In the previous issue of The Lantern, Charles Chace and Jason Blalack presented two case records representing different perspectives on the modern application of lurking pathogens. This is a third case history.

By Jack Schaefer

This case study sprang out of my experience in treating a long-time patient for an acute respiratory infection about a year and a half ago. At that time, I used a fairly standard approach that, in the past, had produced adequate results. However, this time things went quite differently, which helped me understand how over-diagnosis and treatment of acute diseases can create very large problems later on.

In this case, the patient initially appeared to have improved substantially from her initial treatment, but a whole series of events were set into motion involving the creation of a lurking pathogen (fu xie). In my opinion, lurking pathogens are much more common in a clinical situation than one might think. The possible translation of fu xie as “lurking evil” conjures up images of rare, deadly, deep-seated diseases that wait to spring out on their unsuspecting victims like monsters or demons. I believe, though, that these pathogens are seen very regularly by clinicians, especially given that we live in a world where it is common for people to self-medicate with herbs, supplements, or prescribed-but-unfinished pharmaceuticals.

One of the basic teachings about lurking pathogens is that they often occur as the result of a summer-heat pathogen that had its original onset in the summer, then incubated inside the body, and later, either in autumn or winter, was induced to emerge suddenly and seriously by an attack from a secondary external pathogen. Lurking pathogens are also thought to appear as the result of cold attack in the winter that later has its onset in the spring. I believe that the lurking pathogen approach in treatment can also be useful in a greater range of clinical situations. Lurking damp heat pathogens are also frequently the result of untreated, erroneously or incorrectly treated disease patterns, and thus tend to be more prevalent than most practitioners realize, as with the case I am presenting. I have seen this in the student clinic where I supervise as student practitioners struggle with ongoing diseases in their patients and in themselves; diseases that should, by all rights, be fairly straightforward to treat with a solid diagnosis and treatment plan implementation. However, because practitioners often do too much in treatment out of the fear of doing too little, they make constant changes in approach to the diagnosis or treatment plan, moving from one methodology to another, struggling to resolve illnesses. Often the result of over-treatment or inconsistencies in plan and methodology is a lurking pathogen.

In the student clinic situation, the lurking pathogen often presents itself or is created, not...
The case

Visit 1: An overweight yet active 40-year-old female came in on October 18, stating that she caught a cold two days previously and that it had been steadily worsening. She reported that she very rarely caught colds or flus – she couldn’t remember the last time she was sick. Her symptoms were: sinus headache, unproductive nasal congestion, body aches, neck ache, no objectively measurable fever, but she occasionally went from warm to chilled and said that she had been getting warmer over the previous 12 hours. She was also experiencing lethargy, a slight productive cough, sore throat and constipation. Her pulses were deep, wide, slippery and slightly rapid. Her tongue was wide and swollen, slightly red and purple with a thin white coat. At first glance the diagnosis looked like a case of wind-heat invasion that was moving from the wei level into the qi level accompanied by some exterior dampness. To further complicate matters, she was experiencing slight PMS, and was within a few days of starting her menstrual period. I gave her a version of the formula Yin Qiao San in a 7:1 concentrated granule form at a dose of four grams, four times per day, modified to treat the heat toxin/qi level symptoms. The choices of herbs were informed by modern biomedical research on several of the herbs. Its ingredients were:

- Jìn Yín Hūa 9g (Lonicerae Flos)
- Lián Qiao 9g (Forsythiae Fructus)
- Fâng Fèng 6g (Vespae Nidus)
- Huáng Qín 6g (Scutellariae Radix)
- Qiâng Hîu 6g (Notopterygi Rhizoma seu Radix)
- Dà Qíng Yè 9g (Isatidis Folium)
- Bàn Làn Gèn 9g (Isatisis/Baphicacanthis Radix)
- Chúan Xíng 6g (Chuanxiong Rhizoma)
- Mù Dàn Pî 6g (Moutan Cortex)
- Huáng Qí 9g (Astragali Radix)
- Mù Xíng 6g (Aucklandiae Radix)
- Shí Gào 6g (Gypsum fibrosum)
- Shèng Di Huáng 6g (Rehmanniae Radix)
- Chüà Hù 6g (Bupleuri Radix)
- Yì Mû Cáo 6g (Leonuri Herba)

