# Drugs and Acupuncture: The Energetic Impact of Antihypertensives

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#### ABSTRACT

The issue of a patient's medications can be a matter of prime concern to medical acupuncturists. In this article, I use adverse effect profiles and pulse changes to explore the energetic effects of various antihypertensives and suggest that the intentional vector behind drug treatment for hypertension may be in direct opposition to that of acupuncture. Herein, I explore this issue and discuss four commonly used classes of drugs:  $\beta$ -blockers, angiotensin-converting enzyme inhibitors, calcium channel blockers, and diuretics.

Key Words: Hypertension, Drugs, Antihypertensives, Acupuncture, Pulse Diagnosis, Five Elements

## **INTRODUCTION**

A FTER WORKING WITH CHRONIC PAIN PATIENTS for many years, it has become increasingly apparent that drugs can be a major block to successful outcomes. In fact, I would go so far as to say that the use of various medications, from narcotics to antidepressants to anxiolytics, may be the single most important block to the healing process. But it can be hard to get people to stop taking medications. Most people in pain will often continue to opt for short-term symptom relief, even when they are aware of deleterious longterm consequences.

To complicate matters, patients seeking acupuncture are often ingesting a number of different chemicals. This situation poses a unique challenge and leaves the practitioner in the difficult position of trying to apply a system of medicine to clinical situations that the ancients could never have envisioned. Faced with a patient taking a complex drug cocktail, how is the physician acupuncturist supposed to assess the energetic impact of the drugs and/or walk the fine line between two widely divergent treatment paradigms?

One answer is to discontinue the drugs and then look at the energetic situation afresh, but this is often not possible for a variety of reasons, not all of them pertaining to strictly medical issues. Furthermore, the urgency to consider drug withdrawal varies with different medications. For example, few physicians would argue the benefits of helping patients withdraw from the use of narcotics, and acupuncture is increasingly being used as an adjunct to help with withdrawal.<sup>1</sup> But what about a condition such as hypertension where the indication for use of drugs is rarely questioned? In today's climate of evidence-based practice, it is almost heretical to ask such a question. Even so, acupuncturists might like to know what the energetic effects of antihypertensives are and whether they interfere with acupuncture or have hidden and untoward energetic consequences.

# HYPERTENSION AND TRADITIONAL CHINESE MEDICINE

Hypertension can be difficult to treat with Traditional Chinese Medicine (TCM) and if a trial of acupuncture produces less than dramatic results, then continued drug treatment remains the norm. But, the wisdom of this is questionable. Flaws et al have written on the subject with reference to herbs, and state that the reason TCM does not work very well for hypertension is that hypertension is not a TCM diagnosis.<sup>2</sup> The authors add that if one wants to get results, the energetic patterns underlying the condition, which are

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rarely accurately described, need to be elucidated and addressed. Though I agree with this premise, there is another thorny issue that is seldom discussed: whether the drugs used to treat hypertension may themselves interfere with optimal acupuncture results.

## **TCM Classification**

Hypertension is generally classified as: Flare-up of Liver fire Liver Yang rising with Kidney Yin deficiency Obstruction of phlegm and dampness Yin and Yang deficiency Qi and Blood deficiency leading to Liver Yang rising.<sup>3</sup> Hammer reduces the number of syndromes to 3: Heat in the Blood Deficient Yin causing Heat Heart Kidney Qi/Yang deficiency

He posits that the Yang excess of hypertension is an expression of Yin and Yang separation.<sup>4</sup>

## Separation of Yin and Yang: The Qi is Wild

In TCM theory, Yin and Yang separation is regarded as a profound energetic pathology. Hammer states that if Yin and Yang separation is not corrected early, it becomes increasingly irreversible until physiological breakdown occurs, a condition he calls the Qi Is Wild. He posits two scenarios leading to the development of the Qi Wild condition. In the first, an initial Qi stagnation leads to deficient Yin, then loss of Yang control, and predominantly Heat signs. In the second, an initial Qi deficiency leads secondarily to stagnation, followed by Yin and Yang separation and predominantly Cold signs.<sup>5</sup>

Other authors concur that the Qi Wild condition reflects an advanced stage of Yin/Yang separation, with the potential for serious pathology to emerge. Porkert, for example, explains:

When the Qi is wild . . . the Kidney Essence is exhausted such that consequently, Yang active energies, disperse uncontrolled. At the same time, it is a symptom that this Yang, this active energy, has already been greatly depleted or is about to be depleted.<sup>5</sup>

It is worth remembering this progression of Yin-Yang separation as we discuss the energetic effects of antihypertensives because they all appear to accelerate the process.

