

Herban Legends and Clinical Pearls

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Notes and slides: <http://naimh.com/nunm>

Herban Legend

A persistent, widely and firmly held belief about a plant and its medicinal effects which is not true. It is passed from textbook to textbook, and from teacher to student and perpetuated across generations based on students faith in their teachers, their textbooks, and their misinterpretation of science, tradition, or subjective experience.

Why Herban Legends?

- ▶ General lack of critical thinking in modern society

- ▶ The influence of natural products industry
 - ▶ Marketing (deliberate lies and spin)
 - ▶ The corruption of the alternative health media

- ▶ Lack of functional scientific literacy
 - ▶ Animal trials
 - ▶ Epidemiology
 - ▶ The misapplication of science by herbalists wanting to appear to be “scientific”

The romanticization and idealization of the past

- ▶ Pseudo folk traditions
- ▶ Superficial Ethnobotany
- ▶ Herbal medical traditions

- ▶ Uncritical acceptance of authorities and their books.

- ▶ A vacuum of hands-on experience in the later 20th and early 21st centuries.

Critical Thinking from Four Directions

North
TRADITIONS

West
INTUITION/INSTINCT

East
SCIENCE

South
EXPERIENCE

Lomatium

LOMATIUM IS NOT AN "ANTIVIRAL"

History

- ▶ During the Great Influenza epidemic of 1918, a physician in the Lake Tahoe noticed that although mortality was high among the Whites, he was unaware of any mortality among local Native Americans.
- ▶ The same was observed for Whites who used the methods of the Native Americans

See history section at www.lomatium.com

- ▶ The chief medicine was a long decoction of *Lomatium dissectum*.
- ▶ Large amounts of the root were decocted for hours, and resins and other debris which rose to the top was continuously scooped off and discarded.
- ▶ Dose per day in febrile and respiratory illness was 6 ounces of the root.

- ▶ Lomatium as a tincture entered into naturopathic practice (J. Bastyr) as a respiratory herb
- ▶ During the 1980s, it was popularized as an "antiviral" in ND circles, and from there to the larger herbal community.
- ▶ Soon the phenomenon of the "Lomatium rash" was seen in many people using it. May occur at low to moderate doses, or with the herb as part of a formula.

Lomatium rash



Lomatium rash

- ▶ It is a whole body rash, everywhere from the bottoms of the feet to the top of the scalp.
- ▶ Non-inflammatory, non-painful, non-itchy. Does not respond to steroids.
- ▶ The patient then goes to a conventional doctor, sometimes an emergency room, where the rash cannot be diagnosed. And the puzzled docs sometimes admit the patient for observation.
- ▶ The rash is induced by constituents of the plant, not Herxheimer reaction.

Trial for antiviral properties

The effect of the methanolic plant extracts on the replication of seven selected viruses representing a spectrum of viral families was assayed. The viruses selected were:

bovine coronavirus (Coronaviridae)
herpesvirus (Herpesviridae)
parainfluenza virus (Paramyxoviridae)
rotavirus (Reoviridae)
respiratory syncytial virus (Paramyxoviridae)
vaccinia virus (Poxviridae)
vesicular stomatitis virus (Rhabdoviridae).

McCutcheon AR, Roberts TE, Gibbons E, Ellis SM, Babiuk LA, Hancock RE, Towers GH. Antiviral screening of British Columbian medicinal plants. J Ethnopharmacol. 1995 Dec 1;49(2):101-10.

- ▶ 100 British Columbia plants were tested, including Lomatium. Lomatium inhibited the parainfluenza virus, but was ineffective against the other six viruses, including a virus characteristic of the Influenza viral family.

Lomatium pearls

- ▶ *Lomatium* is a warming expectorant, and expectoration itself has general antiviral effects, through the expression of the antiviral antibodies of the system and other substances contained in the mucous.
- ▶ It was ineffective against West Nile virus during a widespread epidemic in Colorado in 2003.
- ▶ *Lomatium* may or may not enhance general host resistance.
- ▶ Its most specific use among the both the Washoe and the old time naturopaths is for respiratory conditions.

Development of the *Lomatium* Herban Legend

- ▶ Misinterpretation of ethnobotany
- ▶ Ignorance of method of preparation
- ▶ Ignorance of methods to reduce adverse effects
- ▶ Scientific illiteracy, interpreting a pharmacological action (anti-viral) from a clinic effect (useful for influenza)
- ▶ Propagation by authorities, books, and natural product industry
- ▶ Blind acceptance of authorities.

