**Warfarin & Chinese Herbs: What’s a Practitioner to Do?**

by  
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**Introduction**

Recently, there has been a lot of concern over herb-drug interactions and especially herb interactions with warfarin (Coumadin®). For instance, on January 13 and 14, 2005, experts from NIH, FDA, and academic and patient advocacy organizations convened to assess current knowledge, identify strategies for clinical guidelines, and determine opportunities for further research in terms of the use of nutritional supplements, herbs, and the class of biomedical blood-thinning drugs. This two-day conference was called by the National Heart, Lung, and Blood Institute, which is part of the National Institutes of Health (NIH), and was held at the Vatican of biomedicine, the NIH campus in Bethesda, MD. In part, this interest in warfarin-herb interactions is due to the wide-spread use of this drug. Currently, 1.8 million Americans take warfarin daily. In 1999, warfarin was the 11th most commonly prescribed drug in the U.S. Warfarin is used to prevent blood clots from forming or growing larger. It is often prescribed for patients with certain types of irregular heartbeat and after a heart attack or heart valve replacement surgery. It works by stopping the formation of substances that cause clots.

The other reason for this concern is that warfarin’s list of contraindications is lengthy and its side effects, especially when its anti-thrombosis effects are potentiated, may be life-threatening. While mild adverse effects may include such common drug reactions as skin rash, hives, and loss of appetite, minor episodes of bleeding may occur even though the dose and prothrombin times are well within recommended range. If the dosage range is incorrect or has been potentized by some other drug, food, or herb reaction, there may be serious bleeding from the nose, gastrointestinal tract, lungs, urinary tract, or into the skin and soft tissues. Therefore, patients on warfarin typically undergo constant prothrombin monitoring and adjustment of their dosage. As Chinese herbal practitioner Roger Wicke has pointed out in a posting on the Chinese Herb Academy (CHA) forum:

> The obvious thing about Coumadin that many people forget is that it is an inherently dangerous drug, with or without herbs! Even many foods can alter the rate of metabolism of Coumadin... Coumadin by itself, without any help from herbs, increases the risk of uncontrollable hemorrhage in case of trauma.

To compound matters, the Baby Boom generation is now entering that phase of their lives where the prescription of warfarin is likely due to the increasing incidence of age-related heart disease, and it is the Baby Boomers who currently make the most use of acupuncture and Chinese herbal medicine. Therefore, many acupuncturists are asking themselves and others what they should do when a patient on warfarin comes to them for treatment.

**Warfarin & Chinese Medicinals: The Truth Behind the Hysteria**

I myself first seriously looked into the whole problem of drug-herb interactions with warfarin when working with Fred Jennex, Lic. Ac., on Blue Poppy Press’s *Herb Toxicities & Drug Interactions.* In 2003, Blue Poppy Press decided to publish this book precisely because the acupuncture/Chinese medical profession was calling for more information on drug-herb interactions. In compiling this book, Fred and I looked at numerous sources of information on drug-herb interactions, and, while I understand and respect the inherent dangers of warfarin, I have come to believe this whole thing is a tempest in a teapot based on economic competition and biomedical hegemony. Other than perhaps *Dan Shen* (Radix Salviae...
Miltiorrhizae), I do not believe that there is any truly compelling research that any Chinese herbs potentize the effects of warfarin (Coumadin). As far as I know, there is only anecdotal and theoretical concern. If you look at Blue Poppy's Herb Toxicities & Drug Interactions, under Dang Gui (Radix Angelicae Sinensis), we only say, “May exaggerate the anticoagulative effect of warfarin (Coumadin).”vi “May,” not “does.”

This issue is so important precisely because so many current and potential patients of Chinese medicine in the Western world and other developed nations will be going on warfarin in the coming decades. M.C. Weinstein et al. of the Harvard School of Public Health have forecast that, “If there were no future changes in risk factors or the efficacy of therapies after 1980, baseline projections indicate that the aging of the population, and especially the maturation of the post_World War II baby_boom generation, would increase CHD [coronary heart disease] prevalence and annual incidence, mortality, and costs by about 40_50 per cent by the year 2010.”vii Since 1987, when this study was originally published, risk factors for cardiovascular diseases, such as poor diet, lack of exercise, and overweight, have only increased in severity in developed countries. That means that, very soon, many of us are going to be seeing a lot more patients on warfarin than we are seeing right now. This has led to some acupuncturists only being willing to do acupuncture on patients on warfarin and not prescribe Chinese herbal medicinals. While this is one way of solving the problem of what to do with patients on warfarin, the truth is that the internal ingestion of Chinese herbal medicinals is the standard of care in the professional Chinese medical treatment of all cardiovascular complaints.