As mentioned, this version of Yin Qiao San was not modified using traditional Wen Bing methodology, but instead from the perspective of modern research findings. Thus, what is interesting in regard to this formula is the unintended interaction of several of its ingredients and the pathogen itself. When going back and looking at the symptoms again, it appears that this was a case of over-diagnosis, and that the patient was most likely only suffering from a wind/heat wei level pathogen. The combination of a more exterior pathogen than initially diagnosed with a few very cold bitter herbs was the recipe for the creation of a lurking pathogen. For example, the addition of Bàn Làn Gèn and Dà Qíng Yè is, for some people, a popular addition to cold formulas for their biomedically proven effects as antibiotic/antiviral herbs, so much so that they have begun to show up in many prepared formulas and are even used quite frequently alone in very high doses.

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In this case they were chosen here under the assumption that the pathogen was headed into the qi level, and that there may be some heat-toxin present as seen in the sore throat, and further supported in the previously mentioned biomedical researched effects against viruses. These two herbs, when coupled with the use of Shí Gāo, the primary ingredient in Bái Hu Táng, which is often used for qi level disorders, were all most likely too cold and pushed the pathogen deeper into the body. Therefore, the very cold nature of these three herbs themselves drove the pathogen deeper into the body, creating an illusion that the symptoms had improved. After taking this formula, the patient initially looked and felt better, but the pathogen was now residing deeper in her body, only to emerge later in more virulent form. The next complication in this situation was the use of Shěng Dí Huáng, which in external pathogen invasion is usually considered too sticky. While it is useful for patients with fluid damage from interior heat, it can be too cloying and create internal dampness where a lurking pathogen can hide. It may have been better to retain the Lú Gèn (Phragmites Rhizoma) that is part of Yin Qī áo Shān’s original formulation to nourish fluids more gently. Lastly, the patient’s fate was sealed with the use of Huáng Qí. While nourishing qi can be a useful tactic in some cases of pathogenic invasion with a pre-existing deficiency, herbs like Tái Zì Shēn (Peudostellariae Radix) are often safer. Huáng Qí, while a very effective herb for treating qi deficiency, in the case of an external pathogenic influence it can actually close the doors and lock the pathogen in. It is this closing of the doors which makes it a major part of Yú Píng Fénɡ Sān’s function of strengthening exterior deficiency to keep pathogens out of the body, but once the pathogen is inside it is too late. Thus to sum up, the situation with this patient was now one of a) cold driving an external pathogen deeper, b) cloying herbs giving it a place to hide, and c) the exterior being locked to keep it in.

Retrospectively the better approach to treat this wind-heat with dampness would be to consider the use of an idea promoted by Ye Tian-Shi, one of the originators of the Warm Disease School. He said that the proper treatment of wind-heat required that one vent the wind and release the heat from the exterior, but when dampness accompanies the wind, one is required to dispel the heat and damp through the lower jiao. In this formula, the force of the exterior releasing component was insufficient to vent the pathogen to the outside, giving it nowhere else to go but deeper, and there was nothing to drain dampness and heat through the lower jiao.

