

Issues in Using Antiviral Medicinals in the Treatment and Prevention of the Common Cold and Flu (*Gan Mao*)

by Jason Blalack

Introduction

There is a current trend for Chinese herbalists to prescribe medicinals based on their Western function. For example, modern research demonstrates that *da qing ye* (*Isatidis Folium*) and *ban lan gen* (*Isatidis/Baphicacanthis Radix*) are antiviral. Consequently, there are those in both Asia and the West that recommend their use for the treatment and prevention of the common cold and flu (*gan mao*), regardless of the pattern. For example, *ban lan gen chong ji* (板蓝根冲剂), a popular antiviral prepared medicine advertises, “Drinking [sic] a cup of this tea when exposed to others that are sick with a cold or when you think you are coming down with a cold to avoid getting sick yourself.”ⁱ

Although such an approach is exciting, integrative, innovative, and research based, this article will examine why the use of such medicinals in the treatment and prevention of externally contracted diseases is usually not warranted. Thus, including such medicinals into a formula because of its Western medical function, without understanding the intricacies of how it affects the overall Chinese medicine treatment principles, other medicinals’ actions, and the formula as a whole, can not only lead to an ineffective treatment, but can make the patient’s condition worse and actually injure the patient.

Ban lan gen (*Isatidis/Baphicacanthis Radix*) is probably the most popular antiviral used in *gan mao* prescriptions. It therefore serves as a good example for analysis, and the issues and concerns around its use can be extrapolated to other similar-natured antiviral medicinals.

The Birth of a New Approach

In the 1950’s Mao Zedong (毛泽东) announced his plan for the unification of Western and Chinese medicine. This dramatically changed how Chinese medicine developed, was perceived, and practiced. Although there were already some who were integrating Western medicine ideas prior to this, Mao’s

“vision” forced many prominent physicians to research and practice in a Westernized manner.ⁱⁱ Consequently, medicinals were increasingly described by their Western attributes and subsequent treatment strategies immersed, influencing a whole new generation of doctors and consumers.

Ban lan gen (*Isatidis/Baphicacanthis Radix*), being one of the most promising discoveries, has since become a key ingredient in popular herbal beverages such as *Isatis root herbal drink* (板蓝根凉茶 *ban lan gen liang cha*) and prepared herbal formulas such as *ban lan gen chong ji* and *gan mao ling* (感冒零). *Ban lan gen* (*Isatidis/Baphicacanthis Radix*) has become very famous and even U.S. research facilities, such as the NIH, have begun exploring its antiviral properties.ⁱⁱⁱ



Not surprisingly, a great deal of marketing has followed this herb’s growing fame. For example, promotional material for *Isatis root herbal drink* quotes the Inner Classic, “The sage does not treat an illness that has already [developed], [but instead] prevents disease.” It goes on to say, “It can prevent

disease when there is none. When there is disease it can treat it... It eliminates toxins from the body, boosts the immune system, fights bacterial and viral infections, and balances yin and yang... It clears heat, but does not damage the Spleen and Stomach”^{iv} Legitimizing an herbal product as one that keeps you healthy as well as treats disease is obviously profitable.

Ban lan gen chong ji (an herbal formula) is even touted as “one of the most popular herbal beverages in China, and a staple in every household.”^v My Chinese teacher says that it is a common belief among Chinese that “it can be used for (treat) almost anything, when there is

heat.” Thus at the first sign of a sore throat or common cold (among other conditions) many drink (self-prescribe) this.

It is unclear if this popularity is related to true efficacy or marketing. Either way, the above product demonstrate how prevalent *ban lan gen* (Isatidis/Baphicacanthis Radix) is in mainstream Chinese culture and how it and other antiviral medicinals are viewed as seemingly safe and effective for external attacks as well as preventative medicine.

Recently though, there have been many disagreements with this perspective. Consequently, there are numerous articles, essays, and case studies illustrating the pitfalls of this antiviral approach. Therefore, we should look more closely at how this method relates to Chinese medical theory and what doctors notice when people prescribe *ban lan gen* (Isatidis/Baphicacanthis Radix) and other antiviral medicinals.