How Hearsay Gets Turned into Truth

If one goes to the Truestar Health on-line encyclopedia, whose publishers say, “Use of our encyclopedia will enable you to make well_informed, responsible decisions for the promotion of your own health and wellness,” you will see that the advice not to mix ticlopidimine, a platelet-inhibiting drug used to prevent stroke and treat intermittent claudication due to peripheral vascular disease, with Dan Shen is based on only two case histories.viii For years, Western medical practitioners have refused to take reams of Chinese medical case histories as serious proof of the efficacy of Chinese medicine, dismissing them as merely anecdotal, but yet we and the general public are told that our medicine is unsafe based on two cases. At another on-line source, Paul Bergner writes:

Interactions between blood_thinning herbs and pharmaceutical medications with the same action present perhaps the greatest risk of drug_herb interactions in modern practice. The risk is due to the gravity of the underlying condition that requires a blood_thinner, and to the fragile dose range and serious side effects of of the pharmaceutical drugs themselves. The drugs must be given in high enough doses to prevent the formation of life_threatening clots, but can cause serious and life_threatening bleeding disorders if given in too high a dose. A blood-thinning herb can act like “the straw that broke the camel's back” by thinning the blood enough to allow the drug to provoke a serious bleeding disorder. The risk is probably greatest with heparin, warfarin, and coumarin derivatives, but recent anecdotes [italics mine] indicate that interactions may also occur between blood-thinning herbs and such mild pharmaceutical blood_thinners as aspirin.ix

Notice that Mr. Bergner says that a blood-thinning herb “can” act like the proverbial straw that broke the camel’s back, not “may.” Then, as proof of these assertions, Mr. Bergner goes on to say:

A case report of potentiation of the effects of warfarin by the Chinese herb dan_shen (Salvia miltiorrhiza) recently appeared. Dan_shen is considered to enter the heart and pericardium channels and is primarily used as a cardiovascular herb in China. In traditional Chinese medical terms it invigorates blood circulation and nourishes the blood, among other activities. The article reports a case of danshen_induced severe and dangerous abnormalities of clotting in a patient with rheumatic heart disease taking warfarin simultaneously.

One case, and it is impossible to determine if, in fact, the Dan Shen was the cause of this bleeding. Even
though John Chen, Ph.D. pharmacist and OMD, only uses the word “may,” “may,” “may” in his article, “Questions and Answers on Warfarin” published in the January, 2000 issue of Acupuncture Today, Brian Carter, a professional practitioner of Chinese medicine who publishes The Pulse of Oriental Medicine on-line, says unequivocally that:

Patients on warfarin (Coumadin) are most at risk for problems from drug-herb interactions. Warfarin is given to thin the blood, thus preventing the likelihood of clots blocking blood vessels in the heart, lungs, or brain. Warfarin's dosage needs to be quite exact to work, so we don't want any herbs affecting it. Herbs and herbal formulas that contain blood-movers must be avoided. [italics mine] This includes, among others, herbs dan shen (salvia), dang gui (angelica), and yan hu suo (corydalis), and herb formulas like xue fu zhu yu tang, di dan tang, and tao he cheng qi tang.

Now we have a whole class of Chinese medicinals being declared unsafe with any Western blood-thinning drugs. Yehuda Frischman, another Lic.Ac. reiterates this blanket prohibition on another post on the CHA forum dealing with warfarin-Chinese herb interactions:

And of course, the blood invigorating and stasis removing herbs should be used with caution as they may potentiate the effects of drugs such as warfarin. Examples would be chuan xiong, yu jin, dan shen, hong hua, tao ren, yi mu cao, mao dong qing, san leng, and shui zhi, di bie chong.

And now we have the assertion that, “of course,” blood-invigorating and stasis-removing herbs are dangerous when used with warfarin. Mr. Frischman then gives a number of blood-quickening medicinals as examples with which to be cautious. Of this list, only Chuan Xiong (Radix Ligustici Wallichii), Hong Hua (Flos Carthami Tinctorii), Tao Ren (Semen Pruni Persicae), and Yi Mu Cao (Herba Leonuri Heterophylli) are discussed in Fred Jennes’s and my book, but, no source that we encountered in preparing this book advised caution when using these Chinese herbs in patients on warfarin or any other blood-thinning biomedical drug.

The Dangers of Incorrect Terminology & Mixing Systems

Basically, this comes down to a fundamental mixing of apples and oranges. There is nothing to suggest that Chinese blood_quickening medicinals are blood_thinning. Blood_quickening is completely a Chinese medical concept with its own definitions and parameters. Blood_thinning is likewise a Western medical concept with its own definitions and parameters. These are in no way interchangeable or identical. Part of the problem here is the widespread misconception that blood_quickeners cause or promote bleeding. That is factually erroneous. Blood stasis is one of the four fundamental causes of bleeding. Therefore, quickening the blood is a treatment principle that is commonly used to stop bleeding.