Visit 2

As one would predict when using these very cold herbs, the patient called the next day and reported that she had improved significantly and was feeling, in her words, about 60 per cent better, with the exception that she was still having a lot of body aches and was very fatigued. These symptoms appeared to be a sign of exterior dampness and possibly qi vacuity (which still needed to be verified with a proper consultation) but initially it appeared as if the formula she was taking was working. The patient then returned to the clinic eight days later on October 26 for a follow-up, and reported that she felt about 90 per cent improved. Her only current complaints were that she still had some body aches that were not characteristic for her, and that her energy was still much lower than normal. She also reported that she had a little burning in her stomach, was craving sugar, and had bad breath. Her tongue body had become wide and pink, with a thin dry white coating, and her pulses were now deep, wide, slightly slippery slightly rapidly. It appeared that Spleen qi vacuity with dampness was a prominent part of her pattern, so her diagnosis was Spleen qi vacuity with damp and interior Yang Ming heat. I prescribed a 7:1 concentrated granule modification of Liú Jun Zì Táng at a dose of four grams, three times a day. It contained:

| Dānɡ Shēn | 9g (Codonopsis Radix) |
| Bāi Zū | 6g (Atractylods macrocephalae) |
| Fū Lǐnɡ | 9g (Poria) |
| Chén Pí | 3g (Citri reticulatae Pericarpium) |
| Bān Xià | 6g (Pinelliae Rhizome) |
| Chái Hú | 6g (Bupleuri Radix) |
| Huánɡ Qí | 9g (Astragali Radix) |
| Mù Dān Pí | 6g (Moutan Cortex) |
| Mù Xiânɡ | 6g (Aucklandiae Radix) |
| Shī Gāo | 9g (Gypsum fibrosam) |
| Shènɡ Dí Huánɡ | 6g (Rehmanniae Radix) |

The main idea of this formula was to nourish Spleen qi to resolve damp, and secondarily to clear Yang Ming heat. In retrospect, it would appear that the use of Mù Dān Pí, Shī Gāo and Shènɡ Dí had the potential to create more of problem in holding the original pathogen inside the body by the combination of their cold and cloying natures. Shī Gāo alone may have been enough to address the Yang Ming heat. Therefore our lurking pathogen was still locked inside. There is also the possibility for the use of these cold herbs to damage the already weak Spleen, leading to more internal dampness to create a place for the lurking pathogen to hide. Again, with no real exterior releasing herbs, the pathogen was unable to vent. Without knowing that the pathogen was now suppressed inside the patient, I went about treat-
ing this patient for what I saw, and it was this step of using tonifying herbs that may have prolonged the course of this disease. As explained by the modern warm disease specialist Liu Guo-Hui, when a patient’s zheng qi is relatively strong compared to the strength of a lurking pathogen, the ability of the pathogen to express itself is stifled.¹

So, with the modification of Liu Jun Zi Tang, I was in essence strengthening her zheng qi. Thus it was possible that the qi nourishing function of the formula contributed to keeping the pathogen in.

Visit 3

The patient stopped by my office 14 days later and reported that her energy was now up to about 90 per cent, she was exercising regularly again and had no more body aches. Her tongue was again puffy and pink with a thin white coating. Her pulse was deep, wide, slightly slippery and still more rapid than normal. She also showed other heat symptoms including irritability; her subjective body temperature was a little warmer than normal, and she was slightly constipated with dry stools. At this point, I attributed her irritability to internal heat, as I could not find any other sources such as Liver qi constraint, and began to suspect that there was something going on that was not fully treated. However, since she felt good, she was unwilling to do anything about it.

Visit 4

On November 9, 27 days after the onset of her cold, things began to get very interesting when the patient came in reporting that she caught the flu again. This time she had been sick for about three days, her current illness had come on very rapidly, and her symptoms had been severe from the onset. She said she had not experienced the gradual worsening of symptoms typical of a garden-variety respiratory tract infection, but she had simply awakened with a full-blown cold. She reported: chest congestion with sticky yellow phlegm, post nasal drip, cough that was dry and painful, burning throat, laryngitis, lumbar ache, fatigue, and low fever. Her tongue coating was thicker and more yellow than normal, and the body was a little red. Her pulses were deep, slippery, and rapid.