## Adverse Effect Profiles and Pulses

One way of appreciating the TCM energetic effects of a medication is through scanning its adverse effect profile and then making a best-guess inference as to what the effect might be. Such an approach may be augmented by attention to qualitative changes in the pulse as predicted by the drugs' mechanism of action, and supplemented by the observations of those who have taken the time to explore and record their findings.

Hypertension has effects that many physicians will intuitively recognize. Though few physicians will be familiar with the classic 28 different pulse characteristics of TCM, most will be able to recognize increased tightness/tautness, and differences depicting Yin/Yang opposites such as: floating vs sinking (surface/interior); slow vs rapid (cold/hot); weak vs full (deficiency/excess); and short vs long (also indicating deficiency/excess).

Dharmananda says that the hypertensive pulse is likely to be some variety of full, combined with wiry, tight, or tense.<sup>6</sup> Likewise, Hammer suggests the shape of the hypertensive pulse is taut, tense, tight, or wiry and shows volume changes reflecting a more robust, pounding, and overflowing quality.<sup>4</sup> He goes on to describe 3 pulse depths at which these qualities are felt: deep (organ), middle (blood), and superficial (Qi).

## **Specific Medications**

#### $\beta$ -blockers

β-Blockers are some of the most commonly used drugs for hypertension.<sup>7</sup> Different β-blockers vary in their specific effects but their main mode of action is blockage of the β-adrenergic receptor sites in the heart, inhibition of renin in the kidneys, and inhibition of vasomotor centers.<sup>8</sup>

Adverse effects of  $\beta$ -blockers include effects on the vascular system such as rhythm disturbances and cold extremities, effects on the respiratory system with bronchospasm and asthma, and more general effects such as fatigue, depression, and insomnia (Table 1).

A perusal of the adverse effects reveals that the reduction in Heart Yang (slowed heart rate, heart block, and impotence) is accompanied by the appearance of pathological Heat in various organs, such as the blood (purpura), face (hot flushes), lungs (skin rashes), and endocrine system (diabetes); and the fatigue experienced with  $\beta$ -blockers may be a combination of reduced Yang with Heat lurking in the interior.<sup>9</sup>

Most of these effects could be explained by positing Liver Qi stagnation as the primary effect. In TCM theory, Liver Qi stagnation frequently transforms into Heat, which is then transmitted throughout the field via the Ke cycle.

#### The Pulse and $\beta$ -Blockers

Although it is common knowledge that  $\beta$ -blockers slow down the pulse, the change in quality induced by  $\beta$ -blockers is perhaps less obvious. Some have said that  $\beta$ -blockers hinder the ability of the Qi to move the blood in the channels and collaterals, which would suggest they might weaken the pulse in some way (Anita Cignolini, MD, oral communication at TCM Conference, September 1991). Hammer suggests they cause a suppressed wave, which feels to the

System	Adverse effects	Inferred TCM effect	
Cardiovascular	Congestive heart failure, heart block, rhythm disturbances, cold extremities, claudication	Heart Qi and Yang deficiency	
Central nervous	Fatigue, vertigo, depression, insomnia, vivid dreams, visual disturbances, clouded sensorium	Liver Qi stagnation/Wind Yin deficiency Disturbance of the Hun	
Skin	Rashes, exacerbation of psoriasis, purpura	Lung Heat Blood Heat, Liver invading Spleen	
Blood	Thrombocytopenia	Blood Heat, Liver invading Spleen	
Gastrointestinal	Constipation, anorexia, indigestion, mesenteric thrombosis	Heat in the Yang Ming Liver invading Spleen Blood stagnation	
Liver	Cholestasis	Liver Oi/Blood stagnation	
Eyes/face	Red, itchy eyes, blurred vision, hot flushes	Liver Heat and Liver Yang rising	
Lungs	Bronchospasm	Lung Qi stagnation	
Endocrine	Diabetes	Heat in the 3 Jiaos	
Miscellaneous	Impotence	Yang deficiency	

