

# Chronic Fatigue and Depression

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The patient is a 55 year old female, married with three adult children and is employed as an elementary school teacher. She had been seen previously by numerous physicians for treatment of long standing "depression". Just prior to her first visit to The Center she was under the care of a psychologist *and* a psychiatrist.

On her first visit she listed the following complaints: "depression, shakiness, sleeplessness, head and body aches, dry mouth, indigestion, stomach cramps and gas, anxious, fatigue, job stress, dizziness, fluid retention, swollen eyes, popping ears, chills, night sweats, cold hands and feet, dry coarse skin, hair loss and no energy." When asked to list her most dominant feelings two weeks prior to her visit she list "helpless/hopeless, panic, anger, anxious and frustrated". Two years ago her problems became so severe she had to take three months sick leave from her teaching position. Just prior to her visit, a psychologist advised her to quit her teaching position to avoid stress.

On her first visit to The Center, a complete physical examination, nutritional profile, psychological and mental evaluation and laboratory tests were performed. In reviewing her past records, no evaluation of the patient's nutritional status was found. Only the basic laboratory procedures, CBC and urinalysis were performed on the patient. In addition to the history given above, she had the usual childhood diseases and a tonsillectomy at four years of age. Her spouse, children, siblings and parents were still living. She denied any history of smoking or alcohol use. She stated an allergy to sulfa drugs.

A list of medications she was presently taking included: "Estertest, Bumex, Advil, Atarax Syrup, Pepsid, Haldol, Prozac, Librium, B<sub>12</sub> and Armour Thyroid". She stated

she had been taking thyroid for two years, "not because it was low, but because it might help!"

The psychological evaluation revealed the patient had signs of severe, agitated depression with a high level of fear and panic. Laboratory test results showed the CBC, urinalysis, Candida IgG antibody titer, vitamin B<sub>1</sub>, A, C, E, folate, B<sub>12</sub> and buffy coat vitamin C in the accepted reference range. A cholecystography examination revealed a normal gall bladder. A glucose tolerance test was borderline for hyhypoglycemia, however, the fructosamine, glucose and A.M. Cortisol levels were all within the reference ranges. Thyroid function tests were also normal. The urine vitamin C screen was "0" mg/dL. During her Center visits, three different hair analyses were done for trace and toxic minerals. The first hair analysis showed elevated levels of sulfur and magnesium and low levels of phosphorus, copper and zinc. Based on the physical, history and preliminary laboratory results, a diagnosis of fibromyositis, depression and zinc deficiency was made. She was initially treated with buffered vitamin C, 1000 mg two times a day, zinc, 0.6 mL in juice or water once a day, niacinamide 500 mg once a day and intravenous calcium.

A second hair analysis a month after her first examination showed elevated magnesium, barium and strontium and decreased levels of copper, zinc and phosphorus. The same treatment was contained except her zinc intake was increased. Her depression, shakiness, sleepiness, body aches and stomach cramps gradually decreased. A third hair analysis again showed a decreased zinc and elevated magnesium levels. Her zinc intake was substantially increased.

On her next visit (about six months after the first visit) the patient stated that her physical and mental conditions were much improved. Physical and psychological evaluations showed an increased energy level, much less pain and a positive mental outlook. She was

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continued on zinc sufficient to correct her deficiency, together with other nutrients as described above. She has slowly been "weaned" from her long list of previous medications.

The patient continues in her job and to improve with less pain, stress, anxiety and greatly improved mental outlook. This case illustrates the importance of the multifactorial approach to disease and the need for monitoring nutrient levels to insure adequate tissue uptake of what has been prescribed.