

CRATAEGUS FOR ASTHMA: CASE STUDIES

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ABSTRACT

Administration of a tincture or solid extract preparation of *Crataegus spp* to patients with asthma has proven remarkably effective in the clinical setting. While original prescriptions were based on specific indications, the mode of action is probably related to anti-inflammatory, anti-allergic actions of flavonoids abundant in the herb. In addition, *Crataegus* appears to address underlying emotional issues that may precede the development of pathology. Some nonasthmatic cases are included to illustrate this point.

PREAMBLE

"...in Indian medicine the plant is seen as a repository of medicine knowledge which the student can tap by the inner experience of the consciousness of the plant."

Matthew Wood

Seven Herbs, Plants as Teachers
North Atlantic Books, Berkeley, CA,
1987, p. 82.

The use of plants as medicine has a history that precedes the emergence of scientific methods by many centuries. Despite the lack of tools to quantify and assess constituents or measure biochemical responses, herbal medicines were used successfully to treat sick people. In many cultures, including traditional Native American cultures, instructions were received in Vision on which plants to use and how they were to be given. Many of the plants we study and use in our clinics today, originally came to be used as Medicine in this way. Such visions did not always come easily, often being sought by fasting, sacrifice, and Ceremony.

The material contained in this article regarding the use of *Crataegus* for respiratory and emotional symptoms was gifted to the author through many years of communion with *Crataegus* in Vision and Ceremony. The proposed biochemical mechanisms of action came to be understood only by researching the literature after the fact.

BACKGROUND

The large majority of asthma cases are of atopic origin in which a hypersensitivity response to an external stimulus creates an inflammatory reaction in the bronchial tree resulting in cough, wheezing, and dyspnea with respiration characterized by a prolonged expiratory phase. Pathophysiology includes the release of multiple primary and secondary mediators of inflammation, including mast cells, basophils, lymphocytes, macrophages, and eosinophils. Histamine released from mast cells and basophils is probably the most important mediator in the onset of acute symptoms, resulting in bronchoconstriction, increased vascular permeability and an increase in bronchial secretions. Platelet activating factor (PAF) also released from mast cells and IgE sensitized basophils contribute to increased vascular permeability. Cellular release of prostaglandins (PGD₂) and leukotrienes (LT C₄, D₄, E₄) contribute to bronchoconstriction, with leukotrienes further contributing to increased vascular

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permeability. Free radicals are released creating epithelial tissue damage. The degree of vascular permeability appears to directly affect the degree of hypersensitivity exhibited by the patient. *Crataegus* is high in a number of flavonoids including anthocyanidins and proanthocyanidins, quercetin, quercetin-3-galactoside, vitexin, and vitexin-4-rhamnoside. Many of these flavonoid compounds have been shown to stabilize collagen matrix, thereby strengthening vessel walls, leading to a decrease in capillary fragility and vascular permeability. They have also been shown to inhibit the release of secondary mediators of inflammation from leukocytes, such as leukotrienes and prostoglandins. What may be responsible for the almost immediate relief experienced by the patient who would otherwise reach for the inhaler is *Crataegus'* ability to prevent the release of histamine by blocking the enzyme histidine decarboxylase.

CASE 1

A 75 year old woman, H.M., came into the clinic in October of 1997, with asthma that started after she contracted pertussis in 1954. At that time she also developed symptoms of chronic fatigue and what she termed "nervousness." Her history revealed a strong, heartfelt, overly generous woman to whom life had presented many griefs and challenges. Her way of coping was to hold her feelings in, as the challenges of her life only seemed to overwhelm others if she shared them.

Allopathic medications at this time included 3 inhalers, Proventil, Serevent, and Aerobid, all to be taken as needed. She expressed a desire to discontinue these, as they had a tendency to exacerbate her nervousness. At the time of the first office call, she found a need to take at least one puff (dose) of each inhaler every 1-2 days, using the Aerobid, a steroidal compound, only as a last resort, perhaps 1-2 times a week.

She was treated with homeopathic Pulsatilla LM-1, and given the following herbal formulas in tincture.

Formula #1. *Passiflora* 60 drops 1 hour prior to retiring and again at bedtime.

Formula #2. *Piper methisticum* 1 dram (per 1 oz bottle) was added for its nervine qualities and specifically for its ability to emotionally lift a patient up from a chronically dark and challenging place.

Verbascum 2 drams
Eriodictyon 1 dram
Aspidosperma 30 drops

These herbs were placed in the formula specifically to nourish the respiratory tract and encourage relaxation of the bronchial tree.

Oplopanax 1
Eleutherococcus 3

Oplopanax helps moisten a dry, nonproductive cough. Both *Oplopanax* and *Eleutherococcus* are adrenal adaptagens, strengthening the patient's physical ability to deal with stress. In addition, *Oplopanax* was used by Northwest Natives as a warrior totem, and as such, is often quite helpful in assisting patients with issues of empowerment. Flower essences of *Crataegus* and Star of Bethlehem were also added for their beneficial effects in healing grief.

