

Adrenal Fatigue: A Debt Worse Than Credit Cards

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The adrenal glands are small triangular-shaped glands that sit on top of the kidneys. They have two essential areas--the cortex, or outer portion, and the medulla, or inner portion. Each produce a different set of hormones. Cortisone, the most well-known adrenal hormone, is made by the cortex. Like all hormones, the adrenal hormones affect every cell of the body, altering metabolism, chemistry, immune system and other functions.

While I had been hearing about "adrenal fatigue" for years in the alternative medicine world, the medical-scientist-in-me was unable to accept this as a true condition until recently. This is because it was initially hard to understand, and even more difficult to prove.

For other glands, we can prove fatigue and failure. In hypo-thyroidism, the thyroid gland makes insufficient thyroid hormone, and eventually none. This is easily measurable. In some cases it is reversible, in others not. With the pancreas gland, people initially develop Type II (adult onset) diabetes, in which the pancreas is actually asked to produce more insulin than usual, due to a situation known as insulin resistance. At some point, considered irreversible, the pancreas "poops out" and can no longer make insulin--and the patient needs to take insulin injections for the rest of his/her life.

However, with the adrenal glands, such a progression from insufficiency to failure was hard, if not impossible to demonstrate. Yes, there are conditions where the adrenal glands totally fail, called Addison's disease. However, this condition is easily measurable and relatively easy to treat. But it is extremely rare, and is not what "adrenal fatigue" refers to. Proving the existence and of adrenal fatigue for myself and my patients proved to be like a CSI investigation.

What Does Adrenal Fatigue Feel Like?

Adrenal fatigue can be as simple as feeling "older than your age", or having difficulty healing after a cold, infection, or wound. Or it can feel like a pervasive fatigue--unable to feel refreshed after sleeping, or feeling worse after exercise. Or it can manifest as a low-level (or intractable) depression or mental fogginess. It has a very similar symptom profile to hypothyroidism, chronic fatigue syndrome, depression, "peri-menopause", and various toxicities. This overlap with these other "diagnoses" makes it hard to identify, which is one of the reasons why conventional medicine has not yet recognized it. The reason all these situations have similar symptoms is that the body, when it doesn't work well, has a limited number of ways to become dysfunctional.

What Is Adrenal Fatigue

Adrenal fatigue is considered a condition in which the adrenal glands cannot keep up with the demand for adrenal hormone production. While there are numerous hormones that the adrenal gland makes, they are all interactive in that many are inter-convertible and they affect each other. For example, all female hormones are made from male

hormones. Therefore, in women, we want this process of conversion to work very briskly; while in men, we want the opposite.

There are other important hormones, such as cortisol, aldosterone, pregnenolone and DHEA, which can affect the immune system, blood sugar, kidneys, liver, brain, other hormones (thyroid and pancreas) and innumerable chemical processes in our bodies. It is the balance of these numerous hormones that ultimately determines whether we are healthy.

For example, earlier in my career, I used thyroid hormone in many of my fatigued patients, after hearing about some "miraculous" improvements. It made sense that even if lab tests didn't show blatant abnormalities, perhaps the patient had "sub-clinical" (i.e. immeasurable) hypothyroidism. Indeed, a small percentage of my patients, maybe 10%, showed such a miraculous improvement. However, the fact that the other 90% didn't show any significant improvement, frustrated us.

And so, as I was searching for the cause of the fatigue and immune dysfunction that my patients were complaining about, I kept coming back to the adrenals. Perhaps I should measure all these hormones, to see if the ratios were a clue for healing.

Is Adrenal Fatigue Measurable?

Conventional medicine has a sophisticated test called the "ACTH stimulation test", in which the adrenal glands are stimulated artificially and their response is measured. While this test is sometimes useful, and was very popular a few decades ago, it is now seldom used because it often is normal despite patients' complaints.

The alternative medicine world has a saliva test, which again can be helpful in select cases.

In this test, not covered by insurance, saliva is collected several times over a day. With women, samples can also be collected over a few days or weeks to further measure female hormonal cycles. This test measures several hormones and how they vary over the day. Again, in some cases, it does demonstrate abnormalities; but not consistently, and then if there are abnormalities, what do you do?