Again, this goes back to terminology. The word huo, to quicken, means two things: 1) to make something move faster and 2) to bring something dead back to life. Nigel Wiseman chose this English term precisely because it has these two English meanings. The Chinese word huo means both of these things. Static blood is “dead blood.” But it is not necessarily thick blood. Literally, it is also “dry blood” and “malign blood.” So quickening means to bring dead blood back to life, i.e., to make it living, engendering, nourishing, and healthy. But quickening as a technical terms does not mean that the medicinal in question “thins” the blood or reduces coagulation. In fact, a blood-quickening medicinal may actually promote coagulation.

Furthermore, I have spent the last two years working on a book (with Simon Becker, Dipl. Ac. & C.H. and Robert Casañas, MD) on the Chinese medical treatment of cardiovascular diseases. In doing the research for this book, Simon and I read hundreds of Chinese research reports and dozens of Chinese medical textbooks on the treatment of various cardiovascular diseases with internally administered Chinese herbs, including Dan Shen and other blood-quickeners. No Chinese source that we came across suggested that such Chinese herbs should be used with anything other than normal caution within the parameters of
standard professional Chinese medicine.

**What To Do**

So, what should a Chinese medical practitioner do when treating a patient on warfarin or similar blood-thinning, anticoagulant drug who wants to be treated with Chinese medicine, either for a cardiovascular complaint or some other condition?

1. I recommend opening a dialogue with the patient’s prescribing physician. As licensed health care practitioners, we cannot and should not say anything about any medications prescribed by another legally licensed health care practitioner. Simply put, Western drugs are not within the scope of practice of Licensed Acupuncturists. This dialogue should include a copy of *Herb Toxicities & Drug Interactions* to show the physician that you are well aware of these problems. It should also include at least a sample chapter of our forthcoming title, *The Treatment of Cardiovascular Diseases with Chinese Medicine*, to show the physician how Chinese medicine treats their patient’s condition and to give him or her some idea of how mature and professional Chinese medicine is.

Further, the Chinese medical practitioner should explain to the Western physician that Chinese herbal medicines are not prescribed as singles. Rather, we prescribe polypharmacy formulas that contain internal checks and balances. For instance, Zhang Ji, a Chinese source, says unambiguously that, in terms of unwanted bleeding, the combination of *Dang Gui* with *Bai Shao* (*Radix Albus Paeoniae Lactiflorae*) “is safe and does not potentiate the effect of warfarin.”

Typically, any animal-model research done on Chinese herbs and warfarin or similar drugs has been done using a single Chinese herb at extremely high doses. As Subhuti Dharmananda, a Ph.D botanist and practitioner of Chinese herbal medicine, writes:

> During the past century, research has been carried out on several of these herbs, such as evaluations of cardiovascular and hemorrhologic effects in laboratory animals and in some clinical trials. One problem with most of these recent tests is that the quality of their design, conduct, and reporting (more specifically, the lack thereof) is such that the results are difficult to interpret. In addition, it is often the case that the dosage of herb materials used in the studies far exceeds that which is commonly administered in clinical practice outside of China, so that the effect of the therapies on blood circulation in such circumstances may be substantially less than observed in the studies.

Dr. Dharmananda concludes:

> Although Chinese herbs, especially salvia, cnidium, carthamus, and pueraria, are extensively used in China to treat people who might otherwise receive warfarin, there is little evidence that these or other Chinese herbs have a potent anticoagulant action comparable to that of warfarin or even aspirin.

Based on my own 25 years of clinical experience, I believe a well written formula will not cause side effects if the formula is based on the patient’s presenting patterns even while on a number of Western drugs.