The patient said that from the first day she had been taking a commercially available prepared Chinese herbal cold formula, which was based on a combination of Xiào Chái Hú Tăng and Sì Wú Tăng with added ingredients such as Bàn Làn Gên, Shèng Di Huáng, at the dosage recommended on the bottle. She reported that the formula had helped the fever slightly for the first day or so, but now she seemed to be getting worse. This situation would again seem to match the mistake I made myself earlier when I first saw her, however this time she didn’t feel any better, as she did with this strategy previously. In my opinion, her worsening condition was probably due to the low amount of exterior releasing herbs in that formula. Her current diagnosis was a lurking pathogen expressing itself at the wei level entering qi level; in addition (as it was autumn) there did appear to be an aspect of dryness in the cough. However, this dryness may also have been from the heat of the lurking pathogen burning off yin.

At this point I decided to re-evaluate my approach. Given the patient’s narration of her sudden progress toward a qi level type of illness, I suspected that her symptoms could now be the manifestation of a lurking pathogen. Not only did it appear to be a lurking pathogen presentation, it appeared that this one was actually formed as a result of her earlier treatment. While she had no memory of any summerheat type of disease during the summer months, or any sicknesses in the summer, she did seem to be presenting with a lurking pathogen. This diagnosis seemed correct, given that there was already some unusual heat present before she got sick this time. The dryness she was experiencing may have arisen from the fact that lurking pathogens can exhaust yin over time. In Meng Shu-Jiang’s book Teaching Reference Books for Traditional Chinese Medical Colleges: Warm Diseases it says that one method for determining if a disease is a newly contracted disease or is a lurking damp heat pathogen is the presence of interior heat symptoms at the onset of the warm disease.⁶ In addition, according to the Qing dynasty scholar He Bing-Yuan, “Compared with a newly contracted warm disease, a lurking warm disease is more severe. It is much easier to treat the newly contracted warm disease and harder to treat a lurking one.”⁷ These two statements would seem to support this idea.

My experience with this patient in the past showed that she normally had a pulse rate of around 65bpm, while her pulse rate for the previous few weeks was always 75bpm or more, a possible heat sign. She said that she felt warmer, and this was accompanied by some uncharacteristic irritability without any corroborating Liver symptoms. She had sudden onset of this flu without going through the typical progression one goes through when catching a cold. These symptoms all can be indicative of internal heat which, given the statements above by He Bing-Yuan and Meng Shu-Jiang, could indicate the presence of a lurking pathogen.


⁷ Ibid.
If these symptoms are indeed the expression of a lurking pathogen, the appropriate treatment method, according to Wang Lu’s Discourse on Tracing Back to the Medical Classics: “…is to clear interior heat and disperse the externally contracted signs and symptoms. Also, in some cases, exterior signs and symptoms will automatically disappear once the interior heat has been fully cleared.” In addition, according to Liu Bao-Yi, in order to treat a lurking pathogen one must clear and vent heat, and nourish Kidney yin. Wei or qi level formulas alone, such as Yín Qiáo Sân or Bù Hà Tâng are insufficient for this condition. With this information in mind, I composed a prescription to treat these heat symptoms more completely, release the exterior, and moisten dryness. She took this formula, again a 7:1 concentrated granule, for five days at a dose of four grams four times a day, and was instructed to finish it, even if she felt better. It contained the following:

Huang Qín 12g (Scutellariae Radix)
Huang Liân 6g (Coptidis Rhizome)
Liàn Qiao 12g (Forsythiae Fructus)
Shí Gāo 10g (Gypsum fibrosum)
Nù Bàng Zì 10g (Arctii Fructus)
Bò Hè 6g (Menthae haplocalycis Herba)
Xuân Shēn 6g (Scrophulariae Radix)
Bàn Lâng Gèn 10g (Isatidis/Baphicacanthis Radix)
Jíe Gèng 3g (Platycodi Radix)
Chén Pí 6g (Citri reticulatae Pericarpium)
Chái Hú 3g (Bupleuri Radix)
Shèng Mù 3g (Cimicifugae Rhizoma)
Mài Mên Dòng 6g (Ophiopogonis Radix)
Bái Hè 6g (Lilli Bulbus)
Zhi Gân Cāo 3g (Glycyrrhizae Radix preparata)

