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JUNE 2011 | ISSUE #335 | $7.50

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Integrative Medicine Perspective by Dr. Julie

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Calming an Inflamed Body

In theory, it may seem as if management of autoimmune diseases is pretty straightforward. Essentially, the goal is to first diagnose the type of disease in order to evaluate prognosis, then aim to suppress the inflammatory process with methods and medications most appropriate for the disease while keeping the side effect profile as benign as possible. For patients going through this process, though, it is anything but straightforward.

In my integrative medicine practice, I see numerous autoimmune patients on a daily basis. When I first see these patients, many are frequently frustrated with their own bodies and with the pain and difficulty that they have to endure every day. Usually, they are seeing me for an integrative approach to their disease because they are not tolerating conventional treatments well, or they are looking for ways to minimize the typical side effects associated with the disease-modifying antirheumatic drugs (DMARDs) or to avoid these drugs altogether. I find these patients to be generally very self-motivated, which make them ideal for the integrative medicine approach.

To best describe a patient's road to healing from a life-altering autoimmune disease, let's review one case.

K. D. is a 35-year-old female who was diagnosed with rheumatoid arthritis (RA) about 3 years ago but had been having intermittent joint pains in her hands and knees for several years prior to diagnosis. She also had begun to develop more and more myofascial pain in her upper back in the last 1 or 2 years. She is still very active and enjoys working out several times per week, but she has to lessen her weighted workouts due to myofascial pains that occur after her sculpting sessions. At the time of diagnosis, her symptoms were escalating, chronic finger swelling, with swelling and pain in all of her proximal joints in her hand and wrist. She was also having excruciating bilateral pain in her shoulders and knees on a daily basis. Her labs at that time were positive for elevated CRP (C-reactive protein), ESR (erythrocyte sedimentation rate), ANA (antinuclear antibody), rheumatoid factor, and anti-CCP (cyclic citrullined peptide). She was diagnosed with rheumatoid arthritis and started on prednisone therapy while she concomitantly started methotrexate. Her joint MRIs did not indicate joint erosion at the time of diagnosis, nor did her bone mineral density test show any osteopenia or osteoporosis.

K. D. was very self-motivated and began researching healthy ways to manage RA and minimize side effects of methotrexate. She stopped all alcohol consumption and acetaminophen usage. She also started taking folic acid and eating a more vegetarian diet. Despite her pain, she still managed to incorporate gentle walking into her daily routine, although she was very frustrated that she could no longer enjoy her daily run.

Despite these efforts, her symptoms flared once she tapered off the prednisone therapy. She also had subsequent liver function test elevations with methotrexate therapy. Despite multiple attempts at dosage variations and dosing patterns, she had elevated liver function tests with each trial of methotrexate therapy. She was then switched to adalimumab, with which she was finally able to achieve good control of her symptoms without progression of joint erosion on subsequent joint MRIs. However, her initial trial with twice per month adalimumab therapy was insufficient; thus her final treatment regimen was with weekly therapy of a TNF-alpha inhibitor.

She has been on this treatment for about 2 years and she still occasionally has flares that require additional prednisone therapy and joint injections. In the last year, she had to add plaquenil and sulfasalazine into her regimen to further decrease flares. She came to see me with the initial goal of eliminating flares while only on her baseline three medications. As her symptoms improved, her subsequent goal was to come off adalimumab due to her concerns about being on a TNF-alpha inhibitor on a long-term basis.

K. D. is a good example of the general work-up and evaluation and treatment of RA. She was first screened for RA along with a bevy of other autoimmune diseases that may present with joint pains as well. She was also screened for hepatitis and other viral and bacterial diseases. She had her joint pains and symptoms for many months with preceding intermittent symptoms dating back several years. She was started on disease-modifying drugs while her work-up continued, which included imaging for potential joint erosion, bone density study, and tuberculosis screening and evaluation since she was being started on immunosuppressant therapy. She was progressively tried on several DMARDs in an attempt to control symptoms and to prevent disease progression. Within modern conventional rheumatic disease management, physicians are also starting to focus more on lifestyle modifications. However, this focus is usually pushed to the wayside if patients are responding well to medications or seem reluctant to make these changes.

It is ideal to optimize health outcome via a combination of conventional and alternative methods which should include lifestyle modifications. By utilizing a variety of alternative therapies, patients can achieve a less inflamed baseline such that they may be able to minimize conventional therapies, thus improving disease status while decreasing adverse drug events.

A complementary approach to autoimmune disease management can be complicated and extensive, depending on severity of the patient. The general areas of interest that I target for treatment are nutrition, mind-body balance, correction of physiological deficiencies, and alternative anti-inflammatory supplements/herbs. By targeting therapies at these factors, we can better achieve basic RA treatment principles of reduction of pain, reduction of joint swelling, prevention of progression of disease and joint erosion, and an increase of overall functionality and well-being.

While more scientific evidence is necessary to solidly confirm efficacy of many complementary and alternative ➤

medicine (CAM) therapies for RA, there are CAM modalities with preliminary data suggesting benefits as adjunctive therapies in RA management. For example, mind-body techniques such as mindfulness-based stress reduction, imagery, biofeedback, and tai chi can be very helpful in reducing stress-associated flares as well as improving pain, anxiety, depression, and functionality status of these patients.[1]

In regard to nutrition, since the intestinal tract is one of the largest immune systems in the body, diet has a significant impact on the inflammatory status. Studies indicate that an anti-inflammatory diet that is largely vegan/vegetarian or Mediterranean-based can be helpful in calming inflammation. Stringent plant-based juice fasts for short durations have been seen to be beneficial for acute RA flares as well. Most patients should also be considered for elimination diet trials of foods frequently associated with sensitivity or allergies, such as dairy, gluten, soy, or nuts; this may be adjunctively helpful in eliminating factors that exacerbate inflammation.[2,5]

Continuing with the idea that the intestinal tract has a significant impact on overall inflammatory status, special attention should be paid to supplements that help to calm the GI tract as well as replenish deficiencies that occur with diminished absorption from natural aging and inflammation. Thus, patients should be checked for cofactor, mineral, and vitamin deficiencies as well as screened for heavy metal toxicity and antibodies that suggest other inflammatory triggers. A key goal would be toward correction of deficiencies as well as appropriate treatment for toxicities and antibodies detected. Patients should also be placed on a personalized anti-inflammatory regimen such as one including fish oil, gamma-linolenic acid (GLA) therapy, boswellia, turmeric with black pepper, ginger, green tea, and fresh garlic cloves. Acupuncture along with supplements to facilitate sleep, insulin sensitivity, adrenal function, thyroid function, and regular GI tract functioning would also be instrumental in the CAM approach to RA management.[4–7]

When K. D. first approached me about CAM therapies, her initial labs demonstrated many nutritional deficiencies such as hypomagnesemia, hypokalemia, vitamin D deficiency, B12 deficiency, B6 toxicity from her own OTC multivitamin, subclinical hypothyroidism, and low adrenal reserve. She was placed on multiple supplements to correct these abnormalities while she underwent mind-body therapy, nutritional counseling for anti-inflammatory diet, and acupuncture mostly to correct for a significant deficiency in *jing*.

The entire treatment course to get her off adalimumab took about 10 months, but by the fifth to sixth month of CAM therapy, K. D. was no longer having flares while on her three medications and no longer requiring joint injections. She was weaned down to every other week therapy, then down to once a month adalimumab injection by the eighth month, and was finally able to discontinue use at the 10-month mark. K. D. has been able to stay off the TNF-alpha inhibitor therapy with the initial CAM regimen addressing nutrition, mind-body balance, anti-inflammatory supplements, acupuncture, and correction of physiological abnormalities seen on labs.

She is still needing plaquenil and sulfasalazine to maintain her current status, but when she feels a flare coming on, she mitigates the flare and symptoms via a stringent juice fast or anti-inflammatory diet and transiently increases her anti-inflammatory supplements under my supervision. She has not required prednisone therapy or joint injections since the addition of CAM therapy to her conventional regimen. While the specifics of this case pertain to K. D. only, the positive treatment outcome need not be. It is important to educate our patients about the importance of approaching inflammation from many angles such that all the contributing factors are addressed. It is with this multimodal approach that we are best able to quell the tidal waves of inflammation raging within our autoimmune patients.

Notes

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