See: *Lomatium* original report.pdf

Oplopanax

“Devil's club is an old Indian remedy for diabetes.”

- ▶ Diabetes is not an “old Indian” disease, and was rare in North American Indian populations in the 1940s.
- ▶ One ethnobotanical survey of Northwest Indians up to the mid 1980s, found only one informant who said it was good for diabetes, and that informant had heard this from a white person.

- ▶ In actual measurements of the effect of Devils' club in traditional decoction, by individuals who thought it helped them showed no benefit on blood sugar. One subject had fewer acute symptoms and though it helped him, but his post prandial glucose was over 600.
- ▶ Devils' Club is used as a tonic for everything by some NW Indians, not a specific for diabetes.

Oplopanax-diabetes-MH-article

Devil's Club pearls

- ▶ In small to moderate doses, Devil's Club is a useful relaxant expectorant, not overly stimulating, and useful for either a dry or an unproductive cough.
- ▶ Devil's Club "fortifies the spiritual heart" and is useful post trauma or post abuse to help a person regain a centered and safe heart space. Combine with Hawthorn and Rose.
- ▶ In higher doses, Devil's club is emetic and laxative, two of its primary traditional uses. Nausea typically starts at about ½ cup of the tea.

Lobelia

“Lobelia is a deadly poison (similar in action to nicotine)”

- ▶ This myth was invented around 1810 in order to prosecute herbalist Samuel Thomson for murder (he was acquitted)
- ▶ It has persisted in the literature of politicized allopathic medicine ever since.
- ▶ Lobelia does not appear in any standard official reference work from the field of plant toxicology. For instance: *Toxic Plants Dangerous to Humans and Animals 1st Edition* by Bruneton, and at least 8 others.

“Lobelia will help stop smoking by binding to nicotinic receptors and reducing cravings.”

- ▶ This is based on the previous myth, that its action is like that of nicotine.
- ▶ The FDA allowed over the counter lobeline to be sold as a stop smoking aid from the 1930s through the early 1990s. The claims were then banned after several clinical trials showed no effect at reducing cravings, or on success at quitting.
- ▶ As a relaxant expectorant, it may help with cleanup and remodeling of the airway after quitting.
- ▶ Like many other “emeto-expectorants” it may produce vomiting.

Lobelia clinical pearls.

- ▶ Lobelia is a powerful relaxant and antispasmodic to both smooth and skeletal muscle.
- ▶ Historical use in childbirth, bone setting, and severe spasmodic cough.
- ▶ A primary herb in formulas for the downward cycle of an exhausting spasmodic cough. Combine with *Althaea*.
- ▶ Even low doses may help acute asthma attack (but don't give up your inhaler yet)
- ▶ Pearl: equal parts Lobelia and Ephedra sinensis tinctures, 6-8 drops, for mild acute attack.
- ▶ See <http://medherb.com> Search on Lobelia

Ginkgo biloba

“Ginkgo is good for memory.”

- ▶ In very specialized cases in an elder with deficient cerebral circulation, *the standardized and concentrated extract* may increase cerebral circulation.
- ▶ No effect on memory in an acute situation.
- ▶ The myth is based on trial using high doses of the standardized extract taken acutely before a memory test.

“Ginkgo is an ancient Chinese remedy”

- ▶ Ginkgo nut/seed is food and medicine in China, the leaf may sometimes be used. It is a strong and toxic herb. Toxicity includes severe headache and GI upset. It was never used in China for the uses of the standardized extract today.
- ▶ The standardized pharmaceutical product contains concentrated flavonoids not present in significant amounts in crude plant material; it also has a class of compounds collectively called ***ginkgotoxin*** (thiaminase inhibitors) removed. Teas, powders, and tinctures do not contain the medicinal flavonoids, but do contain the toxic components and ***will very reliably cause a headache.***

Ginkgo pearls

- ▶ The standardized product may be useful for elder with declining cerebral circulation, may be helpful for depression and cognition.
- ▶ May be useful post head injury.
- ▶ May be useful for diabetic or other retinopathy. Combine with Bilberry extract.
- ▶ NB: The extract has blood thinning properties when used alone, and may promote retinal micro bleeding; may interact with aspirin or warfarin.

Serenoa

“Saw Palmetto is good for prostatic hypertrophy”

- ▶ Saw Palmetto has some warming astringency in the pelvic tissues, and historical use as a systemic tonic in cold and deficient patients.
- ▶ It was not traditionally considered to be sufficient alone for symptoms of BPH (per Ellingwood).

