptus* spp.), camphor, and menthol. It appears that essential oils may enhance lung clearance in chronic airway obstruction.

In severe flu, the immune system produces a "cytokine storm" that generates proinflammatory cytokines that are believed to be responsible for the severe damage to lung tissue in avian flu patients and victims of the 1918 pandemic. Research increasingly indicates that herbs may modulate, rather than stimulate or suppress, immune response. Abascal and Yarnell believe this research suggests that some herbs may be able to moderate the production of proinflammatory mediators in influenza.

— Mariann Garner-Wizard

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