



herbs for back pain...

A lot of people suffer back injuries; I've heard estimates that 65 million people in America alone suffer from chronic back pain. Conventional treatment of such injuries usually revolves around strong pain killers, anti-inflammatory drugs, and very often surgery. Unfortunately, it is too common that these treatments do not yield the recovery hoped for.

One reason for this is that most conventional approaches are suppressive in nature and do not really address the issues that need attention in order for healing to take place. In this regard, we are fortunate that many medicinal herbs, coupled with other therapies, can offer benefits and healing unique from any other modality. I have applied this knowledge for myself and with clients over the years, and offer this insight based on first hand (or perhaps "first back"?) experience.


I thankfully acknowledge the insights of David Winston, Lise Wolff, and especially Matthew Wood, which have been invaluable to me in learning how to address these types of injuries.


back injuries, joint injuries


structure & function; an anatomical overview...

Spinal injuries, though in many ways unique from the injuries of other joints in the body, mirror similar patterns to them. An understanding of how to treat back injuries, and the reaction of the rest of the body to them, offers insights that will prove useful in addressing hurts to other joints. But in order to do so, we much have at least a basic understanding of the physiology of the joints in our bodies.

The foundation of joints can be viewed as the bones that come together to make them. There are three types of joints:

 Synovial, which move a lot and are generally the ones we think of when we say "joints" (knees and shoulders and elbows and such)

 Cartilaginous, bones that are connected entirely by cartilage and move, but not so radically as synovial joints (think about the ribs connecting to the sternum. The discs of the spinal column are also cartilaginous joints, but the spine has synovial joints as well)

 Fibrous, joints that don't move (think where the plates of the skull come together)

In synovial joints, each bone is "capped" with a padding of cartilage, a hard, gristly substance that pads the more rigid bone tissue. The junction where these two cartilage capped bones come together is encapsulated by a membrane called the synovial membrane, and the space enclosed is filled with a fluid called synovial fluid, which is produced from glands with the joint cavity called (can you guess?) synovial glands. This synovial fluid is slippery and somewhat viscous (it's been described as "egglike"), and provides the lubrication so that the ever moving joints do so freely and don't abrade or wear at each other. In addition to merely lubricating the joints, it softens the outer surface of the cartilage. The joint itself is held in place by tendons, which connect bones and muscles, and ligaments, which connect the bones to bones.

In the spinal column, there are both synovial joints (called "facet joints") *and* cartilaginous joints (these are the actual discs that separate each vertebra). These discs have strong and fibrous exteriors to provide stability, and a softer, gel-like interior to act as a cushion or shock absorber. Think of them kinda like tough jelly donuts. Between the facet and cartilaginous joints is an opening that runs the length of the spine which houses the spinal cord. Along the length of the spine, 31 pairs of nerves branch outward and connect the nervous centers of the body (traditional understanding of what we might call "nervous centers" are not limited to the brain, but are housed throughout the body. The heart and solar plexus are examples, and not just metaphorically; both contain neural cells grouped into ganglia just as neural cells in the brain are. The heart is, in fact, 60-65% neural cells). The spinal cord itself is covered by a protective membrane, and is lubricated within this sheath by cerebrospinal fluid.

Both spinal and other synovial joints exist interdependently with the muscles that surround them. Not only do the joints respond to the will of the muscles, but the muscles are also responsive to the goings on in the joints.

This is but a very brief sketch of the structural considerations of joints, and though it gives a fair picture, it leaves out a lot. I'd encourage you all to look into learning more about this anatomy, and as an initial offering would steer you towards a very clear and concise overview of spinal anatomy can be found at the Maryland Spine Center's website:

www.umm.edu/spinecenter/education/anatomy_and_function_of_the_spine.html

nutrition for the bones and connective tissues

To jump right into the use of herbs that have a restorative action on bones, connective tissues and joints would be a misstep. Before we look to take a remedial action, we should be sure that all of the body's needs are being provided. This allows us to build strong joints from the ground upward, rather

than trying to compensate for a shaky foundation with herbs or other therapeutic modalities.

Nutrition is unstatably important. While an overall nutrient rich diet is key, there are certain minerals and nutrients that are worthy of special mention. I owe a depth of gratitude to Paul Bergner, who presented much of this information so well in his *Healing Power of Minerals, Special Nutrients and Trace Elements*.

calcium Ca

We've all been ingrained that calcium is the important nutrient to ensure "strong bones and teeth". While this is certainly true and adequate calcium intake is an absolute necessity, it should also be noted that if we look at the countries in the world with the highest calcium intakes, we find that they also have the highest rates of osteoporosis. Conversely, developing countries where, on average, calcium intake is by our standards sub par, have much lower rates of osteoporosis. What gives?

There are a couple of factors at play. One of the most pertinent is that just because we're getting calcium doesn't mean it's going to the bones. Activity levels determine where calcium goes; when we are active, it goes to the bones, when we are inactive, it leaches out into the serum. So inactivity, a hallmark of "developed" western cultures, causes the loss of calcium in the bones. It also favors the production of bone spurs and other calcifications on the exterior of the bones, especially if there is inflammation, which essentially "cooks down" fluids and causes the precipitation of calcium and other minerals.