TABLE 1. ADVERSE EFFE	CTS OF $\beta$ -Blockers
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palpating finger as if the very top of the normal wave were cut off or flattened, as if the wave is about to fully hit the finger and just stops short of the totality of the surge.<sup>4</sup> Ross has said that they give rise to a flooding pulse (Jeremy Ross, oral communication at Canadian Oriental Medicine Symposium; March 26–28, 2004; Vancouver, British Columbia) (though I would associate this quality more with the calcium channel blockers [see below]). To the palpating finger, the flooding pulse feels normal as the wave begins, but disappears rather abruptly just as it reaches its apex. Porkert associates such a pulse with profuse Heat and considers it to be the result of a dissociation of active (Yang) and structive (Yin) energies, previously discussed as Qi Wild.<sup>5</sup>

Whatever the specific effect, it is clear that Yin and Yang separation occurs. In the situation of wave suppression, the Yang is diverted into other sectors. In the case of flooding, the Yang energy floats to the surface as ungrounded Heat. This means that while  $\beta$ -blockers might appear to reduce excess Yang as reflected in the blood pressure cuff, they have not really solved the underlying energetic imbalance. The disconnected Heat simply shows up elsewhere.

## $\beta$ -blockers, TCM, and Five Elements

From a Five Element perspective,  $\beta$ -blockers might be understood as inducing a block between Wood and Fire. The adverse effects can then be understood as pathological energy being transferred via the Ke cycle to other organs, which suggests that their use may indeed accelerate the progression of Yin and Yang separation.

## ACE Inhibitors

A second commonly used class of antihypertensives are the angiotensin-converting enzyme (ACE) inhibitors (and their cousins, the angiotensin II receptor blockers [ARBs]). Their mode of action is considered to be through inhibition of the renin-angiotensin-aldosterone system, but they also inhibit bradykinin degradation, stimulate the synthesis of prostaglandins, and reduce sympathetic activity.<sup>8</sup> Adverse effects include effects on the kidney, heart, liver, lungs, blood, and CNS (Table 2).

Review of the adverse effects suggests that the hypotensive effect of ACE inhibitors is probably mediated through blocking Kidney Qi and Yang, with secondary effects of deficiency and stagnation in the Liver (elevated liver enzymes), Spleen (anorexia, nausea), Heart (myocardial infarction and hypotension), Lung stagnation (cough, pulmonary embolus), and the accumulation of Damp Heat (pulmonary infiltrates, angioedema).

#### The Pulse and ACE Inhibitors

TCM theory would probably associate the renin-angiotensin system with the Kidney Qi or Yang. Thus, if ACE inhibitors immobilize the Kidney Qi/Yang, it would prevent the rise of Yang out of the organ level. Hammer suggests that some antihypertensives reduce the robust and pounding qualities at the organ depth to diminish quickly at the blood and Qi depths.<sup>4</sup> (Although he doesn't specify the specific antihypertensives that do this, I suspect that he may be referring to the ACE inhibitors.)

Elsewhere, Hammer describes one predominantly diastolic form of hypertension that begins with chronic Kidney Yin deficiency and progresses to Kidney Yang and Heart Yang deficiency.<sup>4</sup> He says that in this situation, the pulse tends to shift from tense at the organ depth on the left proximal position to feeble-absent. Conceivably, in this situation, Kidney Qi immobilization might make the pulse even

IABLE 2. ADVERSE EFFECTS OF ACE INHIBITOR
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System	Adverse effects	Inferred TCM effect		
Cardiovascular	MI, CVA secondary to hypotension	Heart Qi deficiency and stagnation		
Central nervous	Headache, vertigo, confusion, ataxia	Liver Wind		
	Insomnia, dream disturbances, fatigue, depression	Disturbance of Hun		
		Heart Qi/Yin deficiency		
Skin	Erythema multiforme, Stevens-Johnson syndrome, angioedema, urticaria, pemphigus, photosensitivity	Damp Heat		
Gastrointestinal	Nausea, anorexia, ileus, pancreatitis, dyspepsia,	Spleen Qi deficiency		
	constipation, stomatitis	Stomach Yin Deficiency		
Liver	Elevation of liver enzymes, jaundice	Liver Qi stagnation, Damp Heat		
Respiratory	Cough, bronchospasm, rhinorrhea, pulmonary infiltrates	Lung Qi stagnation		
		Damp Heat		
Ears	Hearing loss, tinnitus	Deficient Kidney Qi		
		Liver Qi stagnation		
Kidneys	Increase in serum urea nitrogen and/or creatinine, renal			
5	dysfunction, elevated potassium, impotence	Deficient Kidney Qi		
		Deficient Kidney Yang		
Blood	Decreased hemoglobin, decreased white blood cells and/or platelets, Bone marrow depression	Deficient Kidney Qi		
Other	Alopecia	Deficient Kidney Qi		