2. As a corollary of the above, we must always treat our patients with Chinese herbs based primarily on their currently presenting patterns and only secondarily on their disease diagnosis. Volumes of Chinese medical research show that this is always the safest and most effective method of prescribing these medicinals. There is ample research in *The Treatment of Cardiovascular Disease with Chinese Medicine* showing that, when Chinese herbs and Western medicines are used together and the Chinese herbal medicines have been prescribed on the basis of pattern discrimination, one can routinely expect better therapeutic results at a smaller dose of the Western drugs and with less side effects. This is extremely good news to biomedical physicians since the side effects of Western drugs tend to be dose-dependent. This means that the smaller the dose of Western medicine, the less likely it is to cause adverse reactions.
3. Start cautiously and monitor the patient closely. Starting cautiously means starting with relatively small doses and working up gradually to higher doses as long as these smaller doses have not caused any untoward effects. Monitoring closely means two things. First, the Chinese medical practitioner should monitor their cardiovascular patient on Chinese herbs and warfarin or similar drugs once a week, either in person or by phone depending on the patient’s situation and ability to note and communicate their condition. Secondly, it means that the patient’s prothrombin time should also be regularly monitored either by the prescribing physician or by themselves. (There are now at-home prothrombin testing machines that allow patients on warfarin and other blood-thinners to monitor and adjust their own dosage of these drugs.) If the administration of a combination of pattern-appropriate Chinese medicinals and Western blood-thinners shows an inappropriate decrease in clotting time, then the biomedical practitioner should reduce the dosage of the Western medicine while the Chinese medical practitioner should continue the dosage of the Chinese medicines. Dr. Dharmananda substantiates this approach:

In a survey of people in Hong Kong starting warfarin therapy, it was found that about one in four were taking Chinese herbs. Their INR values, rather than being enhanced, were slightly lower, and this corresponded with a somewhat lower dose of warfarin taken by those who were using the herbs.

Thus, it may be possible for these herbs to be used along with warfarin therapy, so long as monitoring of the INR is maintained in order to detect rare interactions. When the herbs provide additional benefits to the cardiovascular system (aside from simple anti-coagulation), the effect of the total treatment may be improved compared to the drug therapy alone.

4. Never forget and never let your patients or their physicians forget that it is warfarin that is dangerous, not Chinese herbs. According to the U.S. Centers for Disease Control as reported in the Journal of the American Medical Association, in 1994, the use of legal Western medical drugs was the fifth largest killer of Americans, causing 106,000 death. Simply do not buy into the campaign that is being orchestrated against us.

Conclusion

There are forces at work who would like to see the independent professional practice of Chinese medicine in Western countries extremely curtailed and controlled by the dominant biomedical hegemony. One of the tactics in this battle over finite resources in the marketplace is to cast a doubt over the safety of our medicine. We have recently seen Ma Huang (Herba Ephedrae) and Ban Xia (Rhizoma Pinelliae Ternatae) banned from all herbal supplements regulated by DSHEA (the Dietary Supplement, Health & Education Act). We know that all the Citrus medicinals also run a real risk of being banned because they contain sinephrine. If the recent NIH meeting on herb/blood-thinner drug interactions is any indication, the next battleground is the use of blood-quickeners because of their theoretically potential potentization of warfarin and other blood-thinners. It is imperative that we not let our competitors in the marketplace succeed in curtailing and controlling our practice by disallowing one Chinese medicinal after another based on biased and insufficient science. In order to counteract this trend, not only must we stay politically aware and active, we must constantly upgrade our knowledge of Chinese medicine so that we can both treat our patients and debate from a position of strength.

Endnotes:

i Http://my.webmd.com/content/article/26/1728_59089.htm
ii www.nlm.nih.gov/medlineplus/druginfo/medmaster/a682277.html#why
Along with heat causing the blood to move recklessly outside its vessels, qi vacuity not containing the blood within its vessels, and traumatic injury severing the channels and vessels.

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Prothrombin Time (PT) is the most common way to express the clotting time of blood. PT results are reported as the number of seconds the blood takes to clot when mixed with a thromboplastin reagent. The International Normalized Ratio (INR) was created by the World Health Organization because PT results can vary depending on the thromboplastin reagent used. The INR is a conversion unit that takes into account the different sensitivities of thromboplastins. The INR is widely accepted as the standard unit for reporting PT results.

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Additional information:

- **Ibid.**, p.42
- **www.truestarhealth.com/Notes/1520008.html**
- **Bergner, Paul**, [www.purifymind.com/HerbDrug.htm](http://www.purifymind.com/HerbDrug.htm)
- **Carter, Brian**, [www.pulsemed.org/drugherb.htm](http://www.pulsemed.org/drugherb.htm)
- **Dharmananda, Subhuti**, [www.itmonline.org/arts/warfarin.htm](http://www.itmonline.org/arts/warfarin.htm)
- **Ibid.**
- **Prothrombin Time (PT) is the most common way to express the clotting time of blood. PT results are reported as the number of seconds the blood takes to clot when mixed with a thromboplastin reagent. The International Normalized Ratio (INR) was created by the World Health Organization because PT results can vary depending on the thromboplastin reagent used. The INR is a conversion unit that takes into account the different sensitivities of thromboplastins. The INR is widely accepted as the standard unit for reporting PT results.**
- **Dharmananda, op. cit.**
- **www.angelfire.com/rnb/y/charts3.htm#lead**