The other big factor at play is that in our obsession with calcium, we neglect other important vitamins and minerals needed to effectively absorb and utilize it. Rather, there is a tendency to grossly over-consume calcium (many even believe the RDA of calcium is higher than it need be), and are deficient in its vital adjuncts. Calcium deficiency is probably more strongly correlated to a deficiency in the other nutrients needed to absorb and utilize it than it is to an inadequate consumption of calcium.

magnesium Mg

Magnesium plays a role in over 300 vital physiological processes, and those are only the ones we know about. Therefore, it goes without saying I can't give it the attention it deserves. But in regards to the musculoskeletal system, magnesium is of vital importance. Magnesium deficiency, like inactivity, causes the blood to become pull calcium from the bones. It also inclines towards more brittle bones, since calcium is, by itself, a more brittle mineral. There is a direct relationship between magnesium deficiency and muscle tension and spasm, both of skeletal muscles, and of the heart, and severe muscle spasms and tension can be caused by or predisposed by magnesium deficiency.

It is generally agreed among holistic nutritionists that a 2:1 ratio of calcium to magnesium is desired. Herbalist and clinical nutritionist Paul Bergner estimates that the average ratio among Americans is 7:1, and not uncommonly 12:1. Not only is this disparity between calcium and magnesium bad, but it is also the case that the vast majority – even amongst health & diet conscious folks – are magnesium deficient. Now, supposing that one knows that a 2:1 Ca/Mg ratio is ideal, and they buy a 2:1 mineral supplement, then they actually *worsen* the gap, going from (let's say) 7:1 to 9:2.

Unless someone has some reason to think they are truly calcium deficient, it is often a better idea to take, solely, magnesium.

vitamin d

Vitamin D is essential to the proper absorption and utilization of both calcium and magnesium. Our bodies will produce their own Vitamin D if provided adequate sunlight to the skin, but in the US, especially throughout the winter in the northern latitudes, our sun exposure often is not adequate.

boron

Boron is a trace element that aids in the efficient uptake and utilization of calcium and magnesium. It also helps to prevent its loss from the body. It may achieve this end by helping to convert Vitamin D to its active form.

silica

This is not usually considered an “essential nutrient” - there is no RDA for silica – it is of vital importance in the structure of all connective tissues, offering strength, resilience and flexibility. Silica forms the matrix of bones, cartilage, tendons, blood vessels, and myriad other tissues, and provides the structure for proper mineralization, and aids in the utilization of iron, calcium, magnesium, boron and potassium. It has been shown that high levels of silica and lower levels of calcium form stronger bones than high levels of calcium and low levels of silica. One sign of silica deficiency is brittle nails and hair with lots of split ends, both of which are formed primarily of silica. Silica is best obtained from strong infusions of herbs such as Horsetail and Oatstraw.

omega 3 essential fatty acids


Omega 3 essential fatty acids are just that: essential. Unfortunately, they are often lacking from the diet. Omega 3 EFAs help to reduce inflammation throughout the body. Actually, it is probably more accurate to say that a *lack* of Omega 3s *promotes* inflammation throughout the body; that this inflammation can be a deficiency syndrome. Omega 3 EFAs also promote stronger bones, and give tissues a greater elasticity, making them more pliable and so less prone to injury. And they improve cardiovascular health, and they ease depression (itself another deficiency sign), and and and... I could go on a long time.


Omega 3 EFAs are found in certain plants (flax seed, hemp seed, evening primrose oil), in fish and in some other meats. Animal sources, though, must be wild, or raised in a manner similar to that. Though, for example, salmon is one of the richest sources of Omega 3 EFAs, farmed salmon has little. Similarly, cows, if free ranging and pasture fed, will contain some Omega 3s (though nowhere near as much as fish), but do not when raised on a poor diet in a feedlot. Better red meat sources that have appreciable levels of Omega 3s include deer, elk, bison, and other game animals. You can also get Omega 3 EFAs in some eggs (it'll say on the carton). There is, though, a difference between the Omega 3s contained in plant versus animal sources, and one that will not make vegetarians all that happy. Plant sources of Omega 3 EFAs contain alpha linolenic acid (ALA), which is referred to, structurally as a “short chain” EFA. Animal sources contain eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), both of which are long chain EFAs. These long chain EFAs are the ones our bodies need. Though the body does have the

ability to convert ALA to EPA and DHA, it has been shown to only convert, at the most, 10%. So, in terms of supplements, fish oils are far more efficiently used by the body than plant based Omega 3s. Another concern with a specific plant based Omega 3 EFA, flax seed oil, is that it has such poor stability once pressed that *virtually all* flax seed oil available today is some degree of rancid, and consuming rancid fats is not a good idea. Flax seed, and the ALA it contains is still useful, but best taken freshly ground and added liberally to foods as a condiment.

body work and adjunct therapies

If you've hurt your back or a joint, you can't just "take stuff". There are other things that are equally, and even more, important. Of these, two stand out as paramount:

 *Take it easy.* Rest and time will do the most good, and I promise you, if one thing is sure, overexertion and not allowing yourself time to heal will result in more pain and prolonged healing time. This is very hard for some people, for both legitimate and ideological reasons, but it is a time for thinking about how your decisions will impact you long term, not short term, especially in cases of back injuries.

 *Cultivate Body Awareness.* Many of the other options I list below are based on this, but one needs to develop a keen sense of their body's reactions when dealing with back and joint injuries, so that they can remain aware of when they are, for example, stretching enough, and when they are pushing things too far. When participating in any therapies or engaging in any activities, your own body awareness should be your guide as to what you're able to do and what you can't.

stretching and yoga...

One of the things that happens when we injure a joint is that the muscles surrounding it tense up protectively. They often hold onto that tension, especially if we overexert ourselves early on. Engaging, very carefully and very consciously, in movement and stretching will help relax tension in the muscles, and gradually reduce their tendency to spasm or lock up. *I cannot emphasize enough the "carefully" and "consciously" part.* I feel that, especially initially, only very subtle "micromovements" are justified, cautiously exploring where and how your body is holding tension, and how it reacts to movement. Though immobilization is often a part of conventional therapies, this markedly weakens the muscles and also may allow them to adopt their tense, locked up state as normal.

