

CASE STUDY #1463: A Case Study Evaluating the Effects of a Combination THIAA, Rosemary Extract, and Oleanolic Acid Nutraceutical in a Patient with Osteoarthritis

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PURPOSE

To show how targeted nutritional support with a nutraceutical combination of tetrahydro-iso-alpha acids (THIAA), rosemary extract, and oleanolic acid may alleviate discomfort in a patient with osteoarthritis (OA).

PATIENT'S PRESENTATION AND HISTORY

A 43-year-old Caucasian male presented with a 15-year history of OA in his knees. Knee symptoms started in his college years when he developed tendonitis and swollen knees when running cross-country. Knee stiffness had been present for the previous 5 to 7 years, lasting for approximately 1 hour in the mornings. Currently, on a scale of 1 to 10, his pain was 5 on the right knee and 2 to 3 on the left knee. The patient was beginning to experience stiffness in other joints—i.e., fingers, wrists, and shoulders. His concurrent conditions included very high triglycerides (TG), moderately elevated total cholesterol (tChol), and low HDL-cholesterol. The patient's medical history included thyroglossal cyst removal, staph osteomyelitis (left arm), and splenectomy.

The patient consumed the standard American diet. He occasionally consumed alcohol, but did not smoke. He slept 4 hours a night and ran 3 to 6 miles twice weekly.

Patient's Objective Information

- HT: 66.5"; WT: 184 lb.; BP: 127/83
- Results of laboratory tests: Elevated total cholesterol, TG, and LDL-C; depressed HDL-C; negative anti-nuclear antibodies (ANA) and gluten sensitivity
- Prescriptive medications included: Time-released acetaminophen (650 mg), 2 tablets qd; ibuprofen (200 mg bid or tid); combination of acetylsalicylic acid (250 mg)/acetaminophen (150 mg)/anhydrous caffeine (60 mg), 3 tablets daily
- Patient was not taking supplements

ASSESSMENT AND PLAN

The initial assessment indicated knee OA, metabolic syndrome, and hypercholesterolemia.

The patient was placed on the following protocol:

- Begin THIAA, rosemary extract, oleanolic acid nutraceutical (1 tablet twice daily)
- Continue other pain medications
- Begin a low-glycemic-load diet

RESULTS

2 and 4 Week Results

After 2 weeks on the program, the patient reported that the pain in his knees had practically disappeared. The effect of the THIAA, rosemary extract, and oleanolic acid nutraceutical had been gradual, achieving full effect within 7 to 10 days of beginning intake. Missing 1 day of the nutraceutical had made him aware of its effect on his pain, as pain recurred and it took 24 hours to resume its effect. The patient commented that the usual tightness in his calves had almost totally resolved, allowing him to do certain stretches that he couldn't do before. The patient had started to discontinue his other pain relievers, and had only used them sparingly in the previous week. He was instructed to add UltraMeal[®] Plus medical food (2 scoops twice daily) to the program.

At the 4-week visit, the patient continued to report no pain in his knees, and only some mild stiffness in the mornings. He had increased his physical activity, and had just run over a mile up a local mountain. The patient was compliant with the nutraceutical and medical food, and commented on the benefit that the medical food had on his hunger and ability to stop snacking on the wrong foods. The patient was able to discontinue most of his NSAIDs, and joint stiffness almost entirely resolved. Laboratory results further indicated a dramatic improvement in his lipid profile.

Figure 1. After 4 weeks, the patient's Medical Symptoms Questionnaire (MSQ)[†] score decreased from 25 to 6 (reference range: <30 = few or low intensity symptoms). The result suggests a distinctive clinical improvement and noticeably fewer symptoms.

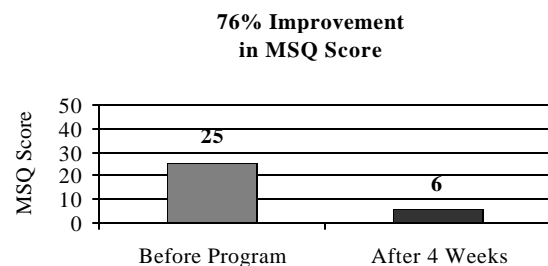


Figure 2. After 4 weeks, the patient's pain score from the WOMAC osteoarthritis index[‡] decreased from 147 to 0. The result suggests a significant improvement in the patient's physical symptoms.

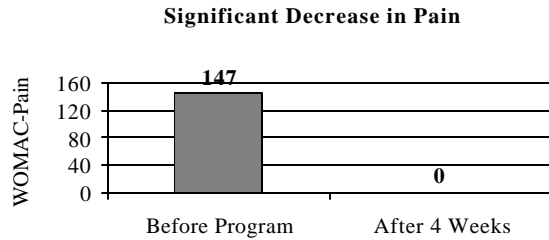


Figure 3. After 4 weeks, the patient's stiffness score from the WOMAC osteoarthritis index[‡] decreased from 124 to 13. The result suggests a substantial improvement in the patient's physical symptoms.

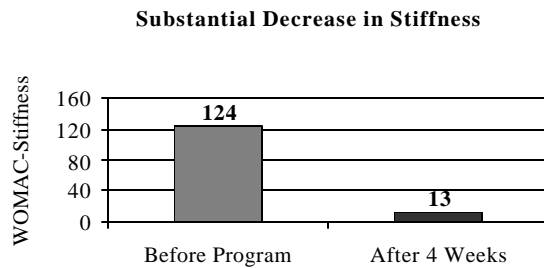
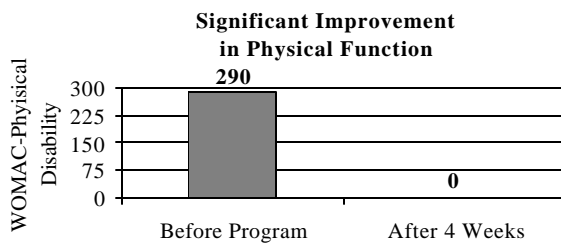


Figure 4. After 4 weeks, the patient's physical disability score from the WOMAC osteoarthritis index[‡] decreased from 290 to 0. The result suggests a significant improvement in the patient's physical function.



SUMMARY

The outcome of this case study suggests that a focused, high-impact nutritional program featuring a nutraceutical combination of THIAA, rosemary extract, and oleanolic acid addressed the knee OA symptoms of pain, promoting a positive effect on the patient's subjective pain and mental well-being with a dose of 1 tablet twice daily.

NOTE

The information provided in this case study describes the results of one patient under the care of a licensed healthcare practitioner and may not be a typical response.

Financial support for this study was provided by Metagenics, Inc. This study was conducted at the Functional Medicine Research CenterSM (FMRC), the clinical research arm of Metagenics, Inc.

[†]The Medical Symptoms Questionnaire (MSQ) is a clinical tool for the evaluation of general physical symptoms. Total scores above 75 are generally associated with substantial symptomatology and disability; scores below 30 generally indicate few or low intensity symptoms.

[‡]The WOMAC osteoarthritis index is a well-validated, self-administered measure that assesses the three dimensions of pain, stiffness, and physical disability in knee and hip osteoarthritis. Higher scores in any of the categories are associated with greater symptomatology.

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