

## **\*\*FINAL, 7/5/2019, MAGGIE CASE STUDY - A CASE OF MISTAKEN DIAGNOSIS**

Staring at her alarm clock, watching the minutes go by, Maggie was worried. It was 1 am and she had been awake for at least an hour. Another sleepless night. How was she going to function at work in her chronic, sleep-deprived state?

Maggie, a 36-year old mother of two high school children, with whom she has a very close, loving relationship, recently started a new job, which she enjoys very much. With her divorce behind her, Maggie can't understand why she feels anxious all of the time and why she has trouble focusing. Could the remnants of her contentious divorce be the underlying cause of her health issues and her inability to sleep properly?

About six months ago, Maggie started a new exercise and diet regime with the hope that these lifestyle changes would help her concentration and sleep problems. To ensure that she got all of her daily nutrients, she bought protein smoothies at a major retailer and drank them daily. Soon thereafter, Maggie began to feel worse. Her muscles and joints ached--sometimes it was her back; other times it was her ankles and wrist. There were days that her entire body hurt. When she started experiencing abdominal pain and uncomfortable bloating, Maggie made an appointment to see her primary care provider

Maggie's doctor ordered lab work, which ruled out rheumatoid arthritis and lupus. Unable to determine the root cause and based on Maggie's symptoms, her doctor informed her that she probably had fibromyalgia, a medical condition that mostly affects women and is characterized by chronic musculoskeletal pain. Poor sleep, cognitive dysfunction, and widespread pain are also symptoms of fibromyalgia.

Antidepressants and pain-relief medication are often prescribed to help manage the pain and fatigue associated with fibromyalgia. Muscle relaxants and sedatives are used to promote sleep. For Maggie's abdominal pain and bloating issues, her primary care doctor recommended that she increase her fiber intake. He also prescribed antidepressants, which caused Maggie to gain weight, and muscle relaxants, which made her groggy. Although Maggie experienced some pain relief, overall she felt worse. Distraught about her fibromyalgia diagnosis and exasperated by an overwhelming feeling of malaise, Maggie decided to seek out a second medical opinion.

Maggie reached out to Dr. Emi, who is well known for her integrative and functional medicine expertise. Working in close collaboration with Maggie, Dr. Emi was able to uncover health-related insights that were previously overlooked.

Dr. Emi's in-depth root cause analysis and specialty testing, which includes lab tests not typically offered by conventional medicine, revealed that:

- Maggie had an underactive thyroid (hypothyroidism), which can cause fatigue, muscle pain and stiffness, impaired memory—all of the symptoms that Maggie had been displaying for the past year.
- Maggie's adrenal glands were out of balance, which can lead to fluctuations in cortisol, a stress-response hormone best known for fueling the body's "fight-or-flight" response. Cortisol levels fluctuate throughout the day and are normally at their lowest at night and at their highest shortly in the morning after waking. If the adrenal glands produce too much cortisol in the evening, this can have a negative effect on sleep quality. Maggie's cortisol was spiking around midnight, which caused Maggie to wake up.
- Food sensitivity testing showed that Maggie had a severe reaction to bananas, which she ate daily, and beans, which she ate frequently throughout the week. She was also sensitive to ingredients in the protein smoothie powder that she had recently started drinking and, unbeknownst to Maggie, were contributing to her abdominal pain and bloating.
- Maggie was deficient in Omega 3, magnesium, and other key minerals and vitamins. Symptoms of Omega 3 deficiency include difficulty sleeping, depression, and unwarranted anxiety. Magnesium deficiency can cause insomnia, mood problems, aches and pains, and other symptoms.

Dr. Emi's treatment plan for Maggie started with an elimination diet to help clear her body of foods and chemicals to which she was sensitive and that can cause inflammation and pain. She also prescribed high quality, third-party tested supplements to address Maggie's vitamin and mineral deficiencies. Maggie's personalized wellness plan included taking magnesium to reduce joint pain and promote sleep; curcumin, known for its anti-inflammatory properties; fish oil for joint pain and for treating Maggie's Omega 3 deficiency; and herbs such as Holy Basil, to support adrenal glands and control cortisol spikes. Maggie was also prescribed Mind Body Wellness meditation classes to help combat anxiety, promote restful sleep, and enhance emotional and physical well-being.

Maggie was diligent about following Dr. Emi's dietary and lifestyle guidelines--her pain dissipated almost immediately after she started the elimination diet, and shortly thereafter, her sleep improved and anxiety significantly lessened. Maggie now has a

new, improved outlook on life and is looking forward to embarking on new adventures with her children!