

Menopausal Symptoms, Insomnia & Anxiety

Initial Symptoms-

- ✓ Severe Hot Flashes
- ✓ Hives
- ✓ Debilitating Anxiety & Stress
- ✓ Insomnia
- ✓ Trembling
- ✓ Constantly Shaky & Dizzy
- ✓ No Appetite
- ✓ Night Sweats/Excessive Perspiration
- ✓ Burning Sensation Across Chest
- ✓ High Blood Pressure

“This patient struggled not only with the initial symptoms listed above, but also with the severe withdrawal effects of a drug prescribed to help her anxiety problems.”

-Dr. Van D. Merkle

In 3 months-

- ✓ Night Sweats Gone!
- ✓ Weight Stabilized
- ✓ Hives Gone!
- ✓ Off Xanax

In 9 months-

- ✓ Anxious Feelings Dissipated
- ✓ Appetite Returning
- ✓ BP Back To Normal
- ✓ Hot Flashes Significantly Improved
- ✓ Shakiness Subsided
- ✓ Off All Prescriptions Including Ativan and Estriol

Patient Profile:

09-03-06 – This 54-year old patient presented with a vast assortment of symptoms which are best described in the patient’s own words: “Starting in the beginning of July 2006, the least little stress flattens and paralyzes me. I shut down. The majority of the last few years, I have only been able to sleep four hours a night. I am shaky and dizzy and weak with a knot in my stomach. I have no appetite and am on high alert most of the time. This is the worst I’ve ever felt!”

In addition to anxiety symptoms, she also battled severe colds, frequent sinus infections and hive outbreaks, with memory problems, depression, high blood pressure and night sweats rounding out her symptoms. About 12 years ago, the patient was told she had zero Estrogen and low cortisone. Doctors

prescribed 3mg Estrogen but shortly after she developed breast lumps and switched to a low dose of compound estrogen called Estriol. She felt fine while taking this hormone replacement until one year ago. She had also been prescribed Xanax and Ativan and took Dramamine to help her sleep. At the time of her initial visit, the patient weighed 155 lbs at 5'3" with a BP of 130/99.

Patient's tests results:

09-10-06 – Due to the multitude of symptoms, we ran an extended test panel including blood work, a tissue mineral analysis, urinalysis, chelation challenge and metabolic urinalysis. In the blood work we found low SGOT, SGPT, and GGT indicating reduced liver/pancreas function and a low Creatine Kinase showing a slow metabolism. While the monocytes are at clinically low level, this is highly unusual and most likely caused by medication. Another thing we will work to improve is the high cholesterol rate.

Results of Initial Blood Test:

| Test Description | Date: | Current Result | Current Rating | Prior Result | Delta | Healthy | Clinical |
|-------------------------------|------------|----------------|----------------|--------------|-------|-----------------|-----------------|
| Albumin | 09/05/2006 | 4.70 | hi | | | 4.10 - 4.51 | 3.50 - 5.50 |
| Globulin | | 2.60 | lo | | | 2.81 - 3.51 | 1.50 - 4.50 |
| A/G Ratio | | 1.80 | hi | | | 1.22 - 1.60 | 1.10 - 2.50 |
| Total Bilirubin | | 0.50 | Opt | | | 0.39 - 0.93 | 0.10 - 1.20 |
| Alkaline Phosphatase 25-150 | | 72.00 | Opt | | | 65.00 - 108.00 | 25.00 - 160.00 |
| Creatine Kinase | | 37.00 | lo | | | 64.00 - 133.00 | 24.00 - 173.00 |
| LDH | | 160.00 | hi | | | 120.10 - 160.00 | 100.00 - 250.00 |
| SGOT (AST) (AST) | | 18.00 | lo | | | 18.10 - 26.00 | 6.00 - 40.00 |
| SGPT (ALT) (ALT) | | 9.00 | lo | | | 18.10 - 26.10 | 6.00 - 40.00 |
| GGT | | 12.00 | lo | | | 22.00 - 39.00 | 6.00 - 55.00 |
| Total Cholesterol | | 228.00 | HI | | | 140.10 - 170.00 | 100.00 - 199.00 |
| Triglyceride | | 152.00 | HI | | | 80.10 - 115.00 | 10.00 - 149.00 |
| HDL Cholesterol | | 61.00 | HI | | | 50.00 - 55.00 | 40.00 - 59.00 |
| VLDL Cholesterol | | 30.00 | hi | | | 5.10 - 20.10 | 4.10 - 40.10 |
| LDL Cholesterol | | 137.00 | HI | | | 50.10 - 75.10 | 6.00 - 99.10 |
| Total Cholesterol / HDL Ratio | | 3.70 | Opt | | | 0.00 - 4.00 | 0.00 - 5.00 |
| Triglyceride/HDL Ratio | | 2.50 | hi | | | 1.00 - 2.20 | 0.50 - 4.00 |
| Monocytes | | 4.00 | LO | | | 5.10 - 7.10 | 4.90 - 13.00 |
| Eosinophils | | 1.00 | Opt | | | 0.00 - 4.10 | 0.00 - 7.00 |
| Basophils | | 1.00 | hi | | | 0.00 - 0.00 | 0.00 - 3.00 |