Yoga may be an excellent means of facilitating this, but one must keep in the forefront of their mind not to overdo it. "Good postures for backs" is a broad grouping of stretches that may be wonderful but also may be very bad for this or that person's particular back injury. Same goes for injured joints like knees and elbows. A good yoga instructor can be a valuable guide, but be wary of any that seem to have a heroic disposition that you feel pushes past the limits of your body awareness.

chiropractic...

Chiropractors are doctors that specialize in spines. It makes sense to consult with them when the spine is injured. Unfortunately, they are viewed as "quacks"

by many people, and there are some chiropractors that have a more drastic approach that leaves many people turned off to them. A good chiropractor is not just trying to get you to “crack”, but is gentle and not forceful. The chiropractor I see is excellent, and uses the grostic technique, which relies on only the most subtle adjustments of the atlas vertebra. If he needs to make other types of adjustments, he will but he starts subtly and uses more pressure or force only as indicated, and is always gentle. This, I think, is the hallmark of a good chiropractor.

massage...

Massage can be very useful, again keeping in mind that, especially during the acute phase of an injury when the muscles are very reactive, you don't overdo it. Massage helps relax the muscles and improve circulation of both blood and the body's vital energy. Massage can be made more therapeutic by using various herbal oils, balms or liniments, which will help deliver their medicine topically over the injured area. Massage would be inappropriate over an area that shows sign of infection.

There are numerous other useful therapies one might apply; really, the scope of possibilities is literally endless. Reiki, qi gong, biofeedback, acupuncture and many others have immense potential for benefit. One consideration, most prevalent in acute back injuries, is whether traveling and getting in and out of a car will undo the benefits offered by the treatment. It may be the case that initially, rest at home will afford more benefit than the trauma (literally) that a car ride can inflict.

herbal treatment of back & joint injuries

Herbs, because they act on such a broad spectrum of systems, tissues and reactions, offer virtues in addressing back and joint injuries that few if any other options give to us. Some of the virtues they offer are clear, while others may seem “nebulous” to the more rational in thought. Very often, a single herb will act in several complimentary ways. I will offer here the herbs I have seen to work, and those taught to me by other herbalists I know and have faith in. Many of these herbs are obscure and hard to find in commerce; in fact, some of the most valuable aren't offered by any health food stores or commercially distributed supplement companies at all. I can, though, offer insights on small scale medicine makers who offer these.

dealing with pain...

This is, for obvious reasons, the first thing most people want resolved. If the person goes to a doctor, they'll quite likely get prescribed strong pain meds, especially for bad back injuries.

There are, however, significant risks to the use of pain meds. Obviously, we need to acknowledge that these are strong medications, and with them come side effects, interactions and a potential for addiction. But less obviously, and perhaps more pertinently, their very effectiveness as pain relievers pose significant risks. This is because pain, uncomfortable as it can be, is an important means of communication between the physiological body and the conscious intellect. Pain tells us what we can and can't do. It forces us to give in when we might choose to forge on. It is a vital reaction, and if we silence it,

we will not be able to hear its wisdom.




If we choose to use strong pain meds, it allows us to better go about our day, but in doing so we cannot hear our body telling us that we are re-injuring ourselves, and in doing so worsening the original injury. Even something so simple as carelessly getting in and out of a car can result in significant trauma, and thwart the body's efforts to heal. But because people using strong pain meds may not be able to feel the pain, they do not know that the trauma is occurring. It is my opinion that this accounts for the need so often for back injuries to be treated surgically; a person comes in, they get pain meds, these meds allow them to overexert and re-injure the body several times each day, and then the lack of healing that results from this is used to justify the need for surgery.

This is not to say that someone should not take pain meds. Sometimes relief from constant pain, even if brought on by pharmaceuticals, will afford a healing not attainable by other means. However, it is *vital* that if one chooses to use these drugs that they adhere to the rest required by such an injury, and not use the drugs as a means to go about business as usual. No herb, no drug, no therapy, no surgical procedure can bypass the need to take it easy, at least without consequences in the long run.

No herbs - at least no legal herbs - are as broadly potent as pharmaceutical pain killers. There are a few exceptions to this, but these plants are quite strong, potentially toxic, and should only be used by those knowledgeable about them. This does not mean though that herbs are inferior; quite the contrary. Used skillfully, herbs will not suppress pain, but rather resolve the conditions that are causing it. This approach generally does not result in immediate relief as do pain meds, but can yield a far better long term recovery.

To achieve this end, we need to use herbs with more specificity than is often done, and to do that, we need to look at the pain in the same way. Pain is not different only in degree, but also in quality. It may be dull and achy, it may be stabbing, it may feel like searing heat. When we differentiate pain in such a manner, we learn to understand the language in which it speaks to us, and we can use this understanding to form the most effective treatment.

While the varieties of pain are extensive, when addressing injuries to joints we can use the structures affected to help us differentiate possible remedies:

-  Muscle pain from injury, spasm and constriction
-  Nerve pain
-  Inflammatory pain

addressing muscle reactions...