Medical Theory

New theory says the common cold is a virus. If we kill the virus we eliminate the disease. This is in contrast with Chinese medicine’s approach, which is to regulate and adjust the body’s internal terrain so that the pathogen is expelled. Although the virus may be eliminated and Chinese medicine’s terminology of “eliminating a pathogen” may even sound similar, the treatment approach of these two systems is dramatically different. Nonetheless, labeling a medicinal as “antiviral” is not the problem. The issue is that antiviral medicinals are often used in a way that is at direct odds with fundamental Chinese medicine theory.

Chinese medicine’s core principle for treating externally contracted diseases is to expel the pathogen. For example, for a common cold or flu due to a wind pathogen, the proper treatment method is to diffuse the Lungs and disperse wind. Thus, one should simply use acrid, balanced medicinals to disperse the wind and resolve the exterior. For a mild illness, one needs only a light treatment. Therefore, one should use medicinals that are balanced, smooth, light, and quick to guide the wind pathogen from the protective aspect to the outside of the body.

For example, Wu Jutong (1758-1836) stated, “One treats the upper burner like a feather. Unless one’s touch is light, one cannot grasp it.” It was also said in the Qing dynasty, “If the disease is in the upper burner, [the treatment should] be light and lifting.”^{vi} *Ban lan gen*’s (Isatidis/Baphicacanthis Radix) nature though, is bitter, cold, heavy and primarily directs downward. Traditionally, *Ban lan gen* (Isatidis/Baphicacanthis Radix) was used for more serious presentations that usually involve internal heat. *China’s Materia Medica*

(*中华本草 zhong hua ben cao*) describes *ban lan gen* (Isatidis/Baphicacanthis Radix) this way:

“It enters the Liver and Stomach channels, clears heat, resolves toxicity, cools the blood and unhinders the throat. It is indicated for warm toxin macular eruption, high fever with headache, massive head scourge epidemic, dark purple-red tongue, putrefying throat cinnabar sand, cinnabar toxin, mumps, painful obstruction of the throat, swelling of sores, chicken pox, measles, hepatitis, influenza, epidemic cerebrospinal meningitis, pneumonia, unconsciousness, swollen throat, and fire eye.”

Quite simply, according to Chinese medicine theory *ban lan gen* (Isatidis/Baphicacanthis Radix) is contraindicated for wind attacks (the most common externally contracted pattern), wind cold attacks, and some types of wind heat attacks. It should be noted that when people first feel like they are starting to “catch something” they usually have a wind attack, not full-blown wind heat or wind cold. If *ban lan gen* (Isatidis/Baphicacanthis Radix) is used in these situations it can cause many problems, such as lurking pathogens, as discussed below. Its downward nature can drive the pathogen deeper and its cold nature not only can congeal a cold pathogen, but can also turn a heat pathogen into a cold pathogen, essentially freezing it. This is very similar to what happens when antibiotics are given incorrectly.

Clinical Practice

According to doctors’ case records and writings, pre-modern physicians did not consider *ban lan gen* (Isatidis/Baphicacanthis Radix), and similar medicinals, appropriate for early stage common colds and flu.^{vii} We do know that they were aware of these medicinals because we see them used for other conditions, as mentioned above. In the Qing dynasty, epidemics were devastating families and dealing with external pathogens became a focal point for many physicians. Quite simply, if they could eliminate a pathogen or keep it from entering, they could save a life. These innovative physicians were looking for the most effective treatments, yet they still favored a light, scattering, and diffusing method utilizing mild and light herbs when treating externally contracted diseases. A great deal of theory came out of these doctors’ clinical practice.

Much of these ideas have now been time-tested and validated to be effective. In addition, my colleagues and I have used these core Chinese medicine principles in treating *gan mao* for years with a high success rate. Therefore, there is no reason to believe that the traditional theories and methods are ineffective. The obvious question is, if *ban lan gen* (Isatidis/Baphicacanthis Radix) is so effective why did these doctors not use it for such conditions? Although I

cannot find any pre-modern or classical discussions of this question, modern doctors do articulate concerns, as discussed below.