Abbreviations: CVA, cerebrovascular accident; MI, myocardial infarction.

more feeble. If such a situation were spotted clinically, perhaps ACE inhibitors could be avoided and reserved for hypertension based in Liver excess conditions.

#### ACE Inhibitors, TCM, and Five Elements

From a TCM perspective, ACE inhibitors might be understood as inducing a block between Water and Wood. The reduced availability of Kidney Qi produces a global energy deficiency that resonates via the Ke cycle, leading first to Heart Qi deficiency and hypotension, then secondarily to Qi deficiency, Damp and Heat in the Earth and Metal sectors, with nausea, anorexia, and cough, and wet skin conditions. Thus, as with  $\beta$ -blockers, use of ACE inhibitors may engender a further separation of Yin and Yang, particularly in those patients who have a preexisting Kidney Qi deficiency.

## Calcium Channel Blockers

Calcium channel blockers act by selectively inhibiting trans-membrane influx of calcium ions into vascular smooth muscle and cardiac muscle, causing peripheral vasodilation. In overdose, they can cause arteriolar vasodilation and depression of cardiac contractility. Patients may present with bradycardia, atrioventricular nodal block, and/or hypotension<sup>7</sup> (Table 3).

System	Adverse effects	Inferred TCM effect	
Cardiovascular	Edema, palpitations, hypotension, brady/tachyarrhythmias	Heart Qi deficiency	
Central nervous	Headache, dizziness, tremor, flushing, insomnia, anxiety,	Liver Yang rising/ Wind	
	parasthesias, dream disturbances, depression	Heart Yin deficiency	
		Disturbance of the Hun	
Skin	Rash, pruritus, angioedema	Wind/Heat/Damp	
Gastrointestinal Nausea, abdominal pain, dyspepsia, diarrhea, flatulence,		Liver invading Spleen	
	constipation, gingival hyperplasia	Yang Ming Heat	
Respiratory	Dyspnea, epistaxis	Lung Heat	
Ears	Tinnitus	Liver Yang, Heat in the Tai Yang	
Eyes	Visual abnormalities, diploplia, eye pain	Liver Yang	
Liver	Increased liver enzymes, cholestasis	Liver Qi stagnation	
Autonomic	Sweating, flushing, dry mouth	Heat in the Upper Jiao	
Musculoskeletal	Arthralgia, myalgia, arthrosis	Lingering Heat	
Genitourinary	Dysuria, frequency	Heat in the Lower Jiao	
Endocrine	Hypoglycemia, thirst Heat in the 3 Jiaos		
Blood	Leukopenia, purpura Heat in the Blood		

	TABLE 3. A	Adverse	Effects	OF	CALCIUM	CHANNEL	<b>BLOCKERS</b>
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#### The Pulse and Calcium Channel Blockers

Calcium channel blockers have variable effects on pulse rate. Some, like nifedipine, can speed up the pulse while others, like verapamil and diltiazem, tend to slow it down and are sometimes used to treat tachyarrhythmias. My impression is that it is they are more inclined to cause the previously mentioned flooding pulse than the  $\beta$ -blockers, though I have also seen a hollow pulse (present at the Qi and organ levels, yet empty at the Blood level). This points to the probability that the calcium channel blockers disrupt Heart Yin and Yang, releasing Heat, which then floods to the surface and overflows.<sup>4</sup>

# Calcium Channel Blockers, TCM, and Five Elements

The likely energetic site of calcium channel blocker action is in the Fire element itself, in the Emperor's palace so to speak. Heart Fire is then channelled off-site via the Ke cycle leading to underfunctioning of the heart (Heart Qi deficiency) and pathologic Heat elsewhere. One curious adverse effect is tinnitus, which Jarrett says can result from Heat in the Small Intestine rising to SI 19 (Ting Gong). He further points out that such tinnitus can be a material expression of the patient's inability to hear his/her Heart's truth, in this case perhaps brought on by a drug that intentionally blocks the connection between the Heart Yin (HT) and Heart Yang (SI).<sup>10</sup> All of which appears to indicate that calcium channel blockers have the potential to induce a most profound disruption of Yin and Yang.