One of the first responses by the body to injury of the back or joints is for the muscles surrounding the injury to seize up. This helps prevent movement that may worsen the injury; in a very literal sense the body is using the constricted muscles to form a natural "splint" around the joint. As anyone who has ever experienced this knows, though, the pain can be agonizing. In the initial stages of injury (say the first 24 hours), an application of ice can help relieve some of this pain while the person is returned to an environment in which they can rest and take it easy. There is a difference of opinion in whether, after this initial

period, it is appropriate to use ice, heat, or alternating heat and cold. Good points can be made on all sides. In my opinion, using heat, or alternating heat and cold will more effectively help the muscles “let go” and reduce their tendency to spasm or stay in tight constriction. There are, however, exceptions, and it is usually clear to the person with the injury which end of the spectrum feels most appropriate.

Following the injury, the muscles don’t just slip back into a state of relaxation. Rather, it is quite appropriate to say that they stay on a vigil, cautiously watching for any movements or actions that might aggravate the injury, and if they sense these, they will spasm and bind up, causing often excruciating pain. The first step to dealing with this is to listen to it: don’t do the things that cause it. Of course, that’s not so easy, since you may be lying in bed and would prefer to go to the bathroom to pee than to do it right there. So you’ll need to move very carefully and very slowly, using your greatest concentration and awareness to figure out how you can get up, sit down, or whatever movement you deem necessary. In doing so, listen to what your body says it can and can’t do. While it may say it can’t do *anything*, you’ll likely find that some specific sequence of movements will afford you the ability to move less painfully than other ways. If you are using pain meds, it is very important you try to be as aware of the reactions of your body to your movements as possible, because each time the body goes into a state of intense spasm, that aggravates the injury and reinforces the tendency of the muscles to do so again. It sets you back. This sets up a state in the muscles that I refer to as “hypervigilance” or “reactivity”; they are more prone to go into spasm, even when they just *think* you might do something that would be risky. The degree to which they do this can be minor or debilitating, and it can even recur long after the initial injury is healed.

Thankfully, there are numerous herbs that possess antispasmodic activity; each one with its own niches and indications. Among them, I have found the following to be especially useful. In regards to which form of the herb works best, I am referring to each remedy prepared as a tincture, unless otherwise noted. Also, while I will suggest dosage ranges as is appropriate for each plant, the most important consideration in the use of these herbs is that they need to be taken, at least initially, quite frequently; at least every hour, though preferably every half hour and if indicated every 15-20 minutes. As muscle reactivity lessens, dosage can lessen as well, but do understand that while a commercially prepared tincture of Cramp Bark might say “Take 30-40 drops 3 times a day”, that just won’t cut it in an acute situation. Rather, smaller, more frequent doses provide a continual influence of the herb on the system, and will yield a greater relaxant activity. Exceptions are noted in their summaries. And of course, remember the foundational role of magnesium.

cramp bark *viburnum opulus*, *v. prunefolium*, *v. acerfolium*

Cramp Bark, as its name clearly implies, is used to treat cramping. While many herbal antispasmodics can be very specific in regards to the kind of cramps they work best on, the beauty and virtue of Cramp Bark is that it possesses a broadly effective relaxant action that works throughout the body to reduce muscle tension and reactivity. Though small, frequent doses do work, I find its action most effective when taken in doses of around 30 drops of tincture. I often alternate this with more specific remedies, taking these more frequently, and Cramp Bark every two or three doses.

black cohosh *cimicifuga racemosa*

Though Black Cohosh has been pigeon holed as a “menopause herb” by supplement company marketing, it excels at treating muscle pain characterized by significant stiffness and a dull, achy, tender sensation. I have used a combination of Black Cohosh and Arnica tincture (not homeopathic but herbal) and find that the two together taken in small frequent doses are very effective at reducing muscle reactivity. Though Arnica is not properly an antispasmodic, it does act decidedly on muscles, relieving inflammation and increasing circulation to them. It may be worth noting that I feel that Black Cohosh tincture should be made from the fresh plant. While preparations made from the dried root may also be effective, I don't think that they work as well, nor do I think that they possess the fullness of activity that the fresh plant brings to a preparation. 5-15 drops is a good dose range; I feel that larger doses of this herb are unnecessary.

lobelia *lobelia inflata*

Lobelia is a powerful antispasmodic, indicated by severe spasm. It doesn't seem to work so well as a preventive, and so would not be an herb for regular use, but rather help to resolve spasm when the muscles are seized up and just won't let go. To this end, it can be very effective; I know of a woman here in Michigan that has used it to address grand mal seizures, and said it has worked better than anything she's ever seen used. Lobelia, in large doses, can have an emetic effect – it can make a person throw up, but the tincture taken in small doses is unlikely to produce this result. It also has a reputation of being dangerous, and some books have suggested that overdoses can prove fatal. This is, though, blatantly untrue, and although the story of how this misinformation got started is very interesting, it's too long to report here. 1-10 drops of lobelia can do the trick; start low, and work your way up if needed.

kava kava *piper methysticum*

Kava Kava is a very effective remedy for relaxing tension, and it works both on the mind and the muscles. I very often use it when people are holding their emotional or mental tension physically, but it can also be useful when the physical tension of an injury is causing a lot of mental anxiety and unrest. While I think Kava poses no problems when taken frequently, it's an herb I'd restrict to use as needed to deal with the anxiety attending injury, and not the mainstay of treatment. Also, I do think kava works rather nice in larger doses, anywhere from 30 to 90 drops (1 to 3 “squirts” of tincture).

nerve pain...

