

Taking Out the Garbage



SLEEP APNEA AND MERCURY DETOXIFICATION

One pair of biological dental sensibilities ripe for marriage that, if they don't marry may derail your health in a convoluted way I haven't yet heard anyone address: the relationship between mercury detoxification and sleep disorders including sleep apnea.

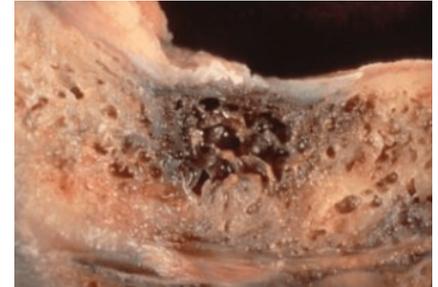
To be honest, it probably only occurred to me because I'd been so immersed in writing *Primal Dentistry* and producing an educational video series *Integrative Medicine From a Dental Perspective* that I began to preventively address several issues at once and had that epiphany. If you know something about holistic dental issues, you won't have any trouble following the bouncing ball:

1. Decided that, because I was a dental assistant in the 1970's and I'd literally touched mercury daily, had three small mercury fillings placed also in the 1970's, polished mercury fillings (thus bringing out their "beautiful" mercury vaporization "shine") in dental school and worked in dental practices that removed mercury without following any precautions for the following 25+ years, it was time to draw out and eliminate sequestered mercury.
2. As part of preparing my body for such a serious detoxification effort, I knew I ought to first do a dental revision. Since I'd never had root canals, and had previously had my three mercury fillings already re-

placed, that meant all I needed to do was check for cavitations I assumed I had in areas where wisdom teeth were crudely extracted. I received a cone beam tomography and indeed, all four sites required cavitation surgery.

3. The biggest shock from the tomography images was how little bone surrounded my teeth from clenching at night, a classic sign of airway problems. [Clenching also causes micro-fractures in the jawbone I wanted to minimize.] Non-retractive orthodontics in my 50's had helped for a while, but menopause caught up with me. A sleep study showed I needed to address it again.
4. Due to slightly burning lips and other nearby oral tissues I had to toss my traditional orthodontic retainers five years after orthodontics due to metal sensitivities, probably heightened by excessive mercury and other environmental toxin exposures. At this point it was clear I had to:
 - a. Protect my teeth from clenching forces, which can exceed daytime forces by 6 times
 - b. Retain my teeth to prevent any relapse to pre-orthodontic locations
 - c. Solve sleep apnea

Prior to the mercury detox, I was already doing everything I could to decrease whole body in-



Jawbone Cavitation

flammation, ensure gut integrity, reduce EMF exposures, optimize methylation pathways as well as making sure my liver, kidneys and gall bladder performed flawlessly.

Hey, wait a second! WHAT?!! Oh man, I'm so glad I didn't start the actual detox process yet! My body was in no way ready to move forward until I could sleep at night without those zillions of micro-awakenings I had no idea I was experiencing. Until blood oxygen levels were consistently over 90%. Until my heart quit racing all night. Until I quit running from tigers all night, flooding my body with the stress hormone cortisol. Until my thyroid started to function better. (Sex hormones and breathing influence each other. Superb progesterone/estrogen ratios improve thyroid function and decrease sleep apnea occurrences.)

Releasing mercury is very pro-inflammatory. You don't want your body revved up to fight generalized inflammation due to apnea only to then dump mercury into overloaded circuits.

Sleep restrictions including apnea and upper airway

resistance syndrome¹ increase “blood-brain barrier” permeability as does the bodily stress it causes. An altered barrier allows toxins like mercury into

the brain. Wow! What if you go to all the trouble of mobilizing mercury out of intra- and inter-cellular spaces throughout your body or even releasing it during

a *candida albicans* yeast cleanse to have it enter the brain rather than following normal excretion pathways. Yikes!

¹ These are conditions some dentists treat, therefore are mentioned here. Restricted breathing applies equally to other medical conditions such as COPD, insomnia (related to apnea) and lifestyle, for example night shift-work, studying, writing books or consistent late night partying.

TIMING IS EVERYTHING

Furthermore, your circadian rhythm earmarks nighttime as your primary detox/regeneration time. Your body kicks into high gear after you’ve been asleep for a few hours. As my books explain, your body’s primary detox time is between 1AM and 3AM.

1. Bile production spikes overnight
2. Liver and kidney detoxification capacity speeds up

3. Digestive tract motility increases
4. Unless you spend late evening hours looking at unfiltered electronic screens, melatonin, the sleep hormone, begins to ramp up in the evening to peak at about 2AM.² Melatonin spikes glutathione production. Glutathione is a critical component of all mercury detox programs for good reasons:

- a. Two molecules of melatonin escorts one mercury molecule out of the body
 - b. It’s anti-inflammatory
 - c. It’s a super anti-oxidant
- Everyone preparing to detox mercury knows all the above organs must function as well as a new automotive oil filter. If these back up with toxins, these organs can falter and suffer damage.

²This becomes an almost Catch-22 situation however because mercury can diminish serotonin levels in the brain, which in turn affects melatonin levels.

DISRUPTED SLEEP

Think of the five sleep stages as a slide. You start off at the top of the slide in Stage I and coast to the bottom of the slide called Stage V, REM or dream sleep. Each sleep cycle phase restores and rejuvenates the brain in different ways for optimal function.

Stages III and IV are termed delta-wave or Deep Sleep. During Deep Sleep, your brain solidifies whatever you learned during the day and enhances memory consolidation. It is when cortisol levels are at their lowest, muscle tension, body temperature and blood

pressure decrease, the circulatory slows down and when your brain releases growth hormones, which in turn stimulate cell repair (including those of the detox organs) and strengthen the immune system.

Oh! And one more thing. Deep Sleep stages are when you detox. Ideally you start at the top of the slide and coast through the cycles about six times every night. If you have Upper Airway Resistance Syndrome or sleep apnea, you get stuck at the top of the slide and spend minimal, if any time in restorative/regenerative sleep.

If you attempt to detoxify mercury with restricted breathing conditions during sleep, you can easily back up and damage your detox organs. Not only do they remain as lightly activated as they are during the daytime, they are not regenerating as well as they should be especially if they’re going to try to handle something as toxic as mercury.

Additionally, it is far easier for mercury to mobilize through a blood brain barrier made permeable due to cortisol release.

SWEEPING GARBAGE FROM YOUR BRAIN

Activated primarily during sleep, the glymphatic system is your brain's system of sweeping out metabolic garbage like the tau proteins and β -amyloid plaques called the trigger and bullet of Alzheimer disease, but also environmental solvents, chemicals, heavy metals like mercury and lead and neurotoxins like the mycotoxins molds produce. The gentle pulsations of augmented cerebral spinal fluid (CSF) and interstitial fluid that flow throughout your brain during sleep also helps distribute

nutrients as needed. The system is partly driven by the mild, rhythmic movement of cranial bones so it's not surprising that CranioSacral therapy can enhance glymphatic system robustness.

If you suffer restricted sleep for any reason, your glymphatic system doesn't have a chance to kick into gear. There is an extremely strong correlation between those with sleep apnea and Alzheimer's disease. The enhanced ability to mercury to enter the brain if you have sleep apnea coupled with an

inoperable glymphatic system to flush it out is a terrible combination.

For these reasons I strongly urge practitioners who assist in heavy metal detoxing to first ensure each client is tested and treated for sleep apnea if they have it. I urge consumers to insist on it and of course each person must understand the importance of excellent sleep hygiene before, during and after detoxing heavy metals. ■



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