Hypoadrenia: A causative factor in MCS, Allergies and Impaired Enzymatic Detoxification
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Integrative Medicine practitioners recognize the necessity of reducing toxic body burdens and providing appropriate cellular nourishment to restore good health. In my previous publications, I expressed an urgent clinical need to exercise caution with many popular detoxification strategies. I have emphasized the need to use safe "non-crisis" detoxification methods that can simultaneously augment cytochrome P450 enzymes, trans sulfaion-sulfate pathways while maintaining proper afferent-efferent neural control of the sphincters of digestion. When toxins can't be disarmed and excreted safely out of the duodenum, they can sabotage fertility, accelerate aging, erode intelligence, trigger carcinogenesis, weaken the immune system causing runaway viral infections, and activate neurological symptoms and cytokine-driven inflammatory processes that lie at the core of many high-profile diseases.

One reason that Multiple Chemical Sensitivity (MCS) can be such a stubborn problem is that it involves so many of the body's interlocking systems, and lying at the center of it all is hypoadrenia caused by a deficit in enzymatic P450 detoxification. For this reason, doctors of integrative medicine are finding it maddeningly hard to minimize or eliminate the symptoms of MCS, thwart unwanted pain and inflammation, and stop viral disorders or carcinogenesis. Lifestyle changes and symptomatic treatment aren't enough. For the nation's major diseases to be controlled, doctors must learn how to unlock tensed neuro-energetic zones in the abdomen that govern healing and repair via the body's inner physician and restore adrenal steroidogenesis.

Increasing worldwide pollution coupled with overcrowding, contaminated water and food, airborne nuclear radiation, and indoor air contaminants has between 15 and 37% of the American population complaining of sensitivities or allergies to chemicals, car exhaust, tobacco smoke, air fresheners, and the scents of many common household cleaning agents and body care products. Indoor air contaminants (synthetic cleaning agents, synthetic cologne, perfumes, body care products, and air fresheners) wreak havoc with detoxification functions and act as constant stressors on the body's stress-fighting adrenal glands. As toxic stressors, they infiltrate and damage the body and rapidly deplete the nutrient precursors and enzymatic co-factors required to cleanse the body of pollutants. Moreover, these pollutants throw off the calibration of the body's stress defense mechanisms, propelling the body into a vicious cycle of stress-driven reactions that allow stagnant damp heat or inflammation to build up in the upper abdomen.

The best way to understand what MCS is—and what it is not is to observe how it affects the lives of people who have it. MCS has serious implications and social effects that demand more public and professional understanding. MCS sufferers experience personality changes—becoming angry, depressed, irritated, anxious, fearful, and lethargic—and acute heart symptoms, brain and nervous system reactions, paralysis, an inability to breathe or a feeling of suffocation, intense and disabling headaches or dizziness, brain fog, short-term memory losses, muscle and joint pain and convulsions when exposed to certain chemicals.

Most sufferers find it impossible to live a normal life. Shopping and the normal social routines of life become impossible making isolation and withdrawal the only option to avoid a chemical exposure that could trigger a serious or near fatal neurological reaction. When they seek professional help, they are labeled as "psychosomatic" or misdiagnosed with psychiatric disorders, cognitive and neurological impairment, allergies, migraine headaches, sinusitis, or asthma. Sadly, the real cause (hypoadrenia and a failure of P450 enzymes) remains obscure and masked by commonly prescribed antihistamines, decongestants, anti-inflammatory drugs, megavitamins (B complex and vitamin C), herbs, and cortisone.

Detoxification in individuals with impaired enzymatic detoxification is contraindicated and dangerous. MCS is a disabling, multi-organ syndrome caused by an impaired ability to detoxify chemical toxins and hypoadrenia. According to a 2004 International Journal of Epidemiology study, impaired metabolism of toxic chemicals underlies MCS. In this case control study, a gene-gene interaction between enzymes suggested an elevated risk for MCS. These findings parallel other observations of a link between P450 enzyme abnormalities in Gulf War syndrome veterans and in a retrospective case-control analysis reporting cognitive and neurological impairments as symptomatology. Clearly, labeling MCS patients as "psychosomatic" is not supported by scientific or empirical evidence.

Effective detoxification protocols for MCS patients must address hypoadrenia and P450 and sulfoxidation deficits. Cysteine dioxygenase (CDO) is one of the enzyme deficits in MCS patients that is not adequately identified by the acetaminophen challenge test, the urinary-sulfate-to-creatinine-ratio and the plasma cysteine-to-sulfate ratio. Thus, it is an exceedingly bad idea to employ detoxification strategies that do not conjugate or disarm volatile and inflammation-producing toxins as impaired CDO activity has been linked to Rheumatoid arthritis, Lupus, Parkinson's Disease, MCS and neurological diseases.

When CDO or P450 enzymes are not functioning at full strength, they fail to act as an enzymatic barrier against the unimpeded transfer of airborne xenobiotics into the lung parenchyma and systemic circulation. Many carcinogens or potential carcinogens enter the bloodstream without being detoxified. Unfortunately, fasting and common homeopathic and nutritional detoxification strategies may allow these un-detoxified toxins to circulate and do further damage to the organism. Antibodies and oligonucleotide probes raised against CDO in immunohistochemistry and in situ hybridization, respectively, demonstrated that the abnormal expression of CDO breaches the body's primary metabolic barrier against the systemic entry of xenobiotics. Since the lungs are the first point of contact for airborne toxins and are always weakened in hypoadrenia, it makes sense that their entry and access to other tissues before being detoxified by the liver has the potential to cause many of the neurological and organ symptoms of MCS and other diseases. In contrast, orally
Ingested xenobiotics undergo the hepatic first pass effect. Therefore, it is possible that, without the potential for CDO detoxification within the alveoli, many carcinogens or potential carcinogens would enter into the systemic circulation unimpeded, without detoxification, as strong electrophiles (electron-deficient molecules). Electrophiles react with electron-rich DNA causing mistranslations, mutations, defective DNA repair mechanisms and chronic malfunctions. In these cases, boosting nutrient uptake with carrier protein-co-transporter technologies may be necessary to nourish these patients and supply the necessary nutritional support to the adrenals and detoxification organs of the body.\textsuperscript{1,2,22-24}

**The Missing Link: Deficient Adrenal Gland Steroidogenesis**

Adrenal steroid hormone biosynthesis involves P450 enzymes.\textsuperscript{16-20} The repertoire of enzymes expressed in steroidogenesis are also involved in detoxification. Disordered steroidogenic activity may result in high cortisol, low corticosterone, low progesterone or testosterone and other abnormal steroid hormone expressions (see illustration). Altered hormone production from the abnormal control of steroidogenic lineages can deregulate many stages of endocrine, paracrine and autocine functions while desensitizing afferent neurons and lowering liver and digestive physiology.

Steroid hormones of the adrenal are essential for normal reproductive and bodily homeostasis. The rate-limiting and regulated steps in steroid biosynthesis involving the utilization and transport of cholesterol is regulated by the STEROIDOGENIC ACUTE REGULATORY (StAR) protein. A deficiency of StAR protein has been documented to markedly disrupt the synthesis of all adrenal steroids via deficits in the mobilization and delivery of precursor cholesterol metabolism by P450 side chain cleavage enzymes.\textsuperscript{53-56} Thus, non-functioning P450 enzymes coupled with a deficiency of quorum-fermented STAR protein, make it impossible for doctors to pursue aggressive detoxification strategies as toxins will continue to stay locked under inflamed tissues. Decades of research with glandular nutrition, cordyceps and other popular adrenal support products failed to correct hypoadrenia, making it impossible to safely disarm and excrete toxins out of the body. These undetoxified toxins are potent adrenal stressors that breach the defensive armor of the adrenals against all kinds of stress.

**An Acupuncture-Energetic View of Hypoadrenia**

Ted Kaptchuck, author of THE WEB THAT HAS NO WEAVER, praised Dr. Mark D. Seem, Director of the Tri-State College of Acupuncture, stated, "Under chronic stress, the adrenals (Yang of the Kidneys), Liver, and musculature of the chest and upper back (Pericardium energetic zone become permanently constricted."\textsuperscript{21}

American or TCM-trained acupuncturists commonly neglect the integrity and balance of the entire human energetic system with primal energy networks (extraordinary meridians) and this is crucial to healing the damage caused by volatile toxins that induce cyclic pro-inflammatory reactions and damage to the organism. Dr. Seem states, "The two dominant styles of practice in this country--TCM and Five Element acupuncture—both emphasize the ZangFu (called Officials by Five Element practitioners of the Worsley school) and the regular meridians only and ignore the complex surface and primal energetic networks, which, taken as a whole with the regular meridians, constitute human energetics. In this sense, they are disembodied approaches to acupuncture."

If we perceive the neuro-energetic pathways of the body according to these teachings, we will see the extraordinary vessel, the Chung Mo as embryologically serving as the foundation upon which all organ functions develop and heal via the body’s inner physician. A disruption of the Chung Mo leads to gastro-duodenal inflammation and spastic diaphragmatic activity as well as disruptions in the chief organizers of neuro-energetic patterning, the Governing Vessel (GV) and Conception Vessel (CV) meridians.

Hypoadrenia causes chronic and prolonged infection and unwanted inflammation, which lies at the root of heart disease, opportunistic yeast and viral infections and is responsible for buildup of stagnant energy in the liver and diaphragm that inhibits P450 steroidogenic and detoxification activities. A wide spectrum of reactive and pro-inflammatory symptoms result from this default in liver function that disrupts the free flow of healing energy throughout the body and generates stagnant Liver Qi that agitates emotional states. For over two decades, I have taught doctors to...
correct these gastro-duodenal disturbances because they disrupt Kidney-Adrenal energetics and inhibit Phase I and III liver detoxification.

Ideally, we need to palpate these abdominal zones and feel the extreme reactivity in the pit of the abdomen and diaphragm, because these constrictions cause immunological unresponsiveness or a dysfunction of the Wei-defensive system. When the adrenals are depleted, the body’s defensive armor is energetically and physiologically breached resulting in extreme reactivity to all stressors (chemical toxins, microbial, etc.). To make matters worse, functional disturbances in the afferent-efferent vagus inhibit lymphatic circulation and drainage, digestion, and liver detoxification even further. In acupuncture-energetic terminology, it is constrained Liver energy with an excess of the Yang root of the kidneys (adrenals) that leads to an afferent neuron deficiency.

Unfortunately, diet and fasting, glandular nutrition, homeopathy, vitamins, and herbs typically fail to address these functional deficits and make matters worse by repatterning the body farther away from normal physiology into a mode of functioning that requires more and more stimulation. As one would suspect, the stimulatory nature of these therapies weakens the adrenals and disturbs energetic relationships with other meridians, especially the front and back and right and left energetic polarities or the deeper palpable energetic zones that organize the regular meridians. This energetic disruption defers the repair of the body's stress-damaged organs/systems, and unbalances meridian energies.

After decades of using a wide variety of different clinical approaches, I have found that it is wrong to stimulate the adrenals and force detoxification without proper quorum nutritional support of Phase I, II, and III detoxification pathways. While stimulation may result in the disappearance of many symptoms, it will eventually backslide as it goes against innate intelligence and acupuncture-energetic physiology. The worst stressors in this regard are nutritional approaches that advocate the use of B vitamins, vitamin C, stimulatory herbs, expansive or contractive inorganic and ionic minerals, DHEA, pregnenolone, and other unidirectional nutraceutical approaches.

Even acupuncture without detoxification may be viewed as a stressor to the body. Dr. Seem states "... in line with modern stress theories, acupuncture serves as a minor stressor to activate the sympathetic nervous system. In doing so it activates the adrenals (the mother of the Liver in acupuncture energetic physiology)..." Since finding clinically effective ways to nourish and fortify the adrenal glands is paramount to activating inner physician healing, I had to invent the YANICK ANTI-STRESS NEURO-EMOTIONAL BALANCING TECHNIQUE as a prod to enable my patients to restore lost inner physician function.

The neurological connection to the acupuncture meridians and the adrenals is well known as the adrenal medulla cells secrete epinephrine (adrenaline) and norepinephrine (noradrenaline), preparing the organism for "fight or flight" in emergency situations. When this happens habitually as a function of addictive stressors or through uncompensated secrete epinephrine (adrenaline) and norepinephrine (noradrenaline), preparing the organism for "fight or flight" in emergency situations. When this happens habitually as a function of addictive stressors or through uncompensated stress, the afferent vagus gets desensitized, inhibiting gastrointestinal function, which, in turn, stress the adrenals and nervous system even more. This cycle keeps the adrenals in a perpetual state of stimulation and fails to address core issues underlying maldigestion and malnourishment. It creates a gut ecosystem disaster and a habitat and niche for opportunistic yeast infections.

The adrenal cortex makes 40 hormones (corticosteroids) formed from cholesterol to help regulate protein and carbohydrate metabolism, metabolism of salt and water, and to provide appropriate stress defense. The glucocorticoids consist mainly of three hormones, cortisone, corticosterone, cortisol and the 17-ketosteroids (sex hormones). We absolutely cannot plug a hormone into this intricate web-like steroidogenesis pathway without serious and potentially fatal reactions. Patchwork or the band-aid approach of treating symptoms and not restoring the body’s inner physician shifts the body's physiology in the wrong direction, inhibiting the proper outflow of all steroid hormones.

Clinically Defining HypoAdrenia and Neuro-energetic Deficits

After 35 years of treating people with natural therapies, I had come to the realization that I was primarily functioning as an educator and not a healer. The more I learned about the infinite wisdom of nature and the body’s inner physician, the more I would teach doctors and patients how to gain restore inner physician healing capacities to get well. The following tests proved useful in defining how much inner physician function was lost and/or the degree of Hypoadrenia:

- **Ragland Test:** Take blood pressure after lying on back relaxed for 5 minutes. Leaving the uninflated cuff in place, test again while standing up and immediately take the pressure again (be careful of dizziness). The systolic blood pressure should rise 5-15 (mm of mercury) on standing with healthy adrenals. If the systolic pressure falls or stays the same, one may suspect hypoadrenia. A drop of 5 points or less corresponds to mild adrenal weakness; a drop in the 5 to 10 point range means substantial hypoadrenia; and more than 10 points suggests the person is bordering on adrenal failure.

- **Rogoff Sign Test:** Beam a light on the patient's pupil. If the light fails to constrict the pupil and maintain a constant constriction for 38-45 seconds, suspect hypoadrenia. The physiological mechanism behind this abnormal reaction is related to the adrenals' inability to maintain electrolyte balance and secrete adrenaline (which constricts blood vessels).

- **Palpation of Abdomen, Neuro-energetic & Neuromuscular Zones** (charts are found @ www.quorumnutritionllc.com in the QUANTUM MEDICINE & QUORUM NUTRITION PRACTITIONER'S MANUAL): Illness is a pattern of tendino-muscular segmentation with distinct left-right polarity differences in upper and lower zones of the body. Palpating the energetic body to assess the total energetic condition is very different from assessing meridian pulses and energies via select acupoints on the hands and feet. Instead, the focus is on freeing up and tonifying deeper energetic zones and functions via extraordinary meridians such as GV (Du Mo) and CV (Ren Mo), and the Chung Mo, which rises upward from Liver and Kidney Yang (adrenals), nourishing all visceral functions. Non-invasive energy techniques are highly successful in balancing yang GV and yin CV polarities and is based on decades of my research and research by leading French acupuncturists. My exposure to French acupuncture while practicing with a French-trained medical acupuncturist guided me early in my practice to palpate deeper energetic imbalances in extraordinary deeper meridian zones that correlated exceptionally well with adrenal-vagus physiology (the GV...
corresponds to what chiropractors call innate intelligence and represents the spinal cord, cerebrospinal fluid and the peripheral nervous system while the CV meridian corresponds to the brain or brain interferences.27,28

- **Questionnaire (posted @ www.aqm.org)** – The scores of this clinical questionnaire can accurately predict inner physician and adrenal status in patients when combined with the functional tests above. Briefly, stubborn gastric or duodenal tenderness on deep palpation; addictive tendencies (sugar, caffeine, etc); a history of gum and jawbone infections and sinusitis, allergies or asthma along with low blood pressure and frequent morning coughing is indicative of hypoadrenia. In addition, slow wound healing or excessive bleeding after puncture or injury, brown skin spots and/or skin tags, swollen eyelids swollen or sensitivity to bright lights along with chronic fatigue (need stimulation to function), being anxious and irritable with mood swings, lightheadedness or dizziness, poor sleep patterns, and decreased libido after the age of 50 all point strongly to hypoadrenia.

### Restoring Inner Physician Dynamics via StAR Protein and Adrenal Nourishment

If we believe what Hippocrates taught over 2700 years ago about the body’s inner physician, we must attempt to help the patient gain contact with their inner physician and see it as the greatest healing force in getting our patients well. This perspective allows us to view sickness as the manifestation of an unstable inner physician process; a pattern of ecosystem disharmony involving stress overload and varying degrees of hypoadrenia. A lack of sunlight, fresh air, clean water, and wholesome raw organic foods stress the adrenals and downshift the body’s inner physician. To restore adrenal function at extraordinary deeper meridian zones we have to follow the patterns of embryologic wisdom in balancing the body in a way that defines the sum and prerequisite for all healing energy and restores the functional unity of the entire organism. The duality of afferent-efferent and meridian function allows the body to keep itself in equilibrium and to balance itself when that equilibrium is disrupted. The body’s restorative secrets are intrinsically linked to its ability to expand and exploit its myriad resources to thwart harmful stress reactions. Our clinical research has found that enhancing quorum nourishment can fortify adrenal-neuro-energetic functions, making one highly resilient to stress. In nutritional applications, this predigested, symbiotic nourishment propels nutrients deep into cells,22-24,26 providing a plausible scientific theory on how to regulate the entire organism while shielding it from the stress of life. However, we have to realize that the body needs nourishment from a healthy gut ecosystem and from effect quorum nutritional methodologies that restore 400 strains of human microbiota in the human ecosystem.

Once the adrenals are functioning optimally, both physically and energetically, the body can adapt to the stresses and strains of everyday living without distress. Detoxification is without effort and without harm to the body. Inner Physician healing energies are not hindered by stress overload (daily doses of unwanted toxins) because they disrupt inner physician function. In prodding the pathways of the body’s inner physician in thousands of patients, I learned how to formulate quorum nutrition with StAR protein to fortify adrenal function while simultaneously improving tri-phasic liver detoxification.29-36,56 Defining the specific requirements for inner physician nourishment took me decades of empirical research because a high percentage of supplements we tested were toxic or too stimulatory depressing adrenal and afferent neuron function with each dose. Our research on the toxicity of supplements is confirmed by in vitro screening studies at the University of California of 196 natural products where Dr. Daryl See reported that 191 were toxic or ineffective (as antioxidants or immunomodulators) with only 5 products or 2.5% reported as being non-toxic.57

### Summary

In summary, the suffering of MCS patients is real and related to impairments in liver detoxification that are induced by stressors and hypoadrenia. Once the metabolic barrier to toxins has been breached, carcinogens or potential carcinogens enter systemic circulation unimpeded, without detoxification, amplifying the inflammatory cascade and causing dysregulation of neurological and vascular system functioning. This impaired detoxification ability manifests itself in acupuncture-energetic physiology as a deferral or a disruption in the free-flow of meridian energies found in palpable abdominal zones that must be freed up, strengthened and balanced with other neuro-energetic zones for optimal adrenal function.

Releasing these abdominal constrictions helps immensely to alleviate pain and tension in the affected zones and frees up circulation in the Chung Mo crossroads of the lymph, venous, arterial, and nervous system, improving overall inner physician regulation. My QUANTUM MEDICINE & QUORUM NUTRITION PRACTITIONER’S MANUAL teaches doctors how to use neuromuscular assessment techniques that can quickly pinpoint left-right neuro-muscular segmentation or a disruption in embryologic patterning of the inner physician.27,28 These unique tools quickly unveil the core issues in innate, immunological and hormonal unresponsiveness providing unparalleled insight into the quantic domain of life where complex, interwoven, neuro-energy fields govern our existence and determine how fast we will heal or recover from an illness, trauma, or an infection. Rather than rely on treatments that are often off-target and embarrassingly simplistic, practitioners need to depart from fragmented, analytical thinking, and listen to body language. Body language—the interpretation of hypotonic and hypotonic muscles relative to deep energetic zones—communicates the body’s problematic condition with incredible accuracy. By eliminating interferences and stressors, the body’s innate healing energies can direct powerful and efficient repair strategies.
Treating symptoms or targeting organs is the opposite of what nature intended, and thus, handicaps the inner physician. When the inner physician is running sub par it sends out signals for help such as anxiety and irritability and other adrenal vulnerabilities. Clinical methods need to be adapted to do a performance appraisal of the inner physician status and address the widespread increase in environmental, food and supplemental toxicity. Ideally, supplementation should be quorum-fermented and in polar lipid formats restore inner physician function. Such methodologies may be helpful in eliminating body stressors, realigning body energies, and nourishing stress-damaged organs and glands. Let’s reconceptualize our role as doctors and see the “cure” as existing within the patient’s body. By focusing on restoring the normal relationship between the adrenals and the body’s inner physician, we support the higher of science—to ethically advance knowledge for the good of the human kind. This kind of professionalism takes courage but it is rewarded intensely when we see our patients’ get well fast by discharging harmful toxins, eliminating opportunistic infections, and correcting nutritional deficiency states in the shortest time possible.

*FREE* Quantum Medicine & Quorum Nutrition Practitioner’s Manual and 12-5-11 FREE Webinar Invitation to Learn Clinical Assessment of Hypoadrenia at [www.quorumnutritionllc.com](http://www.quorumnutritionllc.com)

**References**