Nerve pain can be distinguished from muscle pain by certain characteristics. Pain that involves numbness, tingling, “shooting” or “searing” along the length of a limb indicates to us that the nerves are involved. While there is certainly an overlap in the herbs that treat muscular and nerve pain, the following are among the most effective:

saint john's wort *hypericum perforatum*

Like Black Cohosh, Saint John's Wort has been labeled an “herbal antidepressant” and few people know that it is an incredible remedy for injured

nerves. Saint John's Wort seems to effectively restore the function of injured nerves, whether the injury has impaired their function (causing numbness, tingling and impaired sensation) or induced excessive reactivity (shooting and searing pains along the length of a nerve, as in sciatica, which it is specific for). Saint John's Wort not only helps to resolve the pain of nerve injuries, and probably the inflammation as well, but it also appears to build up and restore damaged or poorly functioning nerve cells to proper function; what herbalists call a trophorestorative. Saint John's Wort helps to relax muscles as well, though its actions on the nerves remedy predominate. 5-15 drop doses are effective, more can be taken if needed. External applications of an infused oil can also be astoundingly in their effect. Dried Saint John's Wort loses much of its virtues however; look for preparations made from the fresh plant.

It must be noted that Saint John's Wort does interact with certain medications, causing them to be cleared from the body more rapidly. Because of this, it must be used with awareness and not used with drugs it may interact with. Be aware that it does not act with all drugs, but only those that are processed through certain detoxification channels in the body. Herbalist Jonathan Treasure explains the mechanism behind these interactions thoroughly here:

www.herbological.com/images/downloads/SJW.pdf

jamaican dogwood *piscidia erythrina*

Jamaican Dogwood is a very effective and unique remedy for pain. It has an action on both muscular and nerve pain, and when the tincture is applied topically, it can produce a topical anesthetic action. I've used Jamaican Dogwood when there is a combination of tight muscle constriction and very sensitive nerve pain. I've found it very effective as well when mental tension causes the muscles to lock up and not give. Though Jamaican Dogwood can be toxic in large doses, the large doses are measured in ounces, and not drops, and as the eclectic herbalist Finley Ellingwood says, it may "truly be called a harmless nerve sedative, indicated in the three following conditions: (1) spasmodic affections; (2) neuralgic affections; (3) cerebral excitation." Dosage range would be 5-30 drops, using 30 if needed, not from the start.

prickly ash *xanthoxylum americanum*

Prickly Ash tincture is sometimes, though unfortunately not quite always, amazingly effective for treating very severe, agonizing nerve pain. This would be pain of the searing and shooting variety - like an electric current - that doesn't go away and has the person either perpetually shifting or writhing around trying to find a position that makes the pain feel less intense. It does little for muscle pain and spasm, though. Like the muscular remedies, small frequent doses are far more effective than larger, infrequent ones. 5-10 drops should do, if it's going to work.

sweet clover *melilotus officinalis, m. alba*

Though I have not personally used either extensively, both White and Yellow Sweet Clover have been used to treat nerve pain, specifically when spinal nerve injuries are causing rather dreadful headaches. Upper Peninsula herbalist Andrea Corpolongo has used it and found it to be especially effective for headaches & migraines, taken immediately upon sensing their onset. King's American Dispensatory states that "Many observers have found it peculiarly effective in certain painful disorders, particularly neuralgias of long standing and

associated with debility.” Harvey Wickes Felter adds, “Melilotus is a remedy for pain associated with a sensation of coldness of the extremities and marked tenderness, lameness, or soreness to the touch.” 5-15 drop doses should be sufficient.

nettle *urtica dioica, u. urens*

Nettle, in regards to addressing joint injuries, can be remarkable when the fresh plant is used to sting the area over the injury. This use, called “urtication”, was once traditionally used to address injuries resulting in impaired nerve function, loss of sensation and paralysis. I’ve also used it to address inflammation in joints; it is specifically useful in tendonitis and other repetitive stress injuries, and has been used effectively in various forms of arthritis as well. Probably, it works by calling blood to the area affected. Because the sting can be uncomfortable, people have shunned this use, but I have found the long term benefits greatly outweigh the short term discomfort.

inflammation...

Inflammation can also be a cause of pain, though its initial occurrence is really a part of the body’s healing response. The “heat” of inflammation is generated by an increase in activity in the area affected. So, when we injure ourselves, the body increases the cellular activity in that area to heal itself. When inflammation of a joint becomes chronic, this is a sign that some necessary function of the healing process cannot be completed; so we see again that it is a means the body uses to communicate with us. It may be that we are deficient in some essential nutrient, such as Omega 3 EFAs, or that there is a lack of lubrication in the joint. Chronic inflammation may also result from autoimmune activity or a food allergy. When we use suppressive anti-inflammatory medications - or even certain herbs - we suppress the healing response of the body, and this can perpetuate the injury as well, even as the inflammation itself is negated. Thankfully, most anti-inflammatory herbs do not act suppressively, but change the conditions in the tissues so that the healing process completes itself, and returns to a state of health.

Most of the herbal anti-inflammatories will be discussed in detail elsewhere, so here I will simply list them along with the tissues they seem to affect most. Some herbs possess a systemic action, which broadens their scope but also limits the specificity of their action.



Black Cohosh: *muscles*



Arnica: *muscles*



Saint John’s Wort: *muscles and nerves*



Jamaican Dogwood: *muscles and nerves*



Sweet Clover: *nerves*



Solomon’s Seal (both True and False): *tendons, cartilage and connective tissues*



Teasel: *muscles, tendons, cartilage and connective tissues*



Salicin-containing herbs (Willow, Wintergreen, Aspen, Birch,

Meadowsweet): *systemic*



Licorice: *systemic*



Ginger: *systemic*



Turmeric: *systemic*

lubrication of joints & tissues...

