Dynamic Chiropractic

VITAMINS / SUPPLEMENTS

Esterified Fatty Acids for Arthritis Pain

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Esterified fatty-acid complex (EFAC), which is not to be confused with essential fatty acids, may indeed be our most potent natural anti-inflammatory. Clinical trial results using EFAC, both as a topical agent and as an oral supplement, have been nothing short of spectacular. The results have been so dramatic that it appears to be a major breakthrough in arthritis and pain management. And as we know, genuine advancements are few and far between.

Esterified Fatty Acids vs. Essential Fatty Acids

Esterified fatty acids and essential fatty acids are very similar in the fact that they are both derived from oils. However, esterified oils are not essential oils, such as omega-3 and omega-6. Oils are considered to be healthy when they have anti-inflammatory properties. Omega-3 and fish oils are currently popular for this very reason. Esterified fatty acids are derived from beef tallow and appear to have far greater anti-inflammatory properties than current healthy oils, as shown in promising trial results.

Esterified fatty acids have another unique property: They are very well-absorbed topically, thereby reaching target tissues. This has major implications for chiropractic care. The active agent itself is the penetrating agent, versus trying to mix active ingredients and carriers in the same formula and hoping that some of the active agent passes through the skin along with the carrier.

EFAC for Knee Osteoarthritis

In 2007, researchers using EFAC as an oral supplement were awarded the best paper out of the 90 papers presented at the prestigious Scripps Integrated Medical Conference in San Diego.[1] The researchers were investigating knee osteoarthritis (OA). In this trial, as in previous trials using EFAC, pain scores dropped quickly and significantly. However, since pain is largely subjective, the researchers wanted objective measurements as well. The researchers decided to measure how far patients could go in a timed six-minute walk. Presumably patients with knee OA would walk slower due to pain and/or stiffness. The patients were tested prior to supplementation to establish a baseline and then again after two, four and eight weeks. In addition to less pain, the treated patients improved in just two weeks, as they were able walk an extra 233 feet. After four weeks they could travel an additional 330 feet. After eight weeks, they were able to walk a remarkable 537 feet farther than from baseline. Most importantly, the placebo patients did not improve, which makes the results that much more significant.

Two clinical trials using EFAC to treat osteoarthritis of the knees have been published in the very highly regarded *Journal of Rheumatology*. Once study tested an oral capsule, and the other tested a topical cream.[2,3] Osteoarthritic knees are often the subject of anti-inflammatory and joint health research because knee OA is prevalent and it provides a functional benchmark with which to compare previous research on other treatments.

In the topical cream trial, patients were tested at baseline, 30 minutes after the first application to

the knees and after 30 days of applying the cream twice daily.[3] Range of motion of their knees, ability to ascend and descend stairs, ease of getting up from a sitting position and balance while stepping down was tested. After only 30 minutes, the EFAC cream improved the ability of patients to perform the above tasks. There were also long-term benefits. After 30 days, the patients improved significantly.

What About Glucosamine and Chondroitin?

The NIH conducted the GAIT trial, which is the largest (1,583 patients) and most rigorous trial ever conducted on glucosamine and chondroitin.[4] In 2006, the initial results of the trial were released: After six months of treatment, there was not a statistically significant reduction of knee pain compared to placebo. However, many physicians continued to recommend glucosamine and chondroitin despite the negative results in the NIH trial because even if they did not relieve pain, they still provided benefit for the cartilage.

GAIT trial patients were given the option to continue for an additional 18 months for a total treatment period of two years to determine whether glucosamine and/or chondroitin would benefit cartilage. The results: Glucosamine and/or chondroitin came up short again, as they did not prevent a statistically significant loss of cartilage.[5]

First, Do No Harm

Should we continue to recommend glucosamine and chondroitin to patients? Chiropractors need to be leaders, not followers, in the field of pain management. Taking the position that glucosamine and chondroitin likely won't help, but won't hurt, either, is simply not serving the best interests of our patients, especially if an safe, effective alternative is available.

As physicians primarily seeing patients presenting with pain, success largely depends on the reduction of that pain. It is generally acknowledged that a majority of pain is due to inflammation. Therefore, to effectively combat pain, we often need to address that inflammation. EFAC, both topically and orally, provides us with a clinically proven tool to do just that.

References

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