- ▶ The European herb industry has had a generation-long campaign to have this herb to be declared the herbal equivalent of the pharmaceutical **Proscar**, including rewriting history, rigging scientific trials and spinning failed trials to make them look successful.
- ▶ 2012 Cochrane metaanalysis: "Serenoa repens, at double and triple doses, did not improve urinary flow measures or prostate size in men with lower urinary tract symptoms consistent with BPH."

<https://www.ncbi.nlm.nih.gov/pubmed/23235581>

Saw Palmetto pearls

- ▶ Combine with Nettle root, Horsetail, Damiana, and/or Yarrow plus warming herbs for BPH in a generally cold and deficient patient. Not effective with prostate volume above about 40 cc. (Yarnell).
- ▶ To stimulate digestion, improve the appetite, and encourage assimilation and promote nutrition and weight gain, combine with Fenugreek, Fennel, and Damiana.
- ▶ It is expectorant to the mucous membranes of the nose, throat and bronchi, relieving irritation, relieving acute catarrh and restoring normal function in subacute and chronic conditions. Combine with like herbs

Tanacetum parthenium

“Feverfew is good for migraines.”

- ▶ Based on historical use in England where patients would eat fresh feverfew leaves in order to reduce the frequency of migraines
- ▶ Clinical trials of fresh material supported this but the reduction was only slight, less than 25% reduction in frequency (efficacy vs effectiveness; significance vs relevance)

Feverfew pearls

- ▶ Large doses of tincture may in fact abort a migraine at first prodromal symptoms (Frances)
- ▶ A reliable emmenagogue (sometimes unexpected side effect when taken for migraine)
- ▶ May be useful anti-inflammatory. Traditionally used for arthritis.
- ▶ Traditionally used as diaphoretic in fever.
- ▶ Of the category in Chinese medicine to "relieve constrained *Liver chi*" and may be most appropriate for the headaches that fall within this pattern.

Coriandrum (cilantro)

"Chelates heavy metals from the body"

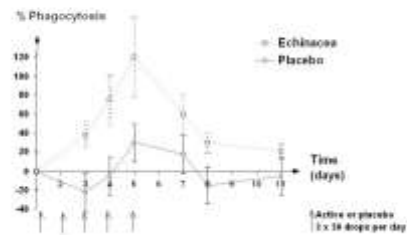
- ▶ Based on a study 20 years ago, appearing in the Journal of Electroacupuncture where a researcher, testing himself with muscle testing, determined that he was toxic with mercury and then that cilantro resulted in complete removal of mercury from his body.
- ▶ This was rapidly adopted by the herb industry to create a whole new multi-million dollar class of products.
- ▶ The plant may absorb heavy metals from its environment, but not from your tissues while moving through your gut.
- ▶ It common commercial companion Chlorella is equally non-effective.
- ▶ Coriandrum itself is bitter, aromatic, cool, and dry, and carminative

Echinacea

“Loses efficacy after ten days.”

- ▶ “Loses efficacy after ten days.”
- ▶ Based on mistranslation of German article
- ▶ Echinacea was only given for the first five days, and immune parameters returned to baseline at ten days.
- ▶ Another trial showed persistently increasing immune parameters throughout six weeks of regular use in chronic vaginal infection

Echinacea Root: Short or Long-Term



Jurcic K et al. J Phytother 1989; 10: 67-70

Arrows indicate the Days of the injected Echinacea dose, which was discontinued after day 5

Jurcic K, Melchart D, Holsmann M, Martin P, et al. "Zwei probandenstudien zur stimulierung der granulozytphagozytose durch echinacea-extrakt-haltige präparate." Zeitschrift für Phytotherapie 1989;10:67-70

“Good for the common cold”

- ▶ Scientific trials of Echinacea for the common cold have not been positive on average.
- ▶ Useful for those who are generally immune deficient, not for normal viral infection in an otherwise healthy person.
- ▶ Useful for any type infection in the system with local or febrile heat.

“Will not aggravate Autoimmunity”

- ▶ Can acutely increase autoimmune processes involving antibody or cell-mediated lymphocyte action. Does not always do this.
- ▶ Collection of more than 30 case studies in systemic lupus, rheumatoid arthritis, ulcerative colitis, multiple sclerosis, ITP, many with rechallenge.