One cause of inflammation can be a lack of lubrication in the joints. A foundational cause of this can be nutrient deficiency, especially a lack of Omega 3 EFAs. These, by providing oils, give tissues pliancy and resiliency, and make cells more resistant to damage. Another cause, specifically in synovial joints, hinges around the production and quality of synovial fluid in the joints. If, for some reason, the production of this fluid is impaired, there will not be adequate lubrication in the joint, and as a result friction and abrasion will result in inflammation. In such instances, using an anti-inflammatory drug that inhibits the body's inflammatory response is inherently short sighted, since it allows the cause of the condition to remain unaddressed and further structural damage to take place.

The role of herbs on the lubrication of joints and the production of synovial fluid is predominantly founded on empirical observation; which standard medical process does not, for the most part, value as a means of discerning legitimacy. Nonetheless, the results that practitioners have obtained using these plants speaks volumes. On the whole, plants acting on lubrication needn't be used as frequently as antispasmodics or herbs used for nerve pain. 3-5 doses a day is usually sufficient, and 2 will often do, if not optimal

solomon's seal *polygonatum biflorum, and various other polygonatum species*

I have found Solomon's Seal to be, without a doubt, among the most valuable herbs for addressing joint injuries of all kinds. Solomon's Seal seems to have a remarkable ability to restore proper lubrication in the joints, and I believe also helps restore pliancy to tendons and ligaments by supplying moisture to them if they are atrophied. It is specifically indicated for tendonitis and other repetitive motion injuries. While nothing works all the time in all cases, it has been my experience and that of others I know who use it that Solomon's Seal almost always helps a condition, and sometimes does so miraculously. Though I can only speculate, I think that in joints it acts directly of the synovial glands to restore proper lubrication. I have frequently seen and experienced Solomon's Seal completely resolve that sensation of friction, grinding, or clicking in joints, and on a number of occasions see this result within a few minutes of a single dose of tincture. This is not always the case, though, and an immediate response should not be expected outright. Daily, consistent use of the tincture provides optimal results. Solomon's Seal, as noted above, seems to act as an anti-inflammatory on almost all of the connective tissues (though I don't feel that it has a pronounced action on the muscles), this end being achieved by restoring proper lubrication, which both supplements the deficiency and acts protectively to reduce friction on the tissues. Small doses of tincture work quite well; I tend to use 5-10 drops, though Matthew Wood, from whom I learned about this plant, uses 3-5.

I have used both the tincture internally and the infused oil externally quite a bit.

I'm often asked if the tea will work as well as the tincture, and the honest answer is that I haven't used it and so don't really know. One consideration about using tea is that it will require a *lot* more root than the tincture, and since Solomon's Seal is difficult to find in commerce (I can confidently say that there probably isn't a single store in SE Michigan that has Solomon's Seal and I only know of a few in the country).

mullein *verbascum thapsus*

Mullein is mostly thought of as a "cough herb", but is, like Solomon's Seal, among the best musculoskeletal remedies I know of. While both the leaf and root can be used, I have the most experience with, and am partial to, the root. To be honest, I'm not entirely sure that Mullein works by affecting synovial fluids, though this is Matthew Wood's hypothesis: "It has a moistening, lubricating effect on the synovial membranes... so that it is hydrating to the spine and joints. It is often indicated in back injuries. People think they are untreatable and incurable, but an increase the synovial fluids will make the spine more pliable and comfortable. The vertebra will slip back into place more readily, pain and inflammation will decrease and the condition will get better." So, that's his thought. What I know of mullein root (Matt uses the leaves) is that it is one of the most effective means of addressing back problems caused by or resulting in misalignment. Whether or not it's working via lubrication, Mullein Root has helped me immensely when my spine's been kinked and I couldn't straighten up, and I've repeatedly seen it work well for clients and students as well. It seems to be most effective before the muscles react to the misalignment, and I've seen and experienced numerous instances where a single dose allow the person (occasionally myself) to just straighten right up. I think it is specific to misalignment resulting from herniated discs, as well as in treating sciatica resulting from misalignment. In acute cases, with all the nerve and muscle reactions that go along with them it need to be used more long term and supportively with other herbs, but after the acute phase has past and the back is no longer in "crisis" mode but still weak and not wholly stable, Mullein Root on its own can be immensely helpful. I think of it among the most essential remedies to restore spinal strength and integrity. 5-15 drops is a good dose; you can also make a tea from the roots.

fluid stagnation...

Another factor affecting lubrication is a stagnation of fluids in the joints. Since synovial fluid exists in a small, encapsulated space, stagnation is not likely. But other fluids, including cerebrospinal fluid, blood and lymph are more prone to impaired flow.

black cohosh *cimicifuga racemosa*

Black Cohosh, in addition to having an anti-inflammatory and antispasmodic action on the muscles, seems to possess a unique lubricating action on the spine. Matthew Wood, who has shown this plant to be among the best herbs in treating both recent and old whiplash cases, suggests that the injury causes a stagnation, or impaired flow, of the cerebrospinal fluid. We can think of the injury of whiplash as resulting in something similar to a kinked hose. Using this analogy, we can recognize that not only does the kink affect nerve function, but the ability of the cerebrospinal fluid to properly lubricate the spinal cord. Matthew Wood and Lise Wolff, both Minnesotan herbalists, have used Black

Cohosh in whiplash extensively, and I have seen good results from it as well, though I have less experience with whiplash. If it seems to work, but not fully, a bit of Lobelia can be added to enhance its function. 5-15 drop doses are sufficient, and (again) I feel that Black Cohosh should be avoided in larger doses.

yarrow *achillea millefolium*

Yarrow acts specifically on the blood, and possesses the unique ability to staunch bleeding, to break up and disperse congested blood and to dispel stagnation and impaired circulation, despite that these uses seem contradictory. It is quite appropriate, if strangely nebulous, to say "Yarrow knows what to do with the blood".