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More than a dozen clinically high or clinically very high levels appeared in the results of the tissue mineral analysis. Toxic elements like Aluminum, Cadmium, Uranium and Nickel can cause many of the patient's symptoms and also displace vital nutrients which may explain the imbalances seen in the essential elements.

Results of Initial Tissue Mineral Analysis:

| Test Description | Date: | Current Result | Current Rating | Prior Result | Delta | Healthy | Clinical |
|----------------------------|------------|----------------|----------------|--------------|-------|-----------|-----------------|
| Toxic Elements | | | | | | | |
| Aluminum | 09/05/2006 | 13.00 | HI | | | - 2.20 | - 7.00 |
| Cadmium | | 0.12 | HI | | | - 0.05 | - 0.10 |
| Lead | | 0.70 | hi | | | - 0.20 | - 1.00 |
| Mercury | | 0.31 | Opt | | | - 0.50 | - 1.10 |
| Uranium | | 0.09 | HI | | | - 0.03 | - 0.06 |
| Nickel | | 1.00 | HI | | | - 0.20 | - 0.40 |
| Titanium | | 0.27 | Opt | | | - 0.50 | - 1.00 |
| Total Toxic Representation | | 3.00 | HI | | | - 2.00 | - 3.00 |
| Essential Elements | | | | | | | |
| Calcium | | 2510.00 | HI | | | 0- 753.00 | 753.01- 1200.00 |
| Magnesium | | 250.00 | HI | | | 0- 62.00 | 62.01- 140.00 |
| Sodium | | 9.00 | LO | | | 0- 45.00 | 45.01- 180.00 |
| Potassium | | 3.00 | LO | | | 0- 18.00 | 18.01- 38.00 |
| Copper | | 7.30 | LO | | | 0- 17.00 | 17.01- 35.00 |
| Zinc | | 310.00 | HI | | | 0- 160.00 | 160.01- 220.00 |
| Manganese | | 0.09 | LO | | | 0- 0.32 | 0.33- 0.65 |
| Chromium | | 0.41 | HI | | | 0- 0.31 | 0.32- 0.40 |
| Phosphorus | | 157.00 | LO | | | 0- 350.00 | 350.01- 400.00 |
| Selenium | | 0.74 | LO | | | 0- 1.45 | 1.46- 1.70 |
| Strontium | | 21.00 | HI | | | 0- 2.90 | 2.91- 7.60 |

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We found even higher levels of toxic elements with the help of a chelation challenge. The column labeled "Pre-Chall" represents the amount of toxins the body is able to eliminate thru the urine on its own. The column labeled "DMSA" is toxic elements flushed from the body with the help of the chelating agent DMSA. Clearly the patient has a difficult time discarding heavier toxic elements like Lead and Mercury.

Results of Chelation Challenge:

| Test Description | Date: | Current Result | Current Rating | Prior Result | Delta | Healthy | Clinical |
|-----------------------|-------|----------------|----------------|--------------|-------|---------|-------------|
| Agent | | DMSA | | Pre-Chall | | | |
| Dose | | 2000mg | | | | | |
| Interval | | 6 | | 6 | | | |
| Toxic Elements | | | | | | | |
| Lead (UA) | | 16.00 | HI | 0.00 | ⊗ | 0- 4.00 | 4.01- 5.00 |
| Mercury (UA) | | 5.40 | HI | 1.60 | ⊗ | 0- 3.00 | 3.01- 4.00 |
| Nickel (UA) | | 5.60 | Opt | 7.30 | ⊙ | 0- 6.00 | 6.01- 12.00 |

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The results of the metabolic urine and saliva test were surprising as they showed no significant toxicity. There were no signs of stress affecting the adrenal glands and there appeared to be significant levels of antioxidants; however, a few nutrients

tested were insufficient including Vitamin C and Calcium. There was a small amount of protein in the urinalysis showing possible kidney involvement or inflammation.

Doctor analysis:

09-20-06 – “Be patient.” That’s one of the things I recommended while explaining the test results to the patient. There were a lot of imbalances, toxicities and deficiencies that had years to progress to their current level. This was not something to correct overnight. In fact, I told her it may be several months before she noticed significant progress.

I was surprised by the outcome of the metabolic profile. The adrenals regulate a person’s stress response by producing cortisol or adrenaline, and based on the initial evaluation I thought the patient was experiencing adrenal fatigue. Instead, from the testing we see a cluster of interlacing little problems caused several imbalances making it difficult for the body to heal, repair or eliminate toxic elements. Another area of concern was the patient’s list of medications. Ativan (prescribed for anxiety/stress) is known to have common withdrawal symptoms including tremors, muscle cramps, vomiting, sweating and convulsions. Should the patient feel well enough to reduce her medication, these withdrawal symptoms may make her feel as though the anxiety is worsening.

We placed the patient on a chelation cycle to clear out toxic elements and a supplement regimen to resupply stores of vital nutrients. Dietary recommendations were also recommended to bring down the cholesterol levels.

Patient assessment:

11-30-06 – The patient had a bumpy first two weeks. As I suspected the Ativan withdrawal symptoms were very difficult for the patient to overcome. Since I did not prescribe this drug, I recommended she consult with her doctor before reducing the dosage. About two weeks after starting her vitamin regimen the patient attempted this but the shaking became worse and she felt overwhelmed by the stress. Her family doctor placed her on Celexa to ease the withdrawal symptoms of Ativan and I reminded the patient it would take time before she no longer needed medications. Two weeks was not long enough to correct the multitude of imbalances causing disorder in her body.

Two months later the patient retested her blood and chelation challenge and noted she was seeing signs of improvement. Her weight stabilized, memory and concentration improved and the

hives disappeared. She also noticed a big improvement with hot flashes and night sweats. The patient continued to try and wean off Ativan, but still battled withdrawal symptoms. More than a dozen levels improved on her blood test including the SGPT and SGOT which are liver indicators and the globulin and Creatine Kinase went up showing better efficiency at healing and repair. Based on all these improvements along with the lowered cholesterol levels, I determined the patient made good changes to her diet and was consistently taking the recommended vitamins and minerals.

Results of 2nd Blood Test:

| Test Description | Date: | Current Result | Current Rating | Prior Result | Delta | Healthy | Clinical |
|-------------------------------|------------|----------------|----------------|--------------|-------|-----------------|-----------------|
| | 11/30/2006 | | | 09/05/2006 | | | |
| Albumin | | 4.60 | hi | 4.70 | ☺ | 4.10 - 4.51 | 3.50 - 5.50 |
| Globulin | | 2.70 | lo | 2.60 | ☺ | 2.81 - 3.51 | 1.50 - 4.50 |
| A/G Ratio | | 1.70 | hi | 1.80 | ☺ | 1.22 - 1.60 | 1.10 - 2.50 |
| Total Bilirubin | | 0.60 | Opt | 0.50 | | 0.39 - 0.93 | 0.10 - 1.20 |
| Alkaline Phosphatase 25-150 | | 63.00 | lo | 72.00 | ☹ | 65.00 - 108.00 | 25.00 - 160.00 |
| Creatine Kinase | | 83.00 | Opt | 37.00 | ☺ | 64.00 - 133.00 | 24.00 - 173.00 |
| LDH | | 165.00 | hi | 160.00 | ☹ | 120.10 - 160.00 | 100.00 - 250.00 |
| SGOT (AST) (AST) | | 21.00 | Opt | 18.00 | ☺ | 18.10 - 26.00 | 6.00 - 40.00 |
| SGPT (ALT) (ALT) | | 16.00 | lo | 9.00 | ☺ | 18.10 - 26.10 | 6.00 - 40.00 |
| GGT | | 9.00 | lo | 12.00 | ☹ | 22.00 - 39.00 | 6.00 - 55.00 |
| Total Cholesterol | | 219.00 | HI | 228.00 | ☺ | 140.10 - 170.00 | 100.00 - 199.00 |
| Triglyceride | | 75.00 | lo | 152.00 | ☺ | 80.10 - 115.00 | 10.00 - 149.00 |
| HDL Cholesterol | | 72.00 | HI | 61.00 | ☹ | 50.00 - 55.00 | 40.00 - 59.00 |
| VLDL Cholesterol | | 15.00 | Opt | 30.00 | ☺ | 5.10 - 20.10 | 4.10 - 40.10 |
| LDL Cholesterol | | 132.00 | HI | 137.00 | ☺ | 50.10 - 75.10 | 6.00 - 99.10 |
| Total Cholesterol / HDL Ratio | | 3.00 | Opt | 3.70 | | 0.00 - 4.00 | 0.00 - 5.00 |
| Triglyceride/HDL Ratio | | 1.00 | Opt | 2.50 | ☺ | 1.00 - 2.20 | 0.50 - 4.00 |
| Monocytes | | 6.00 | Opt | 4.00 | ☺ | 5.10 - 7.10 | 4.90 - 13.00 |
| Eosinophils | | 1.00 | Opt | 1.00 | | 0.00 - 4.10 | 0.00 - 7.00 |
| Basophils | | 0.00 | Opt | 1.00 | ☺ | 0.00 - 0.00 | 0.00 - 3.00 |

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We put the patient on a milder chelator mid-way thru her 10-week cycle because the DMSA appeared to also pull out Ativan; however significant amounts of toxic elements continued to purge from her system. The patient also quit Celexa because it made her "a zombie".

Results of 2nd Chelation Challenge:

| Test Description | Date: | Current Result | Current Rating | Prior Result | Delta | Healthy | Clinical |
|------------------|------------|----------------|----------------|--------------|-------|---------|-------------|
| | 12/29/2006 | | | 09/10/2006 | | | |
| Lead (UA) | | 8.70 | HI | 16.00 | ☺ | 0- 4.00 | 4.01- 5.00 |
| Mercury (UA) | | 7.10 | HI | 5.40 | ☹ | 0- 3.00 | 3.01- 4.00 |
| Nickel (UA) | | 6.60 | hi | 5.60 | ☹ | 0- 6.00 | 6.01- 12.00 |

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06-12-07 – A few months later, the patient’s hard work paid off with several test values entering optimal ranges. Her BP was down to 118/78 and while she was still not sleeping well and felt a little shaky in the morning, her anxiety symptoms had significantly subsided. She was also completely off Ativan and Estriol.

Results of 3rd Blood Test:

| Test Description | Date: | Current Result | Current Rating | Prior Result | Delta | Healthy | Clinical |
|-------------------------------|------------|----------------|----------------|--------------|-------|-----------------|-----------------|
| | 06/11/2007 | | | 11/30/2006 | | | |
| Albumin | | 4.50 | Opt | 4.60 | ☺ | 4.10 - 4.51 | 3.60 - 4.80 |
| Globulin | | 2.50 | lo | 2.70 | ☹ | 2.81 - 3.51 | 1.50 - 4.50 |
| A/G Ratio | | 1.80 | hi | 1.70 | ☹ | 1.22 - 1.60 | 1.10 - 2.50 |
| Total Bilirubin | | 0.50 | Opt | 0.60 | | 0.39 - 0.93 | 0.10 - 1.20 |
| Alkaline Phosphatase 25-150 | | 70.00 | Opt | 63.00 | ☺ | 65.00 - 108.00 | 25.00 - 160.00 |
| Creatine Kinase | | 45.00 | lo | 83.00 | ☹ | 64.00 - 133.00 | 24.00 - 204.00 |
| LDH | | 161.00 | hi | 165.00 | ☺ | 120.10 - 160.00 | 100.00 - 250.00 |
| SGOT (AST) (AST) | | 22.00 | Opt | 21.00 | | 15.00 - 26.00 | 6.00 - 40.00 |
| SGPT (ALT) (ALT) | | 18.00 | Opt | 16.00 | ☺ | 15.00 - 26.10 | 6.00 - 55.00 |
| GGT | | 12.00 | lo | 9.00 | ☺ | 22.00 - 39.00 | 6.00 - 65.00 |
| Total Cholesterol | | 233.00 | HI | 219.00 | ☹ | 140.10 - 170.00 | 100.00 - 199.00 |
| Triglyceride | | 81.00 | Opt | 75.00 | ☺ | 80.10 - 115.00 | 10.00 - 149.00 |
| HDL Cholesterol | | 60.00 | HI | 72.00 | ☺ | 50.00 - 55.00 | 40.00 - 59.00 |
| VLDL Cholesterol | | 16.00 | Opt | 15.00 | | 5.10 - 20.10 | 4.10 - 40.10 |
| LDL Cholesterol | | 157.00 | HI | 132.00 | ☹ | 50.10 - 75.10 | 6.00 - 99.10 |
| Total Cholesterol / HDL Ratio | | 3.90 | Opt | 3.00 | | 0.00 - 4.00 | 0.00 - 5.00 |
| Triglyceride/HDL Ratio | | 1.35 | Opt | 1.00 | | 1.00 - 2.20 | 0.50 - 4.00 |
| Monocytes | | 6.00 | Opt | 6.00 | | 5.10 - 7.10 | 4.00 - 13.00 |
| Eosinophils | | 2.00 | Opt | 1.00 | | 0.00 - 4.10 | 0.00 - 7.00 |
| Basophils | | 0.00 | Opt | 0.00 | | 0.00 - 0.00 | 0.00 - 3.00 |

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We saw higher levels of Lead coming out in the third chelation challenge, likely because she was back to using the full strength chelator. The flushing of higher levels of toxic elements may be the reason some blood values like cholesterol became worse. As a protector for nerves, cholesterol will often rise during chelation periods. Lead affects hormones, digestion and bone strength and was likely a main source of her problems.

Results of 3rd Chelation Challenge:

| Test Description | Date: | Current Result | Current Rating | Prior Result | Delta | Healthy | Clinical |
|------------------|------------|----------------|----------------|--------------|-------|---------|-------------|
| | 06/13/2007 | | | 12/29/2006 | | | |
| Lead (UA) | | 19.00 | HI | 8.70 | ☹ | 0- 4.00 | 4.01- 5.00 |
| Mercury (UA) | | 4.70 | HI | 7.10 | ☺ | 0- 3.00 | 3.01- 4.00 |
| Nickel (UA) | | 8.60 | hi | 6.60 | ☹ | 0- 6.00 | 6.01- 12.00 |

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Dr. Merkle's Final Thoughts:

This patient's anxiety took over her life. She was unable to sleep or eat, was constantly trembling and simply could not deal with any form of emotion or stress. Lead levels accumulated in her body to the point they were actually interfering with and shutting down the tools needed for everyday function. She went to her doctor who prescribed two anxiety drugs. Was she anxious? Absolutely! But why? What changed in her body that made her unable to cope? By doing a broad range of testing we were able to pinpoint which processes were not functioning optimally and determine her level of toxicity contamination. Once we've analyzed the patient's imbalances, we can then map out a course of action to replenish her body with the essential elements and minerals needed to return her to an optimal state of health.

-Dr. Van D. Merkle

This case report showcases a real patient's results using the Science Based Nutrition™ system of analysis, which takes into account hundreds of numeric data and their roles, combinations and inter-relationships as related to disease diagnosis. This patient is/was under the care of Dr. Van D. Merkle, creator and founder of Science Based Nutrition™, Inc. and is meant to serve as an example of results achieved using the Science Based Nutrition™ report. Contact your local health professional and ask him/her to provide you with the Science Based Nutrition™ report. Results will vary based on patient ability/willingness to follow the recommended nutritional protocols, among many other factors. Any suggested nutritional advice or dietary advice is not intended as a primary treatment and/or therapy for any disease or particular bodily symptom. Nutritional counseling, vitamin recommendations, nutritional advice, and the adjunctive schedule of nutrition is provided solely to upgrade the quality of foods in the patient's diet in order to supply good nutrition supporting the physiological and biomechanical process of the human body.