#### Diuretics

Thiazide diuretics are probably the most commonly used drugs for hypertension. They lower blood pressure by decreasing plasma volume (by suppressing tubular reabsorption of sodium, thus increasing the excretion of sodium and water). They also reduce peripheral vascular resistance in the long term<sup>8</sup> (Table 4).

#### Pulses and Diuretics

In contrast to  $\beta$ -blockers, diuretics do not slow the pulse. They are similar in that they both can engender a flattening of the top of the normal wave, known as a suppressed pulse.<sup>4</sup> It is the mechanism that differs. While  $\beta$ -blockers give rise to flattening by blocking the rise of Yang energies, diuretics probably produce a similar effect through increased energy dispersal. Flaws, for example, has said that diuretics disperse the Qi,<sup>11</sup> while Cignolini has said they damage Kidney Yang (Anita Cignolini, MD, oral communication at TCM Conference, September 1991). Interestingly, Hammer says that the subtle flattening found in the suppressed wave exists in a continuum with the flat pulse, which is deep and seems unable to come up to the finger through its own force.<sup>4</sup> Both he and Jarrett imply a dispersal effect by positing that a flat pulse indicates that the Qi is able to flow out of an organ, but is not able to enter.<sup>10</sup>

#### Diuretics, TCM, and Five Elements

In TCM, the kidneys store the Jing and the Yuan Qi, and the Mingmen, located between the kidneys behind CV 4 (Guanyuan), CV 5 (Shimen), and CV 6 (Qihai), provides an alchemical reservoir that fuels Yuan Qi to the extraordinary and superficial energy meridians. The association between the kidneys and hypertension is well-known science. However, renal artery stenosis, one of the prime causes of malignant hypertension, actually arises in the area between the kidneys, precisely in the region of the Mingmen. (Perhaps the ancients knew more about modern physiology than we generally realize.)

From an energy standpoint, stimulation of Bladder Qi, with its concomitant Qi and fluid dispersion, will engender

TABLE 4. ADVERSE EFFECTS OF DIURETICS				
System	Side effects	Inferred TCM effect		
Cardiovascular	Hypotension, myocarditis	Deficient Heart Qi		
Central nervous	Dizziness, headache Liver Wind, Liver Yang			
Skin	Rashes, photosensitivity, exfoliative dermatitis, Wind/Heat purpura, urticaria			
Gastrointestinal	Abdominal pain, bloating, anorexia, nausea, constipation/ diarrhea, gastritis, pancreatitis	Stomach Yin deficiency Spleen Qi deficiency Liver invading Spleen		
Psychiatric	Insomnia	Heart Yin deficiency		
Liver	Elevated liver enzymes, jaundice, cholestasis	Liver Qi stagnation		
Musculoskeletal	Muscle cramps	Liver Qi stagnation, Spleen deficiency		
Sexual	Impotence	Kidney Yang deficiency		
Endocrine	Diabetes, hyperglycemia, elevated uric acid	Heat in the 3 Jiaos Kidney Yang deficiency		
Blood	Decreased white blood cells and/or platelets, hemolytic anemia	Blood Heat, Spleen Qi deficiency		
Kidney	Interstitial nephritis, renal failure, decreased potassium and/or sodium, renal cell carcinoma	Kidney Yin deficiency		

Kidney Yin/Yang disharmony and increase the drain on the Yuan Qi at a time when the patient's primordial energy might be better served by conservation. The impact is a further draining of the Kidney Jing with all its secondary effects such as chronic fatigue, osteoporosis, and premature aging in people who are often already Jing deficient. Thus, once again, it is apparent that diuretics exacerbate the progression of Yin/Yang disharmony.

## THE HIDDEN COST

Though conventional wisdom shows treatment of hypertension to be beneficial in terms of cardiovascular events (such as reduced incidence of strokes, myocardial infarction, etc), the foregoing suggests there may be a hidden cost (Figure 1). Indeed, the energetic analysis predicts that drug treatment, by diverting pathological Heat, is likely to accelerate the process of Yin/Yang disharmony and lead to the emergence of other pathologies.

In this regard, a further perusal of adverse effects can be quite revealing. For example, diuretics result in an 11% increase in diabetes for every four years of therapy,<sup>12,13</sup> can give rise to Wind-Heat related skin disorders such as psoriasis and eczema (Malabsorption and the skin, with particular reference to diuretics. Greenwood K., June 1986), and lead to an in-

creased incidence of renal cell carcinoma.<sup>14</sup> Similarly,  $\beta$ blockers result in a 28% increase in diabetes.<sup>15</sup> While having no effect on cardiovascular morbidity or mortality in primary hypertension,<sup>16</sup> calcium channel blockers can produce profound heart block,<sup>17</sup> and may even increase all-cause mortality.<sup>18,19</sup> ACE inhibitors can give rise to Damp-Heat conditions such as cough, disturbed electrolyte balance, and angioedema, and can even aggravate liver and renal problems in some patients.<sup>20,21</sup> Moreover, they may have less renoprotective effect than the pharmaceutical hype would suggest, probably being no more effective than a diuretic.<sup>22–24</sup> When adverse effects occur, the potential replacements, the ARBs, may actually in-



FIG. 1. Location of block from various antihypertensives.

crease the myocardial infarction rate,<sup>25</sup> and though they may slow renal deterioration in people with nephropathy, do little for the all-cause mortality rate.<sup>26</sup> Then when two drugs are combined, such as diuretics with calcium channel blockers, or aspirin with ACE inhibitors, the detrimental effects can even be compounded.<sup>27,28</sup>

Although such observations have been gleaned fairly from the literature, they could easily be critiqued or dismissed by citing other studies. The point that should not be missed, however, is that the pros/cons of various drugs are always going to be debatable, as each new drug jockeys for a favored position in medicine's therapeutic armamentarium. Indeed, what is popular today is often demonized tomorrow because hermeneutics is not objective and opinions, whether personal or collective, are constantly in flux. That alone should be enough to suggest a need for an approach to hypertension that goes beyond the endless round of marginally useful utilitarian drug studies.

But, perhaps the deeper concern with the use of antihypertensives may not even be demonstrable by conventional studies at all because the blood pressure cuff cannot measure the less tangible areas of mind and spirit, where the Yin/Yang disharmony arises. Here, the separation proceeds unhindered, or may even be accelerated when drugs are used to alter some arbitrary numbers while the real meaning of hypertension remains ignored.

Were this to be recognized conventionally, the issue of Heat diversion and concomitant Yin/Yang separation would constitute a clinical conundrum, precisely because it challenges the wisdom of what is widely considered to be an industry standard. Little wonder, perhaps, that the deleterious energetic effects of antihypertensives are dismissed as unfortunate but manageable side effects.

#### THE ROOT IMBALANCE

Acupuncturists cannot indulge in the luxury of such denial. Yin/Yang separation is a ubiquitous energetic imbalance that lies unacknowledged behind virtually every chronic illness. In particular, it is a process set in motion by the mind's attempt to interfere with the smooth flow of Qi, by turning away from things it does not like.<sup>29</sup> This dissonance between Heart and Mind, or Yin and Yang, is the root psychic friction that in turn creates Heat and depletes the Yin.<sup>30</sup>

Correction of this root imbalance requires something more than simply lowering blood pressure. Rather, it demands a profound attitudinal shift involving a radical reversal of intent.<sup>31</sup> Once such a reversal has been accomplished, any remaining tendency to hypertension can often be addressed quite adequately with simple measures like adequate rest, meditation, a sensible diet, and regular exercise, rendering the issue of potential drug adverse effects largely irrelevant.<sup>32,33</sup> Though such a reversal can certainly be facilitated with acupuncture, it can be difficult to accomplish even without obvious impediments. Once a drug regimen is in place, a reversal can be almost impossible.

## **CASE REPORT**

A 45-year-old woman presented with chronic headaches and a tendency to high blood pressure when stressed. She was an Earth-Fire CT and tended to carry tension in the upper Jiao. Acupuncture was consistently effective in relieving her headaches and stress and as a result, her blood pressure was never a problem. However, while on an overseas vacation, she developed a headache and chest pain, was rushed to the hospital, treated with atenolol, ramipril, and nitroglycerin spray, and was told she would have to stay on them for the long haul even though angiography demonstrated clear coronary arteries. She returned from vacation feeling generally unwell, largely from accumulated stress and now, medication adverse effects. Although acupuncture was once again successful in de-stressing her physiology, she remained ambivalent about discontinuing the medications for some time because of fear induced by her holiday encounters with Aesculapian authority.

## CONCLUSIONS

Though from a conventional perspective, drug treatment for hypertension is generally considered to be good medicine, such treatment only addresses the superficial manifestation of an imbalance that actually embraces the entire body-mind-spirit. Indeed, the phenomenon of hypertension, much like the rabbit hole in Alice in Wonderland, goes deep; in essence, all the way back to the Tao.

What then should physician acupuncturists do when faced with a patient requesting acupuncture for their hypertension? Should they: (1) Attempt to combine the existing drug regimen with a course of acupuncture, and hope to muddle through the contradiction? (2) Leave the issue well enough alone and allow the patient to continue taking his/her drugs? Though one might initially choose the former option, it can be wearying if the contradiction is not resolved fairly promptly, because pulling a rope at both ends simultaneously is ultimately a self-defeating strategy. My opinion is that if patients do not come to appreciate the importance of realigning intent fairly early in the therapeutic process, then acupuncture for hypertension may not be worth pursuing.

There is no easy answer to this question and physicians must decide for themselves how to proceed in any particular case. However, for those patients and physicians so motivated, exploring the deeper existential issues behind hypertension is not impossible, and the rewards for doing so can be quite profound. For patients, blood pressure improvements can come quickly and actually persist when they get curious about the deeper issues involved and take personal responsibility for outcome.<sup>34</sup> For physicians, the experience of achieving results with less therapeutic effort, while at the same time helping patients get to the root of things, can transform the often stressful nature of medical practice while at the same time, re-create the levity and excitement perhaps last experienced in those first few days of medical school.

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Figure 1 was designed by Richard Greenwood.

## REFERENCES

- Brumbaugh AG. Acupuncture: new perspectives in chemical dependency treatment. J Subst Abuse Treat. 1993;10(1):35–43.
- Becker S, Flaws B, Casañas R. *The Treatment of Cardiovas*cular Diseases With Chinese Medicine. Boulder, CO: Blue Poppy Press; 2005.
- Kalish LA, Buczynski B, Connell P, et al. Stop Hypertension with the Acupuncture Research Program (SHARP): clinical trial design and screening results. *Control Clin Trials*. 2004; 25(1):76–103.
- Hammer L. Chinese Pulse Diagnosis: A Contemporary Approach. Seattle, WA: Eastland Press; 2001.
- Hammer L. Towards a unified field theory of chronic disease with regard to the separation of Yin and Yang and "the Qi is Wild." *Oriental Med J.* 1998;6(2–3).
- Dharmananda S. The Significance of Traditional Pulse Diagnosis in the Modern Practice of Chinese Medicine. Portland, OR: Essay for the Institute for Traditional Medicine; 2000.
- Tierney LM, McPhee SJ, Papadakis MA, ed. *Current Medical Diagnosis and Treatment*. New York, NY: Lange Medical Books/McGraw-Hill; 2004.
- Compendium of Pharmaceuticals and Specialties: The Canadian Drug Reference for Health Professionals. Toronto, Ontario: Webcom Ltd; 2006.
- MacPherson H, Blackwell R. Approaches to tiredness and fatigue: tired out. J Chin Med. 1992;40:13–20.
- Jarrett L. *The Clinical Practice of Chinese Medicine*. Stockbridge, MA: Spirit Path Press; 2003.
- 11. Flaws B. Predisone: its TCM functions, indications and contraindications. *J Chin Med.* 1990;33:5.
- ALLHAT Officers and Coordinators for the ALLHAT Collaborative Research Group. Major outcomes in high-risk hypertensive patients randomized to angiotensin-converting enzyme inhibitor or calcium channel blocker vs diuretic (ALLHAT). *JAMA*. 2002;288(23):2981–2997.
- Laragh J. Why the treatment of hypertension has become such a deplorable fiasco [interview by Rosch PJ]. http://www. mercola.com/2003/dec/3/hypertension.htm. Accessibility verified October 9, 2006.
- Messerli FH. Antihypertensive therapy: beta-blockers and diuretics. . .why do physicians not always follow guidelines? *BUMC Proc.* 2000;13:128–131.

- Gress TW, Nieto FJ, Shahar E, et al. Hypertension and antihypertensive therapy as risk factors for type 2 diabetes mellitus. *N Engl J Med.* 2000;342(13):905–912.
- Linholm LH, Carlberg B, Samuelsson O. Should beta-blockers remain first choice in the treatment of primary hypertension? a meta-analysis. *Lancet.* 2005;366(9496):1545–1553.
- Murata M, Cingolani E, McDonald AD, Donahue JK, Marbán E. Creation of a genetic calcium channel blocker by targeted gem gene transfer in the heart. *Circ Res.* 2004;95(4):398–405.
- Pahor M, Psaty BM, Alderman MH, et al. Health outcomes associated with calcium antagonists compared with other firstline antihypertensive therapies: a meta-analysis of randomised controlled trials. *Lancet*. 2000;356(9246):1949–1954.
- Oregon Evidence-based Practice Center. Drug class review on calcium channel blockers, final report. 2004.http://www. ohsu.edu/drugeffectiveness/reports/documents/CCB\_Final\_ Report\_u1.pdf. Accessibility verified October 9, 2006.
- Berkowitz RL. Renal complications of ACE inhibitor therapy. *Proc UCLA Healthcare*. http://www.med.ucla.edu/modules/ wfsection/article.php?articleid=132. Posted September 3, 2000. Accessibility verified October 9, 2006.
- Martino RJ. Are prescription drugs destroying your health, part 1: understanding the problem. http://www.totalhealthdynamics. com/Prescription\_Drugs\_Part1.htm. Posted 2005. Accessibility verified October 9, 2006.
- Casas JP, Chua W, Loukogeorgakis S, et al. Effect of inhibitors of the renin-angiotensin system and other antihypertensive drugs on renal outcomes: systematic review and metaanalysis. *Lancet.* 2005;366(9502):2026–2033.
- 23. Bakris GL, et al. ACE inhibitors and protection against kidney disease progression in patients with type 2 diabetes: what's the evidence? *J Clin Hypertens* (Greenwich). 2002; 4(6):420–423.
- Rahman M, Pressel S, Davis BR, et al. Renal outcomes in high-risk hypertensive patients treated with an angiotensinconverting enzyme inhibitor or a calcium channel blocker vs a diuretic: a report from ALLHAT. *Arch Intern Med.* 2005; 165(8):936–946.
- Julius S, Kjeldsen SE, Weber M, et al; VALUE Trial Group. Outcomes in hypertensive patients at high cardiovascular risk treated with regimens based on valsartan or amlodipine: the VALUE randomised trial. *Lancet.* 2004;363(9426):2022–2031.

- Strippoli GF, Craig M, Deeks JJ, et al. Effects of angiotensin converting enzyme inhibitors and angiotensin II receptor antagonists on mortality and renal outcomes in diabetic nephropathy: systematic review. *BMJ*. 2004;329(7470):828.
- 27. Wassertheil-Smoller S, Psaty B, Greenland P, et al. Association between cardiovascular outcomes and antihypertensive drug treatment in older women. *JAMA*. 2004;292(23):2849–2859.
- Viecili PR, Pamplona D, Park M, et al. Antagonism of the acute hemodynamic effects of captopril in decompensated congestive heart failure by aspirin administration. *Braz J Med Biol Res.* 2003;36(6):771–780.
- 29. Greenwood MT. Psychosomatic compartmentalization: the root of Qi and Blood stagnation. *Medical Acupuncture*. 2001; 13(1):23–28.
- Greenwood MT. Splits in Western consciousness from an acupuncture perspective. *Medical Acupuncture*. 1999/2000; 11(2):11–16.
- Greenwood MT. Acupuncture and intention: needling without needles. *Medical Acupuncture*. 1999;11(1):17–23.
- Schneider RH, Alexander CN, Staggers F, et al. A randomized controlled trial of stress reduction in African Americans treated for hypertension for over one year. *Am J Hypertens*. 2005;18(1):88–98.
- Schneider RH, Alexander CN, Staggers F, et al. Long-term effects of stress reduction on mortality in persons ≥55 years of age with systemic hypertension. *Am J. Cardiol.* 2005;95(9): 1060–1064.
- Greenwood MT. Acupuncture and empowerment: transforming the therapeutic relationship to facilitate the flow of Qi. *Medical Acupuncture*. 15(2):13–18.)

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