These unique multifaceted actions make Yarrow an invaluable ally in addressing any circulatory stagnation resulting from or concurrent with an injury. Yarrow oil or tincture applied topically over an area will both increase circulation in that area, and break up and congealed or stagnant blood. It may also be used internally in small doses of the tincture; 5-10 drops. The infusion works as well, both internally and as a compress. I'll elaborate a bit more on Yarrow when discussing injuries.

arnica *arnica montana and related species*

Arnica increases the circulation of blood to muscles, and within and around a joint. It can be applied topically as a tincture, salve or an infused oil, and also taken internally. Arnica, in large doses can be very irritating to tissues and thus has been considered toxic. In appropriate doses of 5-10 drops, likelihood of aggravations are rare. Many people use homeopathic arnica for this reason, and because the uses of the two forms are almost identical. I have not, though, found the homeopathic form to be as effective as the herbal. I'll elaborate more on Arnica when discussing injuries below.

calendula *calendula officinalis*

Calendula is a broadly acting herb, but here we'll stick to its uses as a lymphatic. Lymphatic herbs are used to decongest or otherwise improve the flow of the lymph within the body. Lymphatic fluid is responsible for supplying the cells with nutrition, cleaning up metabolic wastes, acting as the environment in which immune activity takes place and pretty much makes up most of the interstitial fluid of the body. Lymphatic fluid is not circulated by a pump as is the blood (though it does travel with the blood on its way to the cells), but rather relies on movement of the body to circulate. Inactivity - which more or less comes along with most injuries - impairs lymphatic flow, and thus an herb like Calendula can be useful to prevent stagnation. I'll elaborate more on calendula (déjà vu?) when discussing injuries below. Dose of tincture would be 5-30 drops.

structural integrity...

Of course, when considering healing from back and joint injuries, we must acknowledge the foundational importance of the strength and nutrition of the bones and connective tissues. If these are weak, then they will have difficulty healing, and will be prone to re-injury. The importance of nutrition has already been covered, but I would like to again stress that excess calcium intake and the exclusion of the nutrients needed to properly absorb and utilize it should be

thoroughly considered. There are certain herbs that we can add as offering a nutritive influence...

horsetail *equisetum arvense and related species*

Horsetail species are probably the richest sources of silica available to us via plants. They contain so much as not to be edible, and their common name “scouring rush” refers to their use as an abrasive to scour pots and pans. Since silica, as covered above, is so important in its role of providing a matrix for all connective tissues, improving their strength and resilience, horsetail is a very valuable ally. Steeping a good handful of the plant in boiling water will extract a very bioavailable form of silica. As an infusion, Horsetail may be combined with Oatstraw (also high in silica), Nettles, Raspberry leaf and other nutrient rich herbs to provide mineral nutrition. Strangely, though alcohol is a very poor solvent for silica, the tincture of the fresh plant seems, nonetheless, to afford many of the benefits we would ascribe to silica. Why this is I don’t know, but perhaps the plant not only supplies silica in its whole form, but also improves the metabolism and utilization of silica. Dosage of tincture would be 5-15 drops, 2-3 times a day. The infusion would probably be preferable as a form of nourishment; look to thin hair with splitting ends and brittle nails as signs of silica deficiency.

royal fern *osmunda regalis*

I’m still getting to know Royal Fern, but was turned onto it by Matthew Wood. It’s a very seldom used plant, more obscure even than Mullein root or Solomon’s Seal, but what little information can be found on it makes reference to its usefulness as a restorative medicine for bones and joints. Eclectic herbalist Finley Ellingwood wrote of it “With some physicians this agent is very popular in the treatment of... diseases of the bones from malnutrition, weakness of the osseous structure, rickets... It is also useful in weak back, especially in those cases where, with weakness of the muscular structure of the back, there are symptoms of incipient disease of the spinal vertebrae. It has been used also in subluxations.” Matt has said that it’s the only thing that has reliably helped his back pain. Dose would be 5-15 drops, 3 or so times a day.

structural damage-breaks and tears

There are myriad herbs that can be used to address the damage that physical trauma inflicts on the body. Probably, no other modality offers as many virtues or as many options. Among the most effective, I offer...

comfrey *symphytum officinalis*

Comfrey possesses a remarkable ability to facilitate rapid healing of virtually all tissues, and has been known and revered for long ages for this ability. It will heal broken skin, broken bones, torn muscles, tendons or ligaments, and just about anything else with great speed. Recently, though, the presence of potentially liver toxic pyrrolizidine alkaloids in Comfrey have prompted some people to avoid its use. While there is not a lot of clear cut evidence that liver failure or other harm is directly associated with the use of Comfrey, very good herbalists have opinions on both sides of the debate. I urge you, if you choose to use Comfrey, to look at the points presented on either side and make your own educated decision. For my part, I do not think that, taken in small doses and in limited duration, the use of Comfrey in healing injuries poses more risk

than the benefits it offers. One thing I would say, though, is that the quick pace at which Comfrey heals may cause problems; for instance, healing bones together before they are well aligned (in this case I'd mix it with Mullein). Some herbalists have also voiced suspicions that Comfrey may in some cases produce calcifications around a fracture it's healing. I have not seen this, but offer it as a consideration.

arnica *arnica montana and related species*

Arnica is among the premier herbs for treating injury. Applied topically, it summons the blood and Vital Force of the body to the injury and will help ease swelling, inflammation, pain, and bruising. Taken internally it helps repair and ease the pain resulting from torn muscles and connective tissues, either from a sprain or from overzealous exercise (think about the achy feeling after a workout, or the first day of heavy duty yardwork in the spring); I've taken 5 drops before bed after a hard days labor to ease that sore, achy, "I did too much" feeling that often comes the next morning. Remember, in its herbal form Arnica should be used in small doses of 5-10 drops. Also, because of its action of summoning blood to the site it is applied topically to, it should not be used on broken skin. In such cases, think Yarrow.

solomon's seal *polygonatum biflorum, and various other polygonatum species*

Solomon's Seal is very effective at both healing broken bones (I sometimes call it "bone glue") and addressing injuries to tendons and ligaments. It has a unique ability to adjust the tension of tendons, helping relax them if they're too tight, and tighten them if they've been stretched out. It will also heal tears, and for this would combine well with Comfrey, Teasel and/or Horsetail.

saint john's wort *hypericum perforatum*

Saint John's Wort is very effective at potentizing the healing response to trauma. If the infused oil or salve is applied topically, it really does help improve the recovery quite a bit, acting on the muscles, nerves, and pain. To this end, it is very often combined with Arnica, Calendula and Yarrow, as they all compliment each other's actions.

horsetail *equisetum arvense and related species*

Horsetail is probably one of the best remedies to help heal broken bones and, particularly, torn cartilage, tendons and ligaments. The tincture in 5-15 drop doses works quite well, as does the tea.

yarrow *achillea millefolium*

As mentioned above, Yarrow helps both to stop bleeding and also to disperse congealed blood, making it very important in the treatment of bruising. It can be applied topically as a poultice (the fresh leaves and/or flowers crushed up), a tincture, an infused oil, a salve, or a compress made from the tea. Yarrow stops bleeding, even severe bleeding, remarkably well. It is also markedly antiseptic.

calendula *calendula officinalis*

As an injury remedy, Calendula helps the body clean up the debris that results from trauma to a joint. It helps to resolve the swelling of injuries by facilitating lymphatic cleanup. A tea can be used as a compress for external application, as can an oil, tincture or salve.

teasel *dipsacus sylvestris*

Teasel root has been used to treat torn connective tissues, and may be among the best remedies for torn muscles. It possesses an anti-inflammatory action on virtually all joint tissues, and David Winston has spoken of its usefulness in treating narrowing of the vertebral discs. Dose of tincture: 5-15 drops.

goldenseal *hydrastis canadensis*

Goldenseal tincture can be applied topically, or taken in very small (1-3 drop) doses internally to help strengthen weak and injured spinal discs. This is another use I learned from Matthew Wood, and know works, but have no real sense of how. When I first tried Goldenseal for a herniated disc, I could immediately feel it working. I think it has a very important place in the treatment of disc injuries, as well as Matt's other uses, torn bursa and torn meniscus. Please though, if using Goldenseal, *only* use organically cultivated root. This plant is endangered in the wild because of its popularity as an herbal medicine.

customizing treatment...

While I have presented most of the herbs individually, with a few references to combinations, using a number of the herbs together to address the totality of the injury is essential to attaining optimal results. Using Mullein, for example, to help align the spine will do little good if powerful muscle spasms are pulling it back out of alignment. By recognizing some of the specific affinities of the herbs, we can put together a much more comprehensive treatment protocol than we would be able to by simply looking up "anti-inflammatory" or "herbs for sprained ankles" in an herb book or online. Well crafted formulas are like well crafted meals; it takes time and a knowledge of the ingredients to make the best recipes. This familiarity, though, comes from experience, and there is no substitute for trying the herbs and seeing how they work in specific situations. We learn by doing.

So...

This presents, I think, a rather useful overview of some of the possibilities offered by plant medicines, and one, I feel, that presents information not easily found elsewhere. As is always the case, I feel like a truly comprehensive exploration of the topic could go on infinitely, so please view this presentation as a foundation to expand upon.

In closing, I would like to make offer the idea that one of the (albeit bittersweet) gifts that an injury gives to us is humility. It's often very easy to think we know what would be good for someone to do for this or that problem, but when we are afflicted by a severely or chronically painful condition, all pretenses of ego fall away (its hard to have to big an ego when it takes you a half hour to get out of bed). It is important to remember that even when we do a exceptional job healing an injury, we cannot pretend that we are over and done with it for good. Very often, even when we have done an impeccable job in healing, we are left with a joint or back that while strong, is not "like new". While I've found that I can still do really aggressive lifting (like portaging a canoe on top my head), I also know that when I'm stressed and overexerted my back is more susceptible to having a relapse. This isn't because I didn't do a good enough job healing, but because an injury leaves an imprint in the body which will resurface when

we need to be told again to pay more attention and take greater care of our body.

There are always, in any therapy or treatment, limitations, and while the use of herbs to address back and joint injuries has constantly and repeatedly amazed me, there are still times when my best efforts don't work well enough, and others when I just don't know quite what to do. In some of these cases, the options afforded by modern medicine, which can be so inappropriate as an initial option, may provide the best choice to make. If this is the case, it makes no sense whatsoever to deny their usefulness, or to feel like turning to those options means you have in any way failed or been failed by more holistic alternatives. Holism is by nature inclusive; even of conventional medical practice.

I think, however, that such an end can be made far less common if the ideas and principles outlined here are explored and implemented as indicated. When we nourish ourselves and use herbs to enhance, rather than suppress, our body's innate wisdom, we are again taught humility by the power and potential of the healing force that resides within us.

This, at least, has been, and continues to be, my experience.

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