Echinacea clinical pearls

- ▶ A potent topical application for any inflammation or infection. Use the decoction or a dilution of the tincture from 1:1 to 1:6.
- ▶ Large doses of a decoction are very potent for serious infections. Decoct 1 ounce of Echinacea angustifolia root in a liter of water. For serious infection, drink the entire liter over 2-3 hours. Or drink ½ cup per 2-3 hours until gone. Has been highly effective in kidney infection, copperhead bite, pelvic inflammatory disease, oral infection after surgery, facial cellulitis from tooth abscess.

Hydrastis

“Goldenseal is an antibiotic”

- ▶ Constituents of goldenseal (and related berberine-containing plants) will kill bacteria on contact.
 - ▶ Disrupt bacterial metabolism
 - ▶ Disrupt bacterial defense mechanisms
 - ▶ Disrupt existing biofilms
- The constituents are poorly absorbed and have no efficacy from the blood level.*
- ▶ Contraindicated in acute mucous membrane conditions, strong astringency suppresses beneficial mucus

Hydrastis clinical pearls

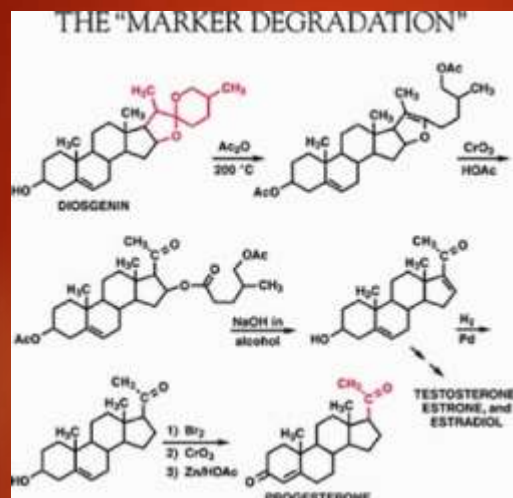
- ▶ Apply topically as tea or fluid extract. May discolor skin.
- ▶ Spray on throat.
- ▶ Nasal spray (1 tsp of glycerin, 15 drops Hydrastis 15 drops myrrh, add water to make 2 ounces) for chronic sinus infection.
- ▶ Douche
- ▶ For all purposes, may combine with Myrrh

Dioscorea

“Wild Yam has hormonal effects”

- ▶ Various claimed for female hormones, especially progesterone
- ▶ Also supposedly promotes anti-inflammatory hormones.

- ▶ Based on misinterpretation of biological significance of the "Marker Degradation" process which the pharmaceutical industry has used to make human hormones using the steroid structure of plant hormones.
- ▶ The process requires heating the materials to twice the boiling point of water and treating alternately with high and low pH solutions outside of normal physiological ranges
- ▶ Humans can't do this in their bodies.
- ▶ The industry formerly used diosgenin from Mexican Wild Yam to do this. Today they use beta-sitosterol from soy because it is cheaper.



The process of making steroid hormones from diosgenin or other plant steroids cannot be achieved in the human physiology.

Wild Yam clinical pearls

- ▶ The most reliable and potent antispasmodic for smooth muscle.
- ▶ Uterine cramping
- ▶ Intestinal colic
- ▶ Gall bladder colic
- ▶ Renal colic
- ▶ Combine with equal parts of *Viburnum opulus* and *Lobelia inflata*.

Juniperus

"Juniper is a kidney herb"

- ▶ True, but it is much more than that. Potent warming alterative, digestive stimulant, blood mover.
- ▶ "Juniper will irritate the kidneys"
 - ▶ May be based on studies of the essential oil of another plant
 - ▶ May be based on non-official species
 - ▶ Harmless for short or long term use in anything but the first early stages of an acute kidney infection.

Juniper clinical pearls

- ▶ Potent topical antiseptic
 - ▶ Directly antimicrobial
 - ▶ Disrupt biofilm signaling
 - ▶ Stimulates local circulation and immunity
- ▶ Potent smudge – aerosolized disinfectant
 - ▶ Reaches infected surfaces of respiratory tract
 - ▶ Antimicrobial
 - ▶ Stimulate local response

- ▶ Potent alterative and blood purifier
- ▶ from Fr. Kneipp: Take five berries on the first day, then six berries on the second, and so on until you reach 30 berries in a day. Then reduce by one a day until you reach 5 again.
- ▶ Kneipp "invariably" produced strong improvement in general health.
- ▶ This can be done as a course with small daily doses of the tincture.
- ▶ Bitter
- ▶ Aromatic
- ▶ Digestive tonic/stimulant
- ▶ Draining diuretic
- ▶ Stimulates immunity and lymphatic flow.

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