In accordance with Wang Lu’s teachings, I used Huăng Qín and Huăng Liân in this formula for their ability to clear heat from the upper burner, while Nù Bàng Zì, and Bàn Lâng Gèn were used for their ability to clear heat and resolve toxins. Shí Gāo was used for its ability to clear heat from qi level diseases. In contrast to my earlier premature use of Bàn Lâng Gèn and Shí Gāo, I felt that it was safe to administer here because the pathogen was already well established in the qi level.

Next, emulating Liu Bao-Yi’s strategy of venting a pathogen outward, I used Bò Hè, Nù Bàng Zì, Chái Hú, and Shèng Mù to release the exterior. Next, to follow Liu Bao-Yi’s strategy to nourish yin, I used Bái Hè and Mài Mên Dòng. Though a blood level herb, Xuân Shēn was used for its ability to clear heat and nourish fluids, as well as to nourish Kidney and Lung yin. Bái Hè and Mài Mên Dòng were also used not only for their minor ability to clear heat, but also to moisten the Lungs (metal), the mother of Kidney (water). Additionally, Mài Mên Dòng moistens the Intestines to promote bowel movement. Nù Bàng Zì, Bò Hè, Xuân Shēn, and Jíe Gèng were used for painful and swollen throat. Chén Pí and Zhi Gân Cāo were added to the formula to harmonise and protect the Spleen qi from the cold herbs.

Visit 5

On November 18, the patient returned. At this point, treating her became more complicated. She reported that she waited until that day to begin taking her herbs, as she felt too sick and lacked the motivation to take them. Consequently, her symptoms progressed to include a loss of voice, cough, sticky yellow brown-tinged mucus that was hard to expectorate, fever, fatigue and head congestion. She went to her MD, who told her that she had bronchitis. Since she did not want medication, she began taking the herbs as prescribed. At this point the patient’s presentation was most consistent with a Lung phlegm heat pattern expressing itself on the qi level, but beginning to show some yin level symptoms, namely thirst but with little desire to drink water, and blood-tinged mucus. Since the patient had little money, I asked her to finish the formula with the addition of 12g of Đàn Nâm Xìng (Arisaema cum Bîle) in order to strengthen the heat clearing action and address the phlegm. I felt that the formula prescribed was just on the strong side before, so with the addition of Đàn Nâm Xìng would probably still be effective.

Visit 6

Four days later, November 22, the patient returned to the clinic for another follow-up. She reported that she was improving and her new symptoms were that her throat was only a little sore and her voice had returned. She had a slight cough with little phlegm, felt only slightly warm and was not sweating. She had some nose and ear congestion, with clear, sticky mucus that was hard to expectorate from the throat, and a low appetite. Her pulse was slightly slippery, floating and rapid. Her tongue was pink with a red tip and a thin white coating. These symptoms gave the impression that her pathogen was moving outward from qi level disease to wei level disease, as lurking pathogen is said to be treated. Given the wei level wind-heat symptoms, I gave her a 7:1 granule formula consisting of Yín Qiáo Sân modified with slightly higher doses of Jíe Gèng and Jìn Yín Huâ. If this formula was to do its job, according to Liu it would induce sweating to release the exterior so that the pathogen could leave the body using the sweat as a substrate. He states that, according to Meng Shu-Jiang, when a patient is experiencing disease in the wei level and is not sweating, the pores are
closed and sweating needs to be induced.9