Formula #3. A tincture of *Crataegus* was dispensed separately, with instructions to take 30 drops as needed whenever chest tightness and dyspnea might otherwise induce her to reach for her inhaler. She was instructed that she could repeat this dose freely every 1-2 minutes for up to 3-4 doses and to resort to the inhaler only if this failed to relieve her dyspnea.

She was also given a multiple B-complex with minerals and encouraged to journal her feelings.

On follow-up 3 weeks later, the patient reported that she was sleeping better and feeling more stamina and strength both physically and emotionally. Her respiratory symptoms were improved. She reported that she was almost completely off the inhalers, using 1 or 2 doses of the *Crataegus* tincture instead. She ran out of the herbs after 2 weeks and had not refilled them. She noted she was not quite as strong off the herbs and had to resort to the inhalers again. Tinctures were refilled and by December, only 2 months later, not only was she completely off the inhalers, but even her need for hawthorne was decreased to every few days.

While hawthorne (*Crataegus*) can be a great adjunct in the treatment of respiratory disease, and in particular in helping patients to de-

crease their dependence on inhalers, it does its best work when given in combination with a whole constitutional approach. This patient reported on one occasion that her need for hawthorne went up if she let her lung/adrenal formula run out, illustrating the value of a multifaceted approach.

CASE 2

M.B., a 34 year old woman with severe chronic fatigue immunodeficiency syndrome, came to the clinic in July of 1997, complaining of a return of her asthma symptoms, a problem she had experienced off and on since childhood. Like many CFIDS patients, M.B. was difficult to treat because of her tendency to hypersensitivity responses to many substances that might have proven helpful in another patient. As she had been coming to the clinic for a few months, she was already on *Glycyrrhiza* glycerite 15 drops tid (more was not well tolerated), echinacea 2 tabs tid and a combination of 7 parts *Astragalus* to one part *Eupatorium perfoliatum* 15 drops tid. All these herbs were aimed at enhancing immune function. In addition, *Glycyrrhiza's* adaptogenic qualities make it a helpful adrenal tonic. She was able to tolerate a multiple B-complex with minerals and antioxidants well, and was kept on this. Homeopathic medicines had been tried, but up to that point there had not been much success (although a good remedy was found for her at a later date). Because of her sensitivity, the only medicine given to her for the asthma was a solid extract of *Crataegus* to be taken 1/4 tsp QID and as needed for acute bronchoconstriction. She was on an allopathic medication, Accolate, dose unknown, which had done nothing for her asthma symptoms. She reported that inhalers prescribed by the medical doctor also did nothing and she had abandoned them as they exacerbated her chronic insomnia.

On follow-up 3 weeks later, M.B. said her asthma was "nearly gone" with the *Crataegus*, which she took QID without fail. This result continued to hold for her and there has been no further recurrence of her asthma.

CASE 3

T.D., a 39 year old male student, placed himself on *Crataegus* tincture 30 drops bid and as needed for asthma after attending one of my lectures. He reported marked improvement in his respiratory symptoms, as well as immediate relief during more acute episodes. It was not clear whether he had ever been on inhalers. This man may have done better with a full constitutional approach had he been amenable to coming to the clinic, but nevertheless, the *Crataegus* by itself made a significant impact on his asthma.

CASE 4

F.L., a 43 year old woman, reported to the clinic for treatment of some mild PMS and fatigue from overwork. On history she revealed she had asthma since childhood, which now came on only with exertion. She used inhalers only occasionally for severe symptoms, but found that her ability to exercise was markedly limited by the dyspnea and wheezing which came on after even a short walk.

In addition to homeopathic *Calcarea carbonica* LM-1, she was given an herbal liver formula containing *Chelidonium*, *Taraxacum*, *Silybum*, *Cynara*, *Bupleurum*, *Berberis*, *Althea*, and fennel to be taken 60 drops bid for her PMS symptoms, and a tincture of *eleutherococcus* 6 parts and *oplopanax* 2 parts to be taken 60 drops bid. She was instructed to take a tincture of *Crataegus* 30 drops tid and as needed. She noted on follow-up 3 weeks later that her asthmatic symptoms were significantly improved but that the hawthorne tincture seemed to work best once symptoms began during exercise. If she took a dose prior to exercising in the hopes of preventing symptoms, the herb did not seem to work as well as it did once symptoms were flaring up with exertion.

In two years and approximately 20 to 25 patients with varying degrees of asthma, there are only 2 cases in which the *Crataegus* did not completely enable the patient to discontinue use of inhalers in a relatively short period of time. One was a patient who was using a steroid inhaler among others and tried to discontinue it too quickly. (Steroid medications must be discontinued slowly and cautiously.) This patient felt enormous relief with the hawthorne however, using it to great

advantage between doses of the steroid, effectively allowing her to discontinue use of the non-steroidal inhalers. "I can breathe easier when I take it," she says. Within 20 minutes one-half tsp dose of the solid extract totally relieves the "tight grasping sensation" she gets in her chest after exposure to certain chemicals.