There are many logistic problems with these tests. One is that a test is a "slice of life"--it captures a single moment in time. When a problem is subtle or "sub-clinical", or is existing on an energetic level (see my prior and future articles on energy medicine), the chances of catching an abnormality may be no better than random. In addition, "normal range" for many of our tests are based on collecting data on a population of "normal" people. In America these days, who is normal? And if we establish a range of values, where does an individual belong on that range. What is normal for one person may not be normal for another.

When it comes to obscure conditions such as Adrenal Fatigue, there is little research. This is in part due to conventional medicine not believing in this condition. In addition, since the treatment does not involve proprietary

drugs, there is little grant money available to do the appropriate studies.

Continued Discoveries

Out of desperation, I began to order different tests on my patients who seemed to have this syndrome. Several hormones, such as thyroid, aldosterone, prolactin were normal. In women, if their cycles were normal, then I knew their sex hormones were working fairly well, and this was substantiated by lab tests.

And then I stumbled upon two tests of obscure adrenal hormones that seemed to show abnormalities in many of my fatigued patients--DHEAs and Pregnenolone. While other practitioners I knew had been measuring DHEAs, none had been measuring Pregnenolone. With a "normal range" of 20-230, many of my patients levels were below 30, or even immeasurable! None of my practitioner colleagues could help me understand this, and again, there is virtually no research on this finding. Even if I had little faith in "normal" ranges, this very low level seemed to be a consistent finding. With the DHEAs, it could be very low, very high, or within normal range.

While I still have lots of questions about the meaning of these tests, such as when is the best time of day to take the tests, and what supplements or drugs may affect these values, they come back abnormal in so many of my patients, that I believe they have some meaning. Furthermore, when we gear treatment (see below) toward correcting Adrenal Fatigue, patients begin to feel better and in some cases, the labs begin to improve. If they fail to improve, looking deeper for the "cause" of adrenal fatigue, such as food allergy, gastro-intestinal dysfunction, stress or sleep disorder, can begin the healing process.

Treating Adrenal Fatigue

Since the cause of adrenal fatigue is multi-factorial and highly individual, so is the treatment. I usually start with education--since Adrenal Fatigue is a "lifestyle dis-ease", and so no doctor can "prescribe" a medicine or a change in lifestyle. Ultimately, it is the patient's responsibility, and choices, that will determine the rate and degree of healing. For example, some patients are unwilling to sleep more than 6 hours a night, while others are unwilling to change their diet. After education, gentle modalities such as eliminating toxins from the diet, adding core supplements that the adrenal (and other) glands need, stress reduction such as yoga and meditation, and energetic techniques such as acupuncture can facilitate the healing process.

Relation of Adrenal Fatigue to Other Conditions

Adrenal fatigue is intimately involved in recurrent infection. During peri-menopause, the adrenal glands have to take over production from the ovaries--and if they are subtly fatigued, menopause can be characterized by lots of symptoms. Poor adrenal function can be linked to allergies and auto-immune diseases such as rheumatoid arthritis, Hashimotos thyroiditis, and inflammatory bowel disease, since the adrenal hormones are important modulators of immune function. Adrenal fatigue can also be the cause of, or caused by, gastro-intestinal dysfunction including ulcers, GERD, and irritable bowel function. It is intimately

involved in most inflammatory conditions of the body, including arthritis, Alzheimers, atherosclerosis, mood disorder, and aging.

Is Adrenal Fatigue Reversible

Conventional medicine tells us that the thyroid and pancreas, after failure, cannot recover, requiring their hormones to be prescribed for the remainder of a person's life. This is also true of Addison's disease, the extreme case of adrenal failure. The mechanism for such glandular death is usually an inflammatory attack that destroys the gland. However, in the case of adrenal fatigue, recovery can occur. I have extrapolated this finding to people with early diabetes and thyroid disease, and have shown that the pancreas and thyroid also have a chance to repair if their dysfunction is caught early enough.

IMPORTANT NOTE: This general information should not be used to make decisions about medical care without the involvement of an experienced practitioner.

For More Information

- O See Dr. Cheikin's related articles on: Allergy, Inflammation, Gastro-Intestinal Dysfunction, and Hormone Havoc
- O Dr. Cheikin's website, www.cheikin.com, has helpful articles on related topics
- O Dr. Cheikin offers workshops on topics such as Chronic Pain, Journaling, Nutrition, Weight Management, and classes in yoga, meditation and other wellness methods. Please call to be placed on his contact list or if you wish to host a Workshop.
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