Although we find advocates for this Western science perspective there is unfortunately a scarcity of actual case studies where formulas with *ban lan gen* (Isatidis/Baphicacanthis Radix) were successfully used to treat common colds and flu that manifested solely in the exterior. Actually most cases that one can find revolve around its unfavorable outcomes. We are now seeing many mainstream articles in Chinese openly criticizing this approach, such as, Is *ban lan gen* (Isatidis/Baphicacanthis Radix) able to treat *gan mao*?^{viii}, To use *ban lan gen* (Isatidis/Baphicacanthis Radix) one must differentiate disease^{ix} and *Ban lan gen* (Isatidis/Baphicacanthis Radix) is unable to guard against the common cold and flu.^x

Another article that does advocate *ban lan gen*'s (Isatidis/Baphicacanthis Radix) use for wind heat conditions says this:

"If [*ban lan gen* (Isatidis/Baphicacanthis Radix)] is used to treat wind cold *gan mao*, not only will it be ineffective, but it also worsen the *gan mao* and damage the body. If one just stereotypically uses *ban lan gen* (Isatidis/Baphicacanthis Radix) for the incubation periods of *gan mao* [preventative treatment], it may have an effect, may not, or may even cause more problems."^{xi}

Although some do advocate it for wind heat patterns, in my opinion its inclusion should revolve around the pattern's severity, location of the pathogen (deeper levels), patient's constitution, and if there is concurrent internal heat. Therefore, the vast majority of externally contracted conditions, according to Chinese medicine theory, would not warrant *ban lan gen*'s (Isatidis/Baphicacanthis Radix) use. It has other concerns as well:

"*ban lan gen*'s (Isatidis/Baphicacanthis Radix) nature is cold and bitter and can easily can damage the Spleen and Stomach. Therefore it is unsuitable to use *ban lan gen* (Isatidis/Baphicacanthis Radix) in patients with Spleen and Stomach deficiency cold patterns (e.g. low appetite or an uncomfortable feeling after eating something cold). Its use can bring about a serious illness, due to the draining of 'correct qi'. This is especially true in children where their digestive system is not yet fully developed."^{xii}

Case studies illustrate the potential consequences of bitter cold medicinals the best. For example, Zhao Shaoqin has a case study entitled *Lurking Ice*^{xiii} where the etiology is described as, "This was a [pattern of] summerheat-damp brewing heat, in which excessive cold medicinals were taken. This covered the pathogen [creating] lurking ice in the middle burner."

There was also a 45-year-old [patient] Li that presented with a typical *gan mao* with fever and chills and body aches. He self-prescribed antiviral patent medicines, *ban lan gen chong ji* and *gan mao qing*^{xiv}. Although this relieved his fever and chills, it drove the pathogen deeper into the body, into the *shao yang*, resulting in a serious presentation with essence spirit deterioration, dizziness, etc. *Xiao chai hu tang* (Minor Bupleurum Decoction) was given and cured him.^{xv}

Zhao Shaoqin had an interesting case where a "summerheat condition turned to congealed cold by merely eating cold food and drinks." [i] Thus, if something as simple as cold natured foods can transform a heat pathogen into congealed cold, one must ponder the potential effects of giving strong cold medicinals.

Another example is the case where a lurking pathogen was created by adding antiviral medicinals, *da qing ye* (Isatidis Folium) and *ban lan gen* (Isatidis/Baphicacanthis Radix) to a typical *gan mao* formula. This was discussed in the article written by Charles Chace, Jack Shaefer, and myself (2007) entitled Lurking pathogens- three modern case studies.^{xvi} Hence, even if a formula contains venting medicinals, this class of cold and bitter medicinals can weigh down the formula and in many instances prevent proper eviction of the pathogen from the body. There is no shortage of cases where cold and bitter medicinals create problems in externally contracted diseases.

In our clinic we have also seen quite a few side effects and complications from patients who have taken formulas that contain these antivirals such as *gan mao ling* and other Western *gan mao* patent formulas, especially when taken at the first signs of a cold. One problem in evaluating these occurrences is that initial symptoms can quickly resolve due to the cold and bitter medicinals. Since many practitioners do not follow patients closely they can easily overlook the etiology and development of problems, such as lurking pathogens. Thus, symptoms that initially resolve can return after a few days or even weeks or the pathogen can transmute into another problem (such as a urinary tract infection). Even worse, a deeper lurking pathogen may be created that will cause problems in the future.