A follow-up phone call three days later from the patient verified that she was back to normal within about two days. She said she had no heat symptoms, no body aches, and that her energy had returned. It would appear, on the basis of symptoms alone, that the lurking pathogen was now eliminated. Interestingly however, in February and again in April she caught two more colds. Though they were not as severe as those in the autumn, they were more frequent than this patient reports to normally contract. Both times, the diagnosis was wind heat invasion, wei level disease, and both times she was able to be treated with a simple modification of Yin Qiao San. These pathogens were eliminated by using these formulas within a couple of days each time. What I find interesting is that both of these colds followed a short period of intense stress and fatigue. My thinking here is that the lurking pathogen from the autumn was still not completely resolved, a premise supported by Chapter 3 of the Su Wen, describing how diseases attacking in the winter may express in the spring as warm diseases. This phenomenon can be explained thus: the expression of yang qi in spring time increases, the yang qi in the body also expresses, therefore the pathogen too is allowed to express itself.

Secondly, as stated earlier, Liu Guo-Hui has stated that lurking pathogens do not tend to express themselves until the body's zheng qi is weakened and unable to resist expression of the pathogen.10 When the strength of the disease and the body's zheng qi are equal, as may have been the case with the pathogen after the last treatment in the autumn and all through the winter, the pathogen does not tend to be expelled. On the contrary, it lurks deeply in the body, only to come out with the approach of spring or the weakening of the zheng qi. In my opinion, with regard to respiratory illness, the constant strengthening of one's upright qi may only keep the pathogen locked inside and only through the proper venting of the pathogen can it be expelled for good.

Given these teachings, it appears that the pathogen my patient caught the previous autumn was not yet completely vented and released, which is why she again had two expressions of it as spring approached. Only after her body's zheng qi became weakened through stress and overwork was the pathogen able to express itself. Nonetheless, both times she was successfully treated with a standard formula that did not require large amounts of bitter, heat clearing herbs to expel the pathogen. Earlier I quoted Qing dynasty scholar He Bing-Yuan where he mentions that lurking pathogens tend to be more severe and difficult to treat than newly contracted diseases. In this case it was easy to see the seriousness when the patient came in with a sudden case of what her doctor called bronchitis. However, it did respond well and reasonably quickly to the formulas given, at the time that they were given. Contrary to what a lot of people report in the repeated venting of lurking pathogens getting more and more violent over time, with this patient it was not unlike letting the air out of an inner-tube: at first the air comes out with force and vigor, but each subsequent time air is released, it comes out more slowly and gently.

Conclusion

Although we all aspire to be skilled clinicians who never miss a diagnosis, few of us, if any, ever realise this goal. In our desire to do right by our patients, we can make the mistake of throwing everything we can think of at them. Yet it is important to see how this approach to a clinical situation can create new conditions that are even more difficult to treat. In my view, this is the realm of the lurking pathogen. As this case illustrates, a situation that is incompletely treated or over-treated can become a series of recurring illnesses. This case demonstrates how attacking an illness with the wrong weapons can actually result in a disease that behaves more aggressively than it might have been handled more gently and skillfully. As we are raised in a science-based culture, when we are then faced with modern biomedical research on herbal effects, it can be difficult to place faith in older perspectives. Nonetheless, these various points of view about warm pathogens have been developing since Wang An-Dao first proposed in 1368 that warm diseases should be considered differently than cold diseases, and these old ideas would not have survived had there not been something to them.

Medicine is in itself a practice, and that is what practitioners are encouraged to do. There are endless seminars covering different perspectives and methodologies, which is good in helping Chinese medicine grow. The problem comes in the mixing of paradigms or treatment protocols. We must constantly go back and examine what we have done, and question the theoretical mechanism behind a case that does not go as planned. This practice will not only tell us what we might have done incorrectly, but also how we can remedy the situation. In addition, we must always look past quick short-term gains to the longer-term result of a chosen approach. In my opinion, the methodology behind diagnosis and treatment of lurking pathogens can be very useful when viewing our own cases gone awry. This case has taught me a lot about trusting in the methodology that we have been given.