The other case in which hawthorne was unimpressive was a young woman of 17 who had been coming to the clinic for 2 years and was already experiencing significant healing in her asthma. This patient had been off her inhalers for some time already, and was using a tincture of ephedra on the rare occasions that she experienced dyspnea. A trial of *Crataegus* was suggested to replace the ephedra. Who knows if it would have helped her earlier on but by this time in her process the emotional symptoms that usually call for *Crataegus*, such as grief, depression, and a tendency to close down, were no longer present, and she reported no relief from the use of *Crataegus*, preferring the ephedra tincture.

A phenomenon particular to the pathophysiology of asthma is the tendency of the asthmatic to retain inhaled air in the lungs. This, combined with the spasmodic bronchoconstriction that narrows the airway, creates an interesting parallel to the patient who is helped emotionally by *Crataegus*. As the following cases illustrate, *Crataegus* may well be indicated for patients who have emotionally closed down and whose hearts are clogged by old wounds and resentments they are unable to let go of, or exhale as it were.

CASE 5

P.A., a 41 year old woman, presented to the office in December of 1994 with deep longstanding depression and fatigue. She had a full-time professional position and did not appear depressed. In fact, her closest friends and family had no idea of the depth of her depression. She tended to be closed to sharing her feelings and preferred to be alone most of the time, finding the company of others irritating. She admitted to a tendency to hang onto old wounds and resentments. Initially she was placed on homeopathic *Aurum*, a multiple B-complex, and an herbal tincture containing *Hypericum*, *Cimicifuga*, *Panax ginseng*, *Trifolium*, and *Taraxacum*. By

the 3 week follow-up she was feeling significantly better, with less fatigue, depression, and irritability. At that visit, based on the specific indications of depression in a closed patient, *Crataegus* was added to her herbal formula such that she would receive one drop of *Crataegus* 4 times per day with her other herbs.

On follow-up 4 weeks later, P.A. was radiant, enthusiastic, and bubbling with excitement. "I feel like myself for the first time in my life!" she said. "I feel lighthearted and happy!" She repeatedly interrupted the session to insist that "that new herb" must not be discontinued. "I want you to know that herb really helped me, Dr. Frances!" she kept insisting, adding that she felt the dramatic shift in her emotions immediately upon taking the first dose of the new formula.

As this patient did not have any physical symptoms calling for *Crataegus*, drop doses were prescribed in the same way a flower essence might be used in treating emotional symptomatology. The author no longer prescribes *Crataegus* in drop doses, however, as *Crataegus*, a food grade herb once used as a jam, is so generally nourishing to the entire cardiovascular system, that it should be given in material doses whenever it is indicated in the hopes of preventing the cardiovascular pathology that is all too common in Western culture.

Other patients placed on *Crataegus* for emotional indications of depression, or grief that has caused them to close down report similar experiences, many of them using the same word, "lighthearted." One woman said, "I love that hawthorne! It just warms my heart every time I take it. It makes me feel more open. People aren't really so bad after all, you know?"

CASE 6

A 36 year old man reported to the office complaining of a persistent pain in his back since a bout of pneumonia treated by the medical doctors a few weeks previously. Physical examination revealed restricted motion in the thoracic spine, pronounced at level T3-T4 and T4-T5 with some hypertonicity of surrounding muscles. Spinal manipulation was done with the usual massage and heat packs and the patient was released with a formula of antispasmodic and anti-inflammatory herbs usually helpful in these

cases. His muscles continued to be hypertonic, however, with repeated adjustments to the spine proving always a challenge and never holding for long.

Further questioning revealed him to be a mild, gentle and generous person whose dreams recurrently suggested that he needed to be more forceful and assertive. Although he could see intellectually what his dreams were telling him, his resentment of his loud, domineering, and aggressive father created a block to integrating his own warrior spirit. His heart was closed. Based on this knowledge, the history of a chest condition (pneumonia), and a general constriction in the area of the "heart chakra," he was prescribed a tincture of *Crataegus* to be taken thirty drops four times a day. On return visit one week later, his muscles were less hypertonic and for the first time the manipulation went quickly and easily. He looked visibly more relaxed and said himself that the tincture made him feel "more open in my heart." In the weeks that followed he was able to integrate more assertiveness and confidence and even to appreciate his father a little more.

There are few references to *Crataegus* as an herb for treating emotional states in the literature though Lust says it is useful for "nervous conditions, particularly insomnia." Ellingwood is more helpful when he states, "It dispels gloomy forebodings. . . (and) causes a general sense of well being."

References to hawthorne as a respiratory herb are almost nil. Charlotte Ericksen Brown, in her book, *Medicinal and Other Uses of North American Plants*, briefly mentions one species as being useful for "coughs and whooping cough" with no further elucidation. Ellingwood is a little more helpful, though the asthma he writes of appears to be of cardiac origin: "Dr. Osborne cured himself of a peculiar asthmatic difficulty of the spasmodic type. He had enlargement of the right side of the heart, the oppressed breathing at times being very severe. In a paroxysm, he took eight drops of *Crataegus* every 15 minutes with almost immediate relief. There was no complete cure, but much benefit."

While *Crataegus* is a powerful tool in the treatment of asthma, it should not be used alone if complete heal-

ing is expected to take place. Basic naturopathic therapies that address nutritional needs, allergies, adrenal function, and immune and liver function should always be considered.

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BIOGRAPHY

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