Western research

A complete evaluation of the issues related to Western style research on medicinals, especially in China, is beyond the scope of this paper. However I would like to bring up one clinical point. Sometimes merely defining a medicinal as antiviral is too simplistic. If we want to play the Western medicine game we are destined to run into similar problems as they do. For example, there are many pathogens that give rise to upper respiratory tract infections such as mycoplasmal

pneumonia, pneumococcus, chlamydia pneumoniae, and legionella pneumonia. Although *ban lan gen* (Isatidis/Baphicacanthis Radix) has a definite antiviral function, it actually has a pretty poor effect against pathogens such as mycoplasmal pneumonia and chlamydia pneumoniae type infections. Therefore, if one is unable to determine the specific pathogen of the flu and indiscriminately uses this medicinal, one may not obtain the desired effect.^{xvii} Hence, we must ask, what does it mean to be antiviral? Even herbs commonly used as food, such as *chen pi* (Citri reticulatae Pericarpium), when tested in a laboratory are said to be antiviral!

Summary

There are many that advocate using antiviral medicinals at the first sign of *gan mao* / an external attack, regardless of the pattern, pathogen, or patient's constitution. Some go as far as suggesting that one should use such medicinals as a preventative medicine. I have found no clinical evidence to support this approach.

I do think there are times that *ban lan gen* (Isatidis/Baphicacanthis Radix), or other clear heat and toxin medicinals, should be used in cases of *gan mao*. Such decisions though should be made from a Chinese medicine perspective respecting the centuries of wisdom that we have to guide us.

Therefore, the vast majority of patients that I treat for the common cold and flu do not require this class of medicinals, nor do I need to think about herbs as being antiviral or antibacterial to get results. I find the best clinical results from adhering to core Chinese medicine principles.

Biography

Jason Blalack is the translator and editor of forthcoming book, *Qin Bo-Wei's 56 Treatment Methods: Writing Precise Prescriptions* with clinical commentary by Wu Bo-Ping (fall 2011, by Eastland Press). He maintains a full-time private practice in Boulder, Colorado and runs a website devoted to Chinese medicine case studies and discussion. <http://www.chinesemedicinedoc.com/practitioners/case-studies/>. Please feel to contact Jason at Jblalack@Chinesemedicinedoc.com with any questions or comments.

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http://drheathersherbs.com/index.php?main_page=product_info&cPath=1_4&products_id=34

ii Taylor, K. (2005). *Chinese medicine in early communist China, 1945-63: a medicine of revolution*. New York, NY: RoutledgeCurzon

iii <http://baike.baidu.com/view/2762507.htm>

iv *ibid*

v

http://www.chinamedicinmall.com/tonic_liquid.htm

vi These are referring to the use of light medicinals with an outthrusting nature, such as *sang ye* (Mori Folium), *ju hua* (Chrysanthemi Flos), and *jing jie* (Schizonepetae Herba) for conditions in the upper burner, which also refers to the exterior of the body.

vii This is based on my review of around 25 pre-modern case record books as well an internet search in Chinese. It certainly is possible that there were physicians that practiced in this manner. If anyone finds such evidence please contact me so that I can revise my position.

viii 板蓝根不是万能药 能不能治感冒 (10-21-2009)

http://www.cdtdyy.com/News_Show.asp?id=188.

来源：中国中医药报

ix China's Chinese Medicine Newspaper (中国中医药报 2010 年 1 月 18 日)

<http://www.zysj.com.cn/yianxinde/7/71161.html>

x <http://www.621m.cn/search/doc/83258>

xi 喝板蓝根预防感冒要对症 -

<http://focus.mz16.cn/baodian/20081222/92620.html>

xii *ibid*

xiii Zhao Shaoqin (赵绍琴) (1996). An Essential selection of Zhao Shaoqin's Clinically Verified Case Records (赵绍琴验案精选 *Zhao Shaoqin yan an jing xuan*). Beijing: *Xue yuan chu ban she* 学苑出版社。

xiv *shan zhi ma, ban lan gen, gui zhen cao, gang mei gen, da qing ye, and chuan xin lian*

xv 江西中医药 1988; <4>:25

xvi This can be viewed at:

<http://www.chinesemedicinedoc.com/practitioners/articles/>. It was originally Published in *The Lantern* (2007).

xvii (2008) Is Taking Ban Lan Gen effective for the Common cold and Flu? (感冒了喝板蓝根管用吗 *gan mao le he ban lan gen guan yong ma*)

http://www.sz60.com.cn/news_view.asp?newsid=36106 (文章来源：家庭医生 更新时间：

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