

## CHAPTER ONE

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### *Introduction to Shang Han Lun*

#### 1.1 Development of *Shang Han Lun*

*Shang Han Lun* (*Discourse on Cold Injury*) describes the pattern identification and treatment of externally contracted and miscellaneous diseases of internal medicine. It is the earliest medical book written in China still extant, which presents a complete theory of disease, its progress, and its treatment. It encompasses detailed aetiology, pathogenesis, diagnosis, treatment principles, indicated formulas, their ingredients, directions for decoction and their modifications. It was written during the Eastern Han period (circa 200 – 210 CE) by Zhang Zhong Jing and was originally named the *Shang Han Za Bing Lun* (*Discourse on Cold Injury and Miscellaneous Disease*)

Zhang Zhong Jing, also known as Zhang Ji, was born in Nie Yang (now known as Nan Yang) in the province of He Nan, and lived from about 150 to 219 CE. No detailed bibliographical records remain from that time, but it is known that he studied under Zhang Bo Zu and that he was later renowned as an accomplished practitioner whose academic and clinical skill surpassed those of his teacher, and eventually, his fame equalled that of Hua Tuo, who also lived in the Eastern Han dynasty. This was a tumultuous era when political unrest and constant warfare resulted in the outbreak of a string of epidemics. In

the preface of Zhang Zhong Jing's original text, he noted that of his 200-member strong family, he had lost two thirds in a ten-year period and that seven tenths of those deaths were attributable to disease which he described as being caused by the invasion of exterior cold. For this reason, he studied the ancient books of *Su Wen* (*Plain Questions*), *Jiu Juan* (*The Nine Fascicles*), *Ba Shi Yi Nan* (*Eighty-One Difficult Issues*) and *Yin Yang Da Lun* (*The Great Treatise on Yin and Yang*), subsequently writing *Shang Han Za Bing Lun*, which totalled sixteen volumes.

#### 1.2 Lineage of the Song and Zhao Editions

The original text was lost soon after it was written but not, fortunately, before another version was compiled and reorganised by Wang Shu He (Western Jin period, 265 – 316 CE). Wang Shu He's edition re-arranged the sections of the original *Shang Han Za Bing Lun* which related to externally contracted disease and compiled them as a separate work. It is this which is now known as *Shang Han Lun*. Subsequently, in the Song dynasty (1127 – 1279 CE), the sections of *Shang Han Za Bing Lun* relating to other diseases of internal medicine, termed miscellaneous diseases, were reorganised to form the book

now known as *Jin Gui Yao Lüe* (*Essential Prescriptions of the Golden Cabinet*). There is no longer an extant text of the original Song dynasty edition in China and today, there are two editions of *Shang Han Lun* which are relied upon. The earlier of these, *Zhu Jie Shang Han Lun* (*Annotations to Shang Han Lun*) by Cheng Wu Ji from the Jin-Yuan period, appeared in about 1144 CE and was the earliest annotated edition. The second version of *Shang Han Lun* used today, and now known as the Song edition, is actually the Zhao Kai Mei edition originating in the Ming dynasty (1368–1644 CE). This work was printed with wooden blocks and consisted of four books:

1. *San Ke Song Ban Shang Han Lun*
2. *Zhu Jie Shang Han Lun* (The Annotated Shang Han Lun) by Cheng Wu Ji
3. *Song Yun Gong Shang Han Lun Lei Zheng*
4. *Jin Gui Yao Lüe Fang Lun*

The first of these came to be known as the Song version by virtue of the fact that the original Song version no longer existed. Much reliance has also been placed on *Yi Zong Jin Jian* (*Golden Mirror of Medical Tradition*) which was commissioned by Emperor Qian Long and compiled in his reign (1739~1742 CE). It comprises ninety fascicles which are incorporated into both *Shang Han Lun* and *Jin Gui Yao Lüe*.

### 1.3 Academic Achievement of *Shang Han Lun*

*Shang Han Lun*'s concept of externally contracted disease and its treatment was seeded in the classics of *Huang Di Nei Jing* (*The Yellow Emperor's Internal Classic*), *Nan Jing* (*The Classic of Difficult Issues*) and *Shen Nong Ben Cao Jing* (*The Materia Medica Canon*

of *Shen Nong*). However, it was only in *Shang Han Lun* that the relatively abstract theoretical knowledge and generalised clinical observations of those works were developed into a specific body of theory. Basing his theory on the concept of six channel pattern differentiation found in *Su Wen: Re Lun* (*Su Wen Chapter 31: Discourse on Heat*), Zhang Zhong Jing identified a range of patterns, which he then analysed and differentiated according to their pathogenesis and symptomatology, describing various pattern changes associated with externally contracted disease. Thus, he provided an innovative and comprehensive system of Six Channel pattern differentiation. *Shang Han Lun* incorporates the theory of yin and yang and the zang fu as outlined in *Nei Jing*, and further develops the theory of the Eight Guiding Principles and the significance of the channels and network vessels. In addition, it describes in detail the aetiology and pathogenesis of disease, coordinating it with the eight treatment strategies of sweating, ejection, precipitation, harmonization, warming, clearing, supplementation and dispersion.

Ultimately, Zhang Zhong Jing produced comprehensive and systematic guidelines for understanding the aetiology and pathogenesis of externally contracted disease and associated treatments, not only developing formulae but also presenting explanations for his herbal modifications, with many formulae from the *Shang Han Lun* still used extensively in the modern-day practice of Chinese medicine. Not only did this text provide the foundation for Chinese medical theory but is regarded as a seminal text which formed the backbone for later developmental theories. One of the most noted of these was *wen bing xue* (warm disease theory) which was developed in the Ming and Qing dynasties. Although both *shang han* and *wen bing* theory had their origins in *Nei Jing*, warm disease theory is regarded as a further development of the principles of *Shang Han Lun*.

## 1.4 Definition of Shang Han or Cold Injury

The term “shang han” has both a narrow and a broad meaning. The narrow concept of shang han is limited to externally contracted disease caused by pathogenic cold or wind cold, whilst the broad meaning refers to all externally contracted disease. The broad concept of shang han (cold injury) is described in both *Nei Jing Su Wen* and *Nan Jing*. The *Su Wen* states, “Now all heat diseases are of the shang han (cold damage) type” and the *Nan Jing: 58th Difficult Issue* states, “There are five types of shang han (cold injury): zhong feng (wind strike), shang han (cold injury), shi wen (damp warmth), re bing (hot disease) and wen bing (warm disease).

The *Shang Han Lun* text addresses diseases defined by the broad sense of shang han, in other words, both externally contracted disease and other diseases of internal medicine known as miscellaneous disease. However, the main focus is on externally contracted disease caused by pathogenic wind cold, and the various differential patterns. And so it can be said that the main focus is, in fact, on the narrow concept of shang han. The aetiology of externally contracted disease is the six climatic influences of wind, cold, summerheat, damp, dryness and fire. However, the text considers both external and internal factors, the pathogens involved, disease patterns and principles of treatment. Importantly, it must be noted that the concept of shang han in *Shang Han Lun* differs from the modern clinical disease known as shang han, which is equivalent to typhoid fever.

## 1.5 Concept of the Six Channels and Six Channel Pattern Identification

The six channels are the Tai Yang, Yang Ming, Shao Yang, Tai Yin, Shao Yin and Jue Yin and in *Shang*

*Han Lun* they serve to categorise patterns associated with externally contracted disease. The groundwork for the theory of the six channels had been laid down in the *Huang Di Nei Jing* where they were proposed as a basis for the the diagnosis and treatment of heat and excess patterns in *Su Wen: Re Lun (Su Wen Chapter 31: Discourse on Heat)* and were further discussed in *Su Wen: Yin Yang Lei Lun (Su Wen Chapter 79: Discourse on the Categories of Yin and Yang)*. However, the diagnosis was generalised and reference to treatment in those chapters was scant, suggesting only that sweating could be used during the first two days and after the third day the disease had entered the interior so purgation could be used, and that meat should be avoided in febrile disease. Furthermore, there was no discussion of deficiency and cold except to say: “Observe deficiency and excess and treat accordingly”. The sophisticated theory of *Shang Han Lun* stands in stark contrast to these simple statements: Zhang Zhong Jing proposed a comprehensive theory of classifying disease according to both the three yin and the three yang channels, discussing not only heat and excess, but also deficiency and cold. He defined many patterns within each classification, explaining their pathogenesis and specifying treatment strategies and formulas.

*Shang Han Lun*'s six channel theory covers physiological function and pathological change in the channels and embraces the theories of the channels and network vessels, the zang fu, and qi and blood. By understanding the physiology of the channels, a theory is proposed as to the significance of pathological changes as manifested in signs and symptoms. Six channel pattern identification follows the course of externally contracted disease and identifies its location, (exterior or interior), its nature, (hot or cold) and explains its pathogenesis. Furthermore, it provides a means to gauge the strength of the zheng qi, (antipathogenic qi), the intensity of the disease and, by analysing manifestations during the course of the

disease, it also provides a tool to determine the subsequent outcomes or prognosis. Disease in any of the six channels manifests as a pattern which can be differentiated by its signs and symptoms, including, importantly, the pulse. Subsequent identification of the channel involved provides the basis for diagnosis and treatment. In this way, the concept of the six channels in *Shang Han Lun* not only offers criteria for analysis and guiding principles for pattern differentiation, but also provides a framework in which to develop treatment strategies.

There have been many interpretations of six channel pattern identification over the centuries. Some thought it better explained at the level of the zang fu, others thought it more relevant to view the concept at the level of the network vessels, and yet another opinion was to explain it in terms of qi transformation. In fact, all three viewpoints are valid because the six channels are closely related to their corresponding zang fu and associated network vessels, and therefore any pathological manifestation of the zang fu, the network vessels or qi transformation will be reflected in the six-channel system.

## 1.6 Categorisation of the Six Channels

There are three yang patterns and three yin patterns, corresponding respectively to the yang and yin channels. The three yang patterns are the Tai Yang which pertains to the urinary bladder and small intestine channels; the Yang Ming, pertaining to the stomach and large intestine channels and the Shao Yang which relates to the gall bladder and triple jiao channels. The three yin patterns are the Tai Yin which relates to the spleen and lung channels, the Shao Yin which relates to the heart and kidney channels and the Jue Yin, which pertains to the liver and pericardium channels. The depth of a disease from the most superficial and external to the deepest, most

internal, and therefore the most serious, follows the order of Tai Yang, Yang Ming, Shao Yang, Tai Yin, Shao Yin and Jue Yin. A brief description of the patterns follows.

**Yang Channel Patterns:** The most exterior of the channels is **Tai Yang**. This is the first channel affected during the initial stage of externally contracted disease associated with the invasion of pathogenic wind and cold. The manifestations of aversion to cold, fever, headache, a stiff, painful neck and floating pulse all indicate that this is an exterior cold pattern affecting the Tai Yang channel which has caused disharmony between ying (nutritive) and wei (defence) qi.

If the external pathogen penetrates into the interior and transforms into heat, an excess heat phase occurs. There is no longer an aversion to cold, but instead, there is sweating and an aversion to heat. As the disease progresses, damage to body fluids may manifest as thirst. This pattern is classified as **Yang Ming** disease and, if not addressed in time, it can transform into a bowel excess pattern with severe abdominal distension, abdominal pain, tidal fever, sweat streaming from the extremities, hard stools and a pulse that is submerged and full.

If, during the course of the disease, the pathogenic influence is no longer in the exterior but has not yet penetrated the interior, a struggle results between the zheng qi and the pathogenic qi at the half interior and half exterior level. It manifests with such symptoms as alternating chills and fever, epigastric fullness, pain in the hypochondrium, a bitter taste in the mouth, a dry throat, dizziness, blurred vision, irritability and nausea, all of which are a reflection of constrained liver and gallbladder qi and impairment of the qi dynamic. This is known as **Shao Yang** disease.

Diseases affecting the three yang meridians are generally regarded as excess patterns because the zheng qi is still intact and is able to offer resistance to the pathogenic qi. Because of the location of the disease being relatively exterior and associated with the fu organs, the three yang channel patterns are generally classified as a yang pattern associated with heat and excess in the fu.

**Yin Channel Patterns:** When the pathogen penetrates into the first of the three yin channels, the symptoms of vomiting, diarrhoea, abdominal distension, pain which is alleviated when pressure is applied and a preference for warmth indicate that the pattern is one of spleen deficiency with depletion of yang qi and an accumulation of cold and damp. This is classified as **Tai Yin** disease.

If the pattern manifests as aversion to cold, an absence of fever, cold extremities, clear and watery diarrhoea, lethargy, a desire to sleep and a pulse that is fine and faint, it indicates deficiency of heart and kidney yang with interior cold. This is classified as **Shao Yin** disease.

If the pattern exhibits upper body heat and lower body cold, excessive thirst, qi surging upward to the heart, vexing heat in the heart, hunger with an inability to eat, vomiting of round worms and continuous diarrhoea, it is classified as **Jue Yin** disease.

Diseases affecting the three yin channels are generally classified as deficiency patterns because of the depletion of zheng qi and general hypoactivity. Because of the location of the disease being interior and associated with the zang organs, the three yin channel patterns are generally classified as a yin pattern associated with cold and deficiency in the zang.

## 1.7 Relationship between Six Channel Pattern Identification and Zang Fu Pattern Identification

Identification according to the six channels provides a systematic framework which can be used to establish the nature and location of the pathogen in externally contracted disease. From this, the diagnosis, principle of treatment and appropriate herbal formula can also be determined. Zang fu pattern identification is based on an understanding of the physiology and pathology of the zang and fu. Signs and symptoms serve to identify the disease pattern and provide insight into the location, nature and intensity of the disease.

There is a close link between six channel and zang fu theory. The zang fu are at the core of all human physiological function, they are the home of the channels and they are interconnected by means of channels and network vessels. Six channel theory proposes a system where the channels corresponding to the zang fu are paired according to the sequential flow of qi and used as a basis for disease differentiation. A quote from *Ling Shu: Hai Lun Pian (Ling Shu Chapter 33: Discourse on the Seas)* illustrates this: “The twelve channel vessels, internally are connected to zang fu, externally the network vessels are connected to the limbs and joints”. Zhang Jie Bing said: “The network vessels are branches of the zang fu; the zang fu are the root of all channels and network vessels. To understand the pathway of the twelve channels is to understand the yin and yang, exterior and interior, qi and blood, excess and deficiency”. It follows that the three yang channels reflect pathological change in the fu organs while the three yin channels reflect pathological change in the zang organs. For example, disease affecting the Tai Yang channel is classified as exterior. If it is not resolved at this level, further penetration via the channel network will affect the transformation function of the associated fu organ of

the Tai Yang channel, the urinary bladder and water amassment will result, manifesting as excessive thirst, difficult urination and a floating pulse.

### 1.8 Relationship between Six Channel Pattern Identification and the Eight Principles

Eight principle pattern differentiation or 'ba gang bian zheng' is based on the conceptual pairs of yin and yang, exterior and interior, cold and heat, and excess and deficiency. Pattern differentiation according to the eight principles is the net result of analysing data collected by the four examinations, which comprise inspection, listening and smelling, inquiry and palpitation. Data obtained from the four examinations forms the basis for identifying the location and nature of disease as well a means of assessing the relative strengths of zheng qi and pathogenic qi.

The concept of eight principle pattern identification originated in such classics as the *Nei Jing* and *Shang Han Lun* with the latter forming the springboard for its later acceptance and development. When six channel pattern identification and the eight principles are used together, they are able to assess not only the location and nature of disease but also its progress and prognosis. These two systems are, in fact, inseparable because the practical application of six channel pattern identification is dependent on differentiating the eight principles of yin and yang; exterior and interior; heat and cold and excess and deficiency.

Yin and yang represent two polarised stages in the process of transformation of all things in the universe and symbolise two diametrically opposite energies. Ultimate good health is dependent on these two forces being in equilibrium. Disease is the consequence of disharmony between these two elements

and, when conducting a diagnosis, it is essential to observe the state of yin and yang. As previously observed, diseases of the three yang meridians are associated with yang, heat and excess, whereas diseases of the three yin meridians are associated with yin, cold and deficiency. *Su Wen: Yin Yang Ying Xiang Da Lun Pian* (*Su Wen Chapter 5: Great Discourse on the Phenomenon of Yin and Yang*) states: "A good diagnostician observes the complexion and palpates the pulse and first distinguishes between yin and yang". Once the distinction between yin and yang is established, further differentiation can be made between heat and cold, exterior and interior and excess and deficiency. Disease must be differentiated as to its location: generally speaking, pathogenic involvement of the network vessels is regarded as an exterior disorder and involvement of the zang fu is classified as an interior pattern.

The selection of the correct treatment strategy is highly dependent on understanding the location of disease. For example, the correct treatment strategy in a Tai Yang exterior pattern is to resolve the exterior with diaphoresis; in a Yang Ming interior pattern, however, the appropriate strategy is to clear internal heat or purge the bowel repletion. For instance, Clause 56 in the Tai Yang chapter says: "If the urine is clear, we know it is not in the interior, it is still in the exterior, one must promote sweating". Conversely, if there has been no stool for six or seven days and there is also headache and fever, then the pathogen has transferred to the interior and purging is indicated, using Cheng Qi Tang. Where exterior and interior patterns exist simultaneously, the correct strategy is first to release the exterior and then to purge the interior heat. In the treatment of disease, it is essential to understand the correlation of the six channels and the exterior or interior manifestations. Using the wrong strategy can have dire consequences.

Cold and heat are the principles by which the nature of a disease is identified. In terms of their aetiology, disease of the three yang channels pertains to heat and excess whereas disease of the three yin channels pertains to cold and deficiency. Identification of patterns as being excess or deficient helps in the determination of the waxing and waning of disease, where deficiency refers to a deficiency of zheng qi and excess refers to an excess of pathogenic qi. *Su Wen: Tong Ping Xu Shi Lun Pian (Su Wen Chapter 28: Discourse on Deficiency and Excess)* states: “Exuberance of evil qi is excess, depletion of essence qi is deficiency”. Thus, it can be seen that the eight principles are an integral part of six channel pattern identification and, conversely, the pathomechanism of disease in the six channels is closely linked to the eight principles and the zang fu.

### 1.9 Relationship between Six Channel Pattern Identification and Identification according to Cause

Pattern identification according to the cause of disease (bing yin bian zheng) is the determination of the cause of disease by examining and analysing its manifestations. Manifestations of disease may have their root in any of a number of causes: the six environmental excesses, the seven emotions, traumatic injury and lifestyle factors such as improper diet or overexertion. Six channel patterns reflect the pathological changes wrought by exterior causes, wind, cold, summerheat, damp, dryness and fire, otherwise known as the six evils or the six exogenous pathogenic factors. In the initial stage, it is pathogenic cold which is the cause of six channel disease.

Tai Yang zhong feng (wind strike) is an exterior deficiency pattern where there is an aversion to wind cold, sweating and a moderate pulse. Tai Yang shang han (cold injury) is an exterior excess pattern with

aversion to cold, no sweating and a tight pulse. Both Tai Yang zhong feng and Tai Yang shang han are caused by pathogenic cold but they can be part of a more complex pattern where there is phlegm, fire, water amassment, food stagnation or blood stasis, any one of which may be an aetiological factor in the disease pattern. From this, it can be seen that the concept of diagnosis by aetiology constitutes a critical component of six channel pattern identification.

In *Shang Han Lun*, six channel pattern identification serves as the framework for diagnosis according to aetiology, the channels and network vessels, the zang fu and the eight guiding principles. Subject to the circumstances of an individual disease, any one, or more than one, of those theories can be applied.

### 1.10 Method of Six Channel Diagnosis

In order to utilize the six channel system of pattern identification correctly, there are five key points to bear in mind.

1. The strategy of six channel system of pattern identification uses the six channels as a means of classifying six different stages of disease caused initially by an externally contracted pathogen. Each channel is characterised by a group of signs and symptoms which is a reflection of the physiology and corresponding pathological changes of that particular channel. Each of the six channels serves as a main category, with each having many sub-categories which are classified as diseases of the related channel. When making a diagnosis according to the method of the six channels, it is essential to identify the channel with which the symptoms and signs are associated.
2. Pathological changes during the course of the disease manifest as changed signs and symptoms.

Treatment is then adjusted according to these new manifestations. For example, Clause 25 says: “Having taken Gui Zhi Tang, there is copious sweat, if the pulse is flooding and big, give Gui Zhi Tang as before”, whilst Clause 26 says: “Having taken Gui Zhi Tang, after profuse sweating, there is severe vexation and unresolved thirst, if the pulse is flooding and big; Bai Hu Jia Ren Shen Tang governs”. The two disease patterns described in these clauses are both associated with the Tai Yang channel and Gui Zhi Tang has been given in both cases. Both mention sweating but the difference is that although in the former there is a surging, large pulse, suggesting an interior syndrome, the absence of thirst shows that the syndrome is still in the exterior. The latter pattern (Clause 26) describes how, after taking Gui Zhi Tang, there is also vexation and thirst, demonstrating a change in the pattern. The symptom of thirst signifies fluid damage due to exuberant heat in the interior, hence it is ascertained that it is no longer in the Tai Yang but in the Yang Ming. The treatment principle must change from promoting sweating, as indicated for Tai Yang syndrome, to clearing heat and generating fluids as indicated for Yang Ming syndrome.

3. In the process of pattern identification, an attempt has to be made to identify similarity or commonality with one of the six patterns, even though the actual pattern may be different from the classic description. Among the complexity of pattern variations, it is necessary to find the common denominator. For example, irrespective of whether the pattern is zhong feng (wind strike) or shang han (cold injury), if the pulse is floating and there is stiffness and pain in the nape and an aversion to cold, then the manifestations are associated with the Tai Yang channel and the principle of treatment is to use acrid warm herbs to release the exterior.

4. The situation of concurrent patterns must be identified, for instance, where some symptoms and signs indicating the Tai Yang pattern are present concurrently with signs and symptoms indicating that the disease has entered another channel. Even though the disease is no longer in the Tai Yang channel, the presence of signs and symptoms typical of Tai Yang channel disease indicates that although the exterior has not been released, the pathogenic influence has entered a deeper channel simultaneously. In such a case, treatment using acrid warm herbs to release the exterior may still apply or may be incorporated with other forms of treatment.

5. The concept of the eight principles is interwoven into the six channels. When diagnosing according to the principles of six channel pattern identification, the eight principles are automatically invoked because without them, the nature and location of the disease cannot be determined. The two theories are used in partnership to arrive at an accurate diagnosis and prescribe appropriate treatment.

### 1.11 Six Channel Disease Transmission

Six channel pattern identification studies pathological changes within the zang fu and their associated channels and collaterals and the progression of disease. If one channel or organ is affected, in time, other channels or organs may also be affected. This concept of disease progression is called transmission or ‘chuan bian’. ‘Chuan’ means ‘pass’ and the term ‘bian’ refers to an anomaly in the normal pathway of disease transmission. Another possible interpretation would be “disease complications”. The following descriptions outline the ways in which disease, which was initially caused by the contraction of exterior cold, may change according to the transmission of the pathogen in six channel pattern identification theory.



**1. Xun Jing Chuan (Transmission in the sequence of channels):** When an external pathogen transfers sequentially from the exterior to the interior, from the superficial to the deep level, in the classic sequence of the six channels diseases, (Tai Yang to Yang Ming to Shao Yang to Tai Yin to Shao Yin to Jue Yin), it is known as xun jing chuan.

**2. Yue Jing Chuan (Transmission by skipping channels):** Where the externally contracted disease does not transmit in the expected order through each of the six channel diseases but skips one or more channels, it is known as yue jing chuan.

**3. Zhi Zhong (Direct Attack):** Where the external pathogenic factor gives rise to a disease by invading the three yin channels directly and without undergoing the stages of the three yang diseases, it is known as zhi zhong.

**4. He Bing (Concurrent disease):** When the symptom complex involves two or three channels concurrently, it is known as he bing. For example, "Tai Yang and Yang Ming he bing", "Tai Yang and Shao Yang he bing" or "Tai Yang, Yang Ming and Shao Yang he bing".

**5. Bing Bing (Lag-over disease):** When the symptom complex of one channel has not yet been resolved and additional symptoms pertaining to another channel appear, it is known as bing bing.

### 1.12 Huai Bing or Transmuted Patterns

Huai Bing or a transmuted pattern is an aberration in the course of normal disease transmission and represents deterioration in the disease caused by incorrect treatment, which can be inappropriate application (as a result of wrong diagnosis) or excessive use of such therapies as sweating, emesis or purga-

tion. The mechanism of the deterioration usually relates to damage to zheng qi because of the loss of qi and fluids caused by these treatments. The subsequent interior deficiency allows the pathogen to transmit to a deeper level of the six channel system, creating a more serious and more complex pattern. As said in the *Nei Jing*: "Where zheng qi resides, evil cannot enter". Conversely, where there is emptiness, it is exploited by the pathogen, and the disease enters the interior. When this occurs, it is known as adverse treatment, resulting in huai bing or a transmuted pattern. This is discussed in numerous clauses of *Shang Han Lun* for example: Clause 16 "Tai Yang disease for three days, sweating has already been promoted, if there is vomiting, if there is purging, if there is warm needling, the condition is still not resolved, this is transmuted disease, Gui Zhi is not appropriate". Transmuted patterns are an aberration of the six channel patterns but are described in relation to them, as appropriate to their aetiology and pathogenesis. They are also known as 'bian zheng'.

### 1.13 Pattern Differentiation according to Six Channel Theory

The following table summarises the diseases of the six channels as diagnosed according to aetiology, pathogenesis and the main signs and symptoms.

Table 1: Pattern Differentiation according to Six Channel Theory

	Aetiology	Pathogenesis	Main Symptoms and Signs
<b>Tai Yang disease</b>	Invasion by exogenous wind-cold	(1) Disharmony of ying and wei (2) Obstruction of defensive yang qi by cold	Superficial pulse, pain and stiffness in the head and neck, aversion to cold
<b>Yang Ming disease</b>	Tai Yang diseases transmitted to the interior	(1) Hyperactivity of pathogenic heat in the stomach which results in fluid depletion. (2) Unformed heat combined with formed accumulation causing obstruction of fu qi.	High fever, profuse sweating, aversion to heat and not cold, flooding pulse. Tidal fever, sweat streaming from extremities, abdominal distension with fullness and pain, hard stool and a sunken and excess pulse
<b>Shao Yang disease</b>	(1) Transmission from other channels (2) Direct attack	Half exterior and half interior due to Shao Yang being the pivoting point of qi mechanism.	Alternating chills and fever, epigastric fullness, loss of appetite which can be accompanied by nausea and vomiting, white tongue coating, restlessness, bitter taste in the mouth, dry throat and wiry pulse
<b>Tai Yin disease</b>	(1) Incorrect treatment of three yang diseases (2) Direct attack	Damage or weakness of spleen yang Direct attack from wind-cold pathogenic factor	Abdominal fullness, loss of appetite, vomiting, diarrhoea, abdominal pain
<b>Shao Yin disease</b>	(1) Transmission from exterior (2) Direct attack due to deficiency	(1) Deficiency of Heart and kidney yang qi (2) Obstruction of yang qi by cold	Aversion to cold, preference for lying in curled-up posture, tendency for sleepiness, diarrhoea, vomiting, preference for hot drinks, copious and clear urine, weak and thready pulse
<b>Jue Yin disease</b>	(1) Transmission from other channels. Generally the terminal stage of disease. (2) Direct attack	Combination of cold & heat	Excessive thirst, feeling of qi rushing to the chest, pain & heat sensation in the chest, feeling of hunger with no desire to eat, diarrhoea and vomiting or vomiting of roundworms

### 1.14 Principles of Treatment in Six Channel Disease

The fundamental treatment strategies of diseases associated with the six channels are to:

- a) Reinforce anti-pathogenic yang or zheng qi
- b) Eliminate the pathogenic factor

The following table summarises specific strategies for the diseases associated with each channel. A more extensive description of strategies and treatments is found in the chapters relating to each channel.

Table 2: Principles of Treatment according to Six Channel Theory

Channel	Diagnosis	Principle of treatment
Tai Yang disease	a) Tai Yang exterior fullness syndrome b) Tai Yang exterior deficiency syndrome	a) Eliminate cold by diaphoresis b) Dispel pathogenic factors from the superficial muscles, eliminate pathogenic wind, regulate ying and wei system
Yang Ming disease	a) Yang Ming channel syndrome b) Yang Ming Fu organ syndrome	a) Clear heat from the Yang Ming b) Purge food stagnation in the fu of the Yang Ming
Shao Yang disease	Pivoting mechanism of Shao Yang is obstructed	Harmonize Shao Yang
Tai Yin disease	Damage to Spleen yang by pathogenic cold	Warm the middle and tonify Spleen, eliminate cold and parch dampness
Shao Yin disease	a) Cold transformation due to Heart and kidney yang deficiency b) Heat transformation due to excess yang as a result of yin deficiency	a) Strengthen yang to dispel cold b) Nourish yin and clear deficiency heat
Jue Yin disease	Heat and cold complex with stomach heat in the middle burner and spleen coldness in the lower burner. Exuberant cold with the possibility of restoring yang qi if given the correct treatment.	Clear heat from the upper jiao and warm cold in the lower jiao

### 1.15 Relationship between Shang Han and Wen Bing

As discussed earlier, the concept of shang han can be defined as either “broad” or “narrow”. The “broad definition” embraces all diseases caused by any exogenous pathogenic factor regardless of whether it is cold or damp or wind or fire, as described in the *Nan Jing: 58th Difficulty* when it states, “There are five types of cold damage: zhong feng (wind stroke), shang han (cold injury), shi wen (damp warmth), re bing (heat disease) and wen bing (warm disease)”. The “narrow definition” refers only to those diseases caused by exogenous cold or wind cold, as is stated in *Su Wen*: “Now all heat diseases are of the cold injury kind”. Although wen bing is contained within the “broad” definition of shang han and has a con-

nection with shang han theory, they are nevertheless two separate concepts.

During the period that *Nei Jing* and *Nan Jing* were written, both the broad definition encompassing wen bing and the narrow concept of shang han were placed in the same category as externally contracted disease when, in fact, shang han and wen bing are two entirely different types of febrile disease. When *Shang Han Lun* was written, there was a lack of clinical knowledge concerning the aetiology of wen bing and it was only as time progressed that the aetiology and pathogenesis of wen bing were properly understood.

*Shang Han Lun* was written during the Eastern Han period (circa 196 CE), whilst wen bing theory was

developed in a much later period, during the Ming and Qing Dynasties. Thanks in part to its early inclusion in shang han theory, and in part to the influence of shang han theory over the ensuing centuries, the system of pattern identification in wen bing theory as developed later, was derived from that expounded in *Shang Han Lun*. Tracing the origins of both shang han and wen bing theories, it is clear that the diagnostic techniques of wen bing are a further development and expansion of the foundation theory of *Shang Han Lun*. It was some centuries later before wen bing finally developed into a system of its own with particularised diagnostic features such as the four aspects (wei, qi, ying, xue) and triple jiao pattern identification (upper, middle and lower jiao). Nevertheless, the wen bing theories of the four aspects and triple jiao were based on many of the concepts of six channel pattern identification as pioneered by Zhang Zhong Jing. This is evidenced in much of wen bing theory, for instance, it is stated in *Wai Gan Wen Re Bing Pian (Dissertation on Externally Contracted Febrile Disease)*, “Diseases of the qi aspect, if not transmitted to the xue aspect, can persist in the triple jiao and bear resemblance to diseases of the Shao Yang channel”.

To speak of the development of wen bing theory without reference to *Shang Han Lun* is tantamount to talking about water without a spring or a tree without a root. The qi aspect of wen bing theory is comparable to the Yang Ming pattern of *Shang Han Lun*, and a further illustration of the correspondence between the two theories is seen in the use of the formula Huang Lian E Jiao Tang in the treatment of Shao Yin disease in *Shang Han Lun*, which is the same formula cited in wen bing to treat heat scorching true yin, thus meeting the wen bing requirement to nourish true yin and clear hyperactive heart fire.

Numerous wen bing xue (warm disease theory) formulas are derived from *Shang Han Lun*. Huang Qin

Tang, Bai Hu Tang, Huang Lian E Jiao Tang, Zhi Zi Chi Tang as well as the three Cheng Qi Tang formulas are just some of the many formulas with no modification, frequently cited in the treatment of wen bing. Formulas of wen bing xue which are adaptations of *Shang Han Lun* formulas are Zeng Ye Cheng Qi Tang and Xuan Bai Cheng Qi Tang. Qing Dynasty practitioners created new treatment strategies such as clearing heat and relieving toxicity and established the use of aromatic medicinals to transform turbidity and employed specific medicinals to open the orifices. In addition, new formulase such as Yin Qiao San, Lian Po Yin, Niu Huang Wan and Zhi Bao Dan emerged.

Parallels are often drawn between the treatment strategies proposed respectively by shang han and wen bing theories. At the onset of externally contracted disease with an exterior or wei pattern, both wen bing and shang han theory adopt the treatment principle of releasing the exterior. The critical difference is in the aetiology, with wen bing being caused by pathogenic heat and Shang Han by pathogenic cold. Correspondingly, acrid cool herbs to release the exterior are adopted by wen bing theory whereas shang han adopts acrid warm herbs to release the exterior and promote sweating. When the pathogenic influence enters the interior and there are such manifestations as fever, thirst, sweating, a flooding pulse or dry accumulation in the bowel with abdominal pain, both shang han and wen bing theories invoke the strategy of clearing heat and purging accumulation. The difference is in the later stages, where wen bing theory focuses mainly on essence, fluid, blood and humour damage and shang han on devastated yang. Hence the corresponding treatment for later stage wen bing disease is to nourish yin and replenish fluid whilst the treatment of later stage shang han disease is based on the restoration of yang qi.

### 1.16 Shang Han and Miscellaneous Diseases

The aetiologies of shang han and miscellaneous diseases differ. Shang han is categorised as disease caused by exterior injury by environmental pathogenic factors; miscellaneous diseases are mainly attributed to internal injury, pertaining to yin and caused by such things as improper diet, emotional stress, phlegm and blood stasis. *Su Wen: Tiao Jing Lun Pian* (*Su Wen Chapter 62: Discourse on Regulating the Channels*) states: “When evil arises, it relates either to yin or to yang. Disease pertaining to yang is due to wind, rain, cold or summerheat; that pertaining to yin is due to food and drink, an irregular lifestyle or immoderate joy or anger”. *Ling Shu: Wu Se Pian* (*Ling Shu Chapter 49: The Five Colours*) states: “When the disease arises in the interior, first treat the yin, then treat the yang, the reverse will cause deterioration; When the disease arises in the yang, first treat the exterior, then treat the interior, the reverse will cause deterioration”. It is clear from these passages that Shang Han and miscellaneous diseases differ significantly in their aetiology. This is not to say, however, that the two can not manifest simultaneously. Externally contracted disease can activate internal disease or aggravate pre-existing conditions and result in a more complex condition. For example, Tai Yang disease accompanied by asthma as seen in a Gui Zhi Jia Hou Po Xing Zi Tang pattern; shang han disease accompanied by water qi beneath the heart, as seen in a Xiao Qing Long Tang pattern and shang han accompanied by heart vexation and palpitations as in a Xiao Jian Zhong Tang pattern. