

# Case Study

65 year old male OSTEoarthritis LUMBAR SPINE

Secondary diagnosis – type 2 Diabetes Mellitus, Cervical Osteoarthritis, Hypothyroidism and Constipation



The patient had longstanding, worsening back pain with discomfort down both lower extremities. The patient had lumbar pain that was severe prior to surgery in October 2005. The surgery implanted metal rod stabilizers which became infected by *Staphylococcus aureus*. Postoperatively, the lower extremity pain resolved but the lumbar pain continued despite the rod removal. He had been taking Coumadin, Synthroid, Lasix, Zocor, Kadian (60mg three times daily) and no vitamin supplements. In January 2008, SpectraCell's micronutrient testing discovered deficiencies in biotin and zinc. There were borderline deficiencies in glutathione and pantothenic acid. **Based upon his deficiencies, he was administered the following treatment summary in February 2008:**

- 1) 50mg/day of Zinc
- 2) 1,000mcg/day of Biotin
- 3) 500mg twice/day of Pantothenic Acid
- 4) 1,000mg/day of N-acetylcysteine
- 5) No other changes to medication

**In addition to the above treatments, nutritional and lifestyle modifications were recommended:** Walking daily x 15 minutes, ensure all oils are first cold pressed, switch coffee to dandy Blend (chicory root coffee substitute), increase water intake, avoid processed carbs and sweets, dairy x 3 weeks (elimination diet) and consider avoiding gluten.

## Clinical Outcome:

In April 2008, the patient returned with no pain in the lumbar spine or the lower extremities. The narcotic Kadian that the patient had been on was no longer needed.

No follow up micronutrient testing was performed as the patient had a total resolution of lumbar and leg pain. As of February 2009, the patient is currently pain free and is not using any narcotics. These deficiencies would not have been detected without SpectraCell's micronutrient testing.

## Cost Savings and Benefits:

The savings is clinically for the patient and financially for the insurance company no longer supplying Kadian, constipation treatments or muscle relaxants.