



GENERAL ACUPUNCTURE

# A Guide for Talking to Doctors about Acupuncture and Brain Chemistry

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Before I begin any discussion of how to talk about the effects of acupuncture on brain chemistry, nervous and endocrine function, it is essential to understand just what physicians most need help with. Who are the patients that most frustrate physicians and conventional medicine?

This is a key step that so many otherwise competent acupuncturists skip when presented with an opportunity to reach out to the mainstream. If you know what is important to physicians, what interests them, what matters to them, if you understand what they need help with as well as the problems to which they are seeking solutions, then you can craft a very targeted and well thought out presentation. Better still, if you learn to craft your communication in language they understand and respect, you become an unstoppable proposition.

Why? Simple: because the size of the problem and your opportunity to help out is so enormous. Because acupuncture is inherently suited to help modern medicine in treating and managing the exact patients that so confound the conventional system, the key to all of this is your ability to communicate effectively.

This article will both identify the key frustrations of conventional medical professionals within the 21st century patient population, and will also provide legitimate explanations in biomedical terms for the mechanisms by which acupuncture gets its effects – complete with some of the essential phraseology useful to achieve serious rapport with and respect from physicians. A review of the literature and even modest and low-level understanding of the 21st century patient population makes clear that certain conditions are especially confounding to modern, conventional medicine.



In the broadest terms, the most difficult to treat patients are generally suffering from four specific comorbidities that far, far outweigh all other diseases both in terms of the numbers of patients who present, and in regard to how difficult they can be to treat successfully with conventional modern medicine.

The literature overwhelmingly reveals that pain, stress, anxiety and depression are by far the most costly complaints physicians are forced to treat in patients. Technically, stress is not a disease and thus not to be found in the DSM (although the ICD classifications DO categorize "stress" as a diagnosable condition). However – as you will soon learn – interruption of the stress response is one thing acupuncture does best.

Acupuncture is already understood as and believed by the public to be primarily a pain therapy so this is no hard-sell to physicians or patients or anyone else for that matter. To address the other top disease conditions, we must focus on what are perhaps the two most difficult co-morbidities in all of medicine: anxiety and depression.

Anxiety is the "common-cold of psychiatry" and physicians in all specialties deal with it. As for depression, it is such a dastardly condition to treat and manage that it is – in my own experience and from interviewing and working with conventional medical professionals – the No. 1 "pain point" for the modern physician. Stress, anxiety and depression (and pain too for that matter) all involve major pathways and brain regions related to the stress response. Here I am talking about the physical signs and symptoms of what in TCM amounts to liver-spleen disharmony and it various possible sequelae.

So, let's get crystal-clear on exactly what biomedicine considers to be the signs and symptoms of the

### stress response:

- Elevated blood pressure (liver depression *qi* stagnation)
- Increased heart rate (heart heat)
- Decreased blood flow to digestive organs (spleen vacuity leading to dampness, etc.)
- Disruption of circadian rhythm and sleep cycle (*yang* exuberance, depressive heat, *yin* vacuity heat)
- Increased appetite (depressive heat in the liver and stomach leading inevitably to spleen vacuity, dampness, blood vacuity, *qi* vacuity, et al)
- (Over time) decreased arterial elasticity (*yin*, blood vacuity)
- (Over time) Decreased heart rate variability (possible heart *yin*/blood vacuity)

One major biomedical effect of the stress response is that it results in elevated levels of glucocorticoids such as cortisol. Glucocorticoids are hormones secreted predominantly by your adrenal cortex to respond to stress. Like any hormone or neurotransmitter, these endocrine messengers must find receptors to which they can bind in order to produce effects on physiology and function. It turns out that the areas of the brain most susceptible to the stress response are the areas loaded with high-concentrations of glucocorticoid receptors, and these same regions are very much involved with the major mood disorders of anxiety and depression. Acupuncture does more than "regulate the stress response." It increasingly appears that acupuncture fundamentally recalibrates the primary CNS (central nervous system) Networks that account for the different symptom-types and severity in anxiety and depression.

## Speaking With Physicians

When I speak to physicians about what my service can do to help them help their patients, I make it clear that simple acupuncture can help with the common complications exhibited by nearly all patients with chronic conditions. The literature will back you on this. The "activation phase" of the stress response is technically known as sympathetic nervous system and adrenal up-regulation. To physicians, I make it a point to explain how acupuncture, "down modulates sympathetic up-regulation." I cannot tell you how many physicians I have reached simply by this dirt-simple phraseology.

As I have written elsewhere, I make it a point never to use any TCM jargon, unless:

- 1. They ask or use it first an inevitability when physicians are truly engaged and interested in what you do and an opportunity which then necessitates as simple and straight-forward an explanation as you can give them.
- 2. I immediately follow with a quick explanation, usually starting with the words, "what that means in biomedical terms is..."

This is no small skill-set because ultimately you do want physicians to engage you in such dialogue so you can clarify their confusion. Make no mistake, if you are the one who clarifies the confusion for a given physician or audience of physicians, your whole career can change. This has happened for many of the folks I work with and will continue to happen more and more.

To address the co-morbidities of pain, anxiety and depression, you need go no further then the simple data from the latest research. Few physicians you will encounter will likely be unaware that acupuncture gets its pain-relieving affects via "endogenous opiate release." Use that phrase.

To communicate about anxiety and depression, come back to acupuncture's well-documented affects about down-modulating autonomic nervous system up-regulation/hyperactivity, and recalibrating CNS network connectivity, BOTH of which are mechanisms which assist in reestablishing homeostasis. Both anxiety and depression share specific network and nodal dysfunctions involving the amygdala and the prefrontal cortex as hubs or nodes, thereby deranging the networks controlling critical "switching" and "top-down regulation" of the fear-anxiety and the stress response. Specifically, the hippocampus and the amygdala will often evince dysfunction resulting in over-excitability, with possible shrinkage (atrophy) of the hippocampus and prefrontal cortex, and hypertrophy of the amygdala.

"Top-Down" regulation fails because the Salience Network's amygdala nodes fail to "switch off" the Default Mode Network, and the PFC in Executive Network fails to modulate the Central Autonomic Network and the HPA-axis (hypothalamic-adrenal-pituitary axis) "stress response." Acupuncture by multiple methods of brain imaging and neurochemical tracing directly corrects this, down-modulating first the hyperactive network nodes, then reestablishing the network connectivity required to down-modulate the ANS (autonomic nervous system) and adrenal axis. Fifty percent of patients with anxiety and depression have a major component of (usually) long-standing sympathetic nervous system upregulation – i.e. stress. That positions acupuncture to effectively address one core dysfunction. The rest have clear evidence of nodal and netork dysfunction, also directly remediated by acupuncture.

# Dragon Rises, Red Bird Flies

By letting physicians know how you can aid them in managing these notoriously difficult-to-manage conditions, you not only show them you are attuned to their needs and frustrations, you further gain for yourself the exact leverage you will need to make an impact in the big-leagues of modern medicine. The reason I am explaining the possible mechanisms involved at this level. is so that you are fortified with the confidence you need to communicate with physicians when the opportunity presents itself.

Understand that talking about how acupuncture can treat stress and the simplicity of the approach that I am detailing may not be sexy . . . but it is effective. By communicating to them in their own language, you gain instant respect and the gratitude that comes from having gone the extra-mile to help them in clarifying what is still – for many physicians – the mystery of how acupuncture achieves its effects.

By tying-in your (acupuncture's) ability to down-modulate and recalibrate the organism's homeostatic mechanisms – mechanisms THEY understand – you open a pathway for physicians to understand how acupuncture can augment conventional treatment strategies for treating and managing depression. I would encourage you to reach out to a physician and ask to interview a conventional medical professional to see for yourself. This will give you yet more confidence in what I am telling you and for your own continued interaction with the mainstream.

You need not doubt whether or not physicians will follow your logic or believe your assertion that mitigation of the stress response can and does aid with major depressive disorder. This is all patent to conventional medicine, as Robert Sopolsky of Stanford University makes clear in his course, *Stress and Your Body*, which is part of the Great Courses series.

Another expert I spoke to recently – University of California at San Diego faculty member Dr. Will Sieber also confirms that: 1) Major Depressive Disorder (MDD) is perhaps the "pain-point" for physicians who see patients with difficult-to treat mental health complications; and 2) that mitigating the stress response is likewise the leverage point for treating and managing MDD, and that—in his

experience—physicians already know this.

A Parallel Concept Physicians Understand and Appreciate

In the pathophysiology of holistic TCM, it is an axiomatic truth that, "where there is one, there is more than one." Holism is – by definition – concerned with a multiplicity of factors that affect health/illness. In reality, no real-life patient ever has one and only one patho-mechanism at work. Such simplistic understanding is a textbook abstraction useful only for the convenience of discussion and elementary learning.

The concept in biomedicine that smacks very much of the above holistic understanding is referred to as "allostatic load." I first heard this phrase from Dr. William Sieber at a lecture on brain chemistry and mood disorders. The concept of a patient's allostatic load shows obvious resemblance to a holistic understanding in that it refers to a patient's overall burden from the stresses of life.

Contained within the notion of allostatic burden is the idea that when one system is affected by a given illness or imbalance or stressor, other systems in the body must also be affected. This is no great stretch as no source denies the relationship between nervous system dysregulation from stress and the effects this has on digestion and circulation, as well as immunity and inflammation.

The concept of the allostatic load is perhaps less elegant than pattern discrimination; but it is a useful and empowering concept to know about and especially to employ in your conversations with physicians. Use this concept to reach physicians when explaining to them that your services are really just a useful and proven way to disburden a patient's allostatic load, thus allowing the physician to be more focused on his/her specialty.

Talk about the value of your service in helping restore and maintain homeostasis in a patient whose allostatic burden is so great as to hinder and frustrate the effects and efforts of conventional medicine. This is the role physicians are looking for and – truth to tell – it is the one that simple acupuncture is best suited to perform within the mainstream. Nor am I suggesting that this is an ignoble role to assume. On the contrary, your power and attractiveness within mainstream medicine right now comes from clear-thinking about your value, about what acupuncture is and is not best-suited to provide and deliver consistently within the halls of high-pressure and high-tech modern medicine.

Accept this truth and you can and will go far. But seek to eclipse conventional medicine with 5,000 year-old magic that has no logic and whose only substantiation by a vocal minority is still that, "oh, we just know it works," and you cannot hope for success. Mainstream medicine can never allow that kind of loose-headedness to prevail. Learn what they need and what acupuncture does best and you cannot fail. There is too great a need and too much at stake. The shift to include medical acupuncture is on and it will happen in a rush. You do not want to be last in line when the hiring starts in your area.

#### **Action Items**

In conclusion, you stand to gain enormous career success and personal satisfaction right now by learning how and taking the steps to reach out to and educate mainstream physicians. They are in fact looking for you.

If you know a few key basics about the brain chemistry and how to rattle off a little biomedical lingo, you stand a better-than-average chance of achieving a breakthrough into mainstream medicine during

this fantastic era of healthcare reform.

All the specific ways that acupuncture affects brain chemistry are – of course – more complex than the simple synopsis I have detailed. Nonetheless, if you can grasp and communicate about these two simple concepts, and how these core conditions of stress, anxiety, and depression affect nearly every other condition and complaint, you will not only gain creditability in the eyes of your mainstream, physician colleagues; you also present yourself as the best and most logical choice for inclusion in aiding physicians with their toughest patients.

My advice to anyone seeking serious breakthrough success during this incredible era of healthcare reform is to go out and talk to physicians. You will be astounded how – with just a little knowledge and forethought – you can quickly create meaningful dialogues with multiple doctors and mainstream professionals simply by showing and explaining how valuable you could be to them. The better you know how to speak in language they already understand, the easier things will go for you.

## Good luck.

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