

Case # 1032: A Case Study Evaluating the Effects of a Thyroid Support Formula Containing Targeted Phytonutrients in a Patient with Hypothyroidism

Robert Lerman, MD, PhD

Functional Medicine Research CenterSM, Gig Harbor, WA 98332

PURPOSE

The purpose of this study was to assess the effectiveness of a thyroid support formula featuring targeted vitamins, minerals, and herbs that promote healthy thyroid function in a patient with hypothyroidism.

PATIENT'S PRESENTATION AND HISTORY

A 48-year-old Caucasian female presented with symptoms of fatigue, insomnia, thinning hair, and intolerance to cold. She was also concerned about her memory and concentration. Her sensitivity to cold had begun about 3 to 4 years earlier, and she was diagnosed with hypothyroidism 2 years before presentation.

The patient was initially given a desiccated thyroid product, which resulted in some improvement in emotional "ups and downs" and insomnia, but had been changed to a synthetic levothyroxine preparation about 1 year before presentation. She had gained about 20 to 25 lb over the previous 3 to 4 years, and had tried an elimination diet, which resulted in a loss of 5 lb. She felt "fantastic" on the elimination diet, and upon reintroduction of foods, she found she reacted to soy, night shade vegetables, citrus, and cow's milk, which caused gas, bloating, and diarrhea. The patient also exercised 4 to 5 times per week, was on a lowfat diet, and said she had fairly regular bowel movements. She noted her hair was more brittle and her skin was more dry than usual.

Patient's Objective Information

- HT: 60"; WT: 142 lb; BP: 118/80
- Physical exam was essentially normal except for inflammation of the right palpebral conjunctiva and a trace of edema in the extremities
- Questionnaire results indicated presence of moderate symptoms (MSQ*: 31) and low mental functioning (MCS[†]: 33.9); physical symptoms using the PCS were within reference range
- Prescriptive medications: levothyroxine, 0.05 mg qd
- TSH was high normal at 5.29 and anti-TPO antibodies were elevated at 951; Free T3 and free T4 were normal

PLAN AND RESULTS

The patient was instructed to:

- Begin taking thyroid support formula providing the vitamins A, D, and E and the minerals iodine, selenium, and zinc, along with other select vitamins, minerals, and botanicals, 1 tablet bid
- Continue taking prescriptive medication

2 and 8 Weeks after Starting the Thyroid Support Formula

After 2 weeks, the patient reported feeling better. She was feeling warmer, especially in her hands, and her energy level had improved. She also noted her dry skin had improved, especially on her legs.

At 5 weeks, the patient reported feeling considerably better and having more energy. She rated her fatigue at 50% to 70% improved. She said she no longer felt cold all the time and her hands and feet were warm. She had been exercising consistently.

11 Weeks after Starting the Thyroid Support Formula

After 11 weeks, the patient said she was "feeling pretty darn good...lots better than a year ago... better energy level, and more balanced emotionally." She reported that she was having 2 regular bowel movements per day, no more dry skin problems, and warmer hands and feet. She also said she was not having the mood swings and depressive symptoms she had experienced before. She said she had begun experiencing hot flush symptoms. The patient was instructed to continue on the thyroid support formula and track her hot flushes.

15 Weeks after Starting the Thyroid Support Formula

After 15 weeks, the patient reported that she continued to feel "really good." She worked in an air-conditioned building but said she didn't notice the cold anymore. Her oral body temperature was averaging 98.8 degrees. She was no longer losing her hair and noticed new hair growth. Her concentration was definitely improved, with less frequent lapses in memory.

The patient also noted that her hot flushes appeared to increase, and she had started on a popular, meeting-oriented weight loss program. Her weight was 143.5 lb and her blood pressure had decreased from 118/80 to 108/68. The patient was instructed to continue on the thyroid support formula and to continue tracking her hot flushes.

23 Weeks after Starting the Thyroid Support Formula

At 23 weeks, the patient reported she was feeling "great." She said her hot flushes had decreased, and she had been able to exercise consistently, resulting in a loss of around 11 lb. The laboratory results indicated that her TSH had normalized to 2.30 uIU/mL, free T3 and free T4 remained normal, and Anti TPO remained elevated at 762 IU/mL. The patient was instructed to continue the thyroid support formula and was referred back to her primary care physician.

Figure 1. After 23 weeks, the patient's MSQ* score decreased from 31 to 3 (reference range: 30 or below = few or low intensity symptoms). This result suggests a substantial improvement in general physical symptoms with the thyroid support formula.

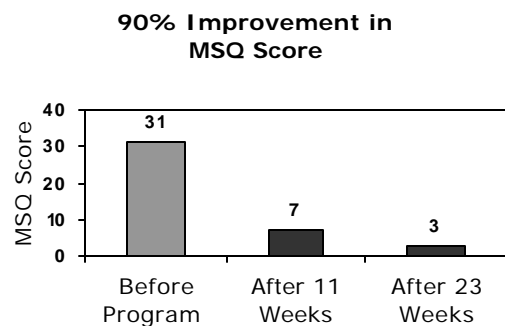


Figure 2. The patient's SF-36 MCS[†] score increased from 33.9 to 52.8 over the 23 week period (reference range: 50 or above = healthy function). The result suggests a notable improvement in mental functioning scores.

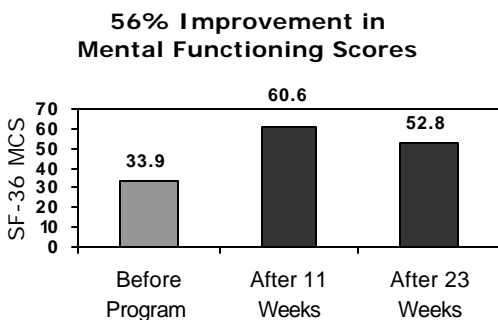
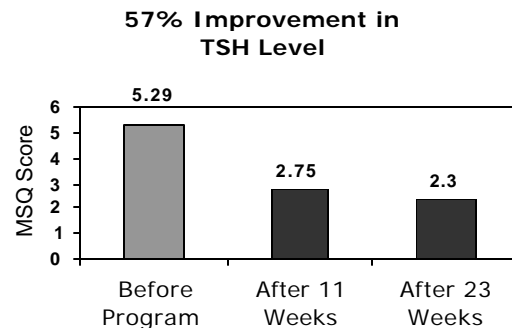


Figure 3. At 23 weeks, the patient's TSH levels decreased from 5.29 to within normal range at 2.3 (reference range: 0.34-5.60 uIU/mL). This result suggests a noteworthy improvement in TSH level.



SUMMARY

This case suggests that a thyroid support formula featuring targeted phytonutrients combined with other approaches may improve thyroid function and promote health.

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.

* 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 Medical Outcomes Survey SF-36 is a well-validated general quality-of-life questionnaire that summarizes health outcome in two reliable reproducible scores: the Physical Component Summary (PCS) and the Mental Component Summary (MCS). Scores of 50 or higher are associated with healthier individuals, whereas scores lower than 50 indicate compromised functioning.

Case Study: *A Case Study Evaluating the Effects of a Thyroid Support Formula Containing Targeted Phytonutrients in a Patient with Hypothyroidism.* Metagenics, Inc; 034THY404.