

Dietary, Nutritional and Botanical Interventions to Reduce Pain and Inflammation

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Generally speaking, the allopathic/pharmaceutical paradigm of anti-inflammatory intervention is forced to be ineffective and dangerous by the very nature of the pharmaceutical agents that are relied upon. Since the vast majority of drugs are single molecules that intervene at a specific part of a complex inflammatory phenomena, the end result often is similar to throwing a monkey wrench into a machine that is malfunctioning—a single aspect of inflammation might be stopped, but the system continues to malfunction and might become even more imbalanced as a result of the so-called “intervention.”

Of course, the most recent—and most tragic—example of this iatrogenesis is the Cox-2-inhibitor (coxib) and Vioxx catastrophe, which injured or killed more than 139,000 Americans.¹ Any student of nutritional biochemistry could have anticipated the problems years before these drugs caused their first deaths and injuries.² Indeed, the alarms were sounded within the first few years after the first coxibs were unleashed onto the “health care” market,³ but these alarms were ignored in favor of the most aggressive and successful drug-marketing campaign that the world had ever seen—one that made celecoxib/Celebrex the most successful drug launch in U.S. history, with more than 7.4 million prescriptions written within its first six months.⁴ The obvious problem with these drugs is that by targeting the Cox-2 enzyme, they block formation of prostacyclin, long considered “the good prostaglandin” due to its vasodilatory and antithrombotic actions, which are cardioprotective. Furthermore, any inhibition of cyclooxygenase tends to shunt arachidonic acid into the formation of leukotrienes, which promote painless inflammation and the acceleration of cardiovascular disease.⁵

The failure of the coxibs exemplifies a major failure of the drug paradigm; namely that excessive focus on the inhibition of isolated pathways creates additional imbalance due to its failure to appreciate the multifaceted and interconnected nature of physiologic systems and biochemical pathways. On the contrary, our holistic perspective holds that inflammation is most effectively treated by focusing not on isolated pathways per se, but on the patient’s overall health. Using an effective overall approach allows specific pathways to be nutritionally supported and modulated, rather than pharmacologically inhibited. In other words, whereas anti-inflammatory drugs are specific and inhibitory of normal function, the natural approach is more general and supportive of optimal function.

How can clinicians orchestrate a practical nutritional wellness protocol that specifically alleviates pain and inflammation? In essence, we start by getting the pro-inflammatory junk out of the diet, because we realize that high-fat and high-carb meals are pro-inflammatory.

Once we’ve created some space for healthy foods, we encourage consumption of anti-inflammatory foods such as low-carb, phytonutrient-rich fruits, vegetables, nuts, seeds and berries. We correct general vitamin and mineral insufficiencies with a multivitamin and multi-mineral supplement (which provides an anti-inflammatory benefit⁶), and we ensure that the daily vitamin D requirement of 3,000-5,000 IU is met by ensuring daily full-body sun exposure or by using a supplement that provides the appropriate amount.⁷ We replace the health-promoting fatty acids that are missing from the American diet by supplementing with ALA, GLA, EPA and DHA, and we recommend probiotics to counteract the barrage of antibiotics that most patients have had to endure during the course of their viral infections, allergies, and other non-bacterial ailments. Weight loss and the attainment of optimal weight are the natural results of proper diet and frequent exercise; adiposetissue is inherently pro-inflammatory,⁸ and its “replacement” by lean muscle tissue (which is anti-inflammatory⁹) helps shift the balance away from inflammation and toward homeostasis and healing. Up to this point, we merely have turned off the gas lines that were fueling the inflammatory fire; we have not yet done anything specifically anti-inflammatory per se. By the time we’ve re-established the foundation for health, a large percentage of patients already are healed of their primary ailments, and inflammation and pain might be reduced significantly.¹⁰

For patients who need additional anti-inflammatory interventions and relief from pain, now we can begin the implementation of treatment, which is customized to the needs of the patient. For osteoarthritis, we can use the tried-and-true glucosamine and purified chondroitin sulfates (note that purified chondroitin sulfate is cardioprotective¹¹), and now that a study has finally been published on the use of MSM¹² we can be confident that it works, even though we’ve been using it successfully for years! For pain associated with inflammation and edema (i.e., recent injury), proteolytic and pancreatic enzymes work well and work quickly.¹³ If we are only treating pain (rather than that which is marked by significant inflammation) we can use a combination of analgesic botanicals, namely Devil’s Claw

(*Harpagophytum procumbens*),¹⁴ Willow bark (*Salix alba*)¹⁵ and *Boswellia serrata*.¹⁶ If inflammation predominates over pain, then we might choose to temporarily inhibit NF-kappaB with nutrients and botanicals such as curcumin¹⁷ (requires piperine for absorption in humans¹⁸), lipoic acid,¹⁹ green tea,²⁰ rosemary,²¹ propolis²² and resveratrol.^{23,24}

Somewhere along the way, when pain and inflammation particularly are severe or recalcitrant, we need to consider that the inflammation might be being triggered by an occult or “silent” infection,^{25,26} and so we will need to assess and treat the various foci of dysbiosis.²⁷ Antimicrobial interventions can include time-released oregano,^{28,29} berberine,³⁰ artemisinin^{31,32} hyperforin³³ myrrh (*Commiphora molmol*),³⁴ bismuth,³⁵ peppermint, uva ursi,³⁶ thyme,³⁷ clove,³⁸ anise,³⁹ buchu,⁴⁰ caprylic acid, dill,⁴¹ *Brucea javanica*,⁴² and *Acacia catechu*.⁴³ The attainment of anti-rheumatic benefits via the use of antimicrobial treatments, immunosupportive interventions (rather than immuno-suppressive drugs), xenobiotic detoxification, and

the correction of hormonal imbalances is the leading edge of anti-inflammatory treatments for autoimmune diseases and other disorders characterized by severe “idiopathic” inflammation.⁴⁴

Different healthcare professions are empowered and disabled by their respective paradigms, and the merits of each can be contrasted by the results they obtain. Here in America, drug-centered allopathic medicine, (which mislabels itself “traditional medicine” even though it has existed for only 60 of the 2.5 million years of human history) is the third or fourth leading cause of death, responsible for more than 1 million iatrogenic injuries and approximately 180,000 unnecessary deaths per year.⁴⁵⁻⁴⁷ The American medical system also is the most expensive and inefficient “healthcare” system in the world, and it burdens and bankrupts our families, businesses, and communities⁴⁸⁻⁵² while drug companies enjoy record-breaking multi-billion dollar profits.⁵³⁻⁵⁵ Summarizing the situation in 2000, the Director of World Health Organization’s Global Program on Evidence for Health Policy, Christopher Murray, MD, PhD,⁵⁶ concluded, “Basically, you die earlier and spend more time disabled if you’re an American rather than a member of most other advanced countries.” In contrast, a lifestyle of healthy living that includes meditation, yoga, herbal dietary supplements, and a whole foods diet can reduce total medical expenses by 59% over four years and by 63% over 11 years compared to patients under “conventional” medical care; hospital admission rates are reduced 11.4-fold for cardiovascular disease, 3.3-fold for cancer, and 6.7-fold for mental health and substance abuse.⁵⁷ Thankfully, as the naturopathic profession continues to increase its scope of practice, more and more Americans will be able to experience true health without lifelong medicalization—with the use of proper diets, nutritional supplements, and treatments that focus on the cause of the problem, not merely the symptoms.

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