Natural Medicine: How Immune Imbalance is the Root Cause of Insomnia

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The Root of Insomnia: Immune Imbalance

I have talked in the past about the close connection between immune over activation, inflammation and many common diseased and medical events, including atherosclerosis, heart attacks, strokes, cancer, the metabolic syndrome (type-2 diabetes) and hypertension.

Now we can add chronic insomnia to the list.

A tremendous amount of recent research strongly indicates that immune over activity is at the root of most insomnia cases. Newer studies from sleep-research labs have found that immune chemicals known as cytokines play a major role in normal sleep patterns. The rise and fall of these chemicals causes us to fall asleep and stay that way – but they also wake us up once we are rested.

Insomnia results when these sleep cytokines are disturbed. The most important cytokines include IL-6. TNF- and possibly IL-1B, with IL-6 being the most important.

As we start out day, IL-6 levels in our blood and brain fall, allowing us to feel fully awake and refreshed. Throughout the day, these levels slowly rise so that by early evening they reach very high concentrations, making us sleepy again.

When we lay down to sleep, IL-6 levels suddenly fall precipitously (to allow the sleep-inducing amino acid melatonin to do its work), as we quickly fall into a deep sleep. Then, throughout the night, blood levels gradually arise, so that by early morning they again reach a higher concentration, which wakes us up.

Upon walking, the levels once again fall very low, allowing us to become fully alert. This cyclical fluctuation in the sleep cytokine is referred to as a "circadian rhythm."

When sleep researchers looked at the effects of sleep disturbances in a normal young person, they found that the next day IL-6 levels were higher than normal,

making the person feel groggy and fatigues. In fact, injecting normal people with this cytokine made them very sleepy and tired as well.

Next, researchers observed people suffering from chronic insomnia and found serious abnormalities in their circadian cycle linked to the sleep cytokine.

Instead of the normal sudden drop in IL-6 at the onset of sleep, they discovered that very high levels of the cytokine remained . IL-6 was elevated throughout the day, as well. In essence IL-6, when higher than normal, caused insomnia at night and sleepiness and fatigue the next day.

Insomnia is also a common problem for patients suffering from Alzheimer's disease – and similar studies have shown that those with insomnia have the highest IL-6 levels.

In fact, researchers have found the same link – elevated TNF-a and IL-6 – in many other disorders associated with chronic insomnia, including sleep apnea, narcolepsy, hypertension, alcoholism, drug abuse, depression, stress, SIDS (sudden infant death syndrome), obesity and the metabolic syndrome.

These cytokines are important because they are immune chemicals that cause inflammation and are associated with the causation of all the diseases I have listed – and many more.

While the pharmaceutical companies and others are busy devising ways to help you fall asleep and stay that way, they are ignoring this critical underlying cause of the problem.

And though some drugs can "fix" our sleep –problems, they do little or nothing to address the underlying high cytokine levels – and that leaves us vulnerable to some pretty nasty diseases.

After all, high levels of these inflammatory biochemical's can cause atherosclerosis, heart (Alzheimer's and Parkinson's), diabetes and psychological disorders – all of which can be smoldering away underneath a person's insomnia.

Dr. Badanek has been and currently is 37 years into active/private practice in the Ocala/Marion County, Florida region. Dr. Badanek practices Natural/Holistic Medicine through the use of Functional/Integrative Models for diagnostic and treatment protocols for the health challenged. Find him online at Dr.Badanek.com and www.alternativewholistic.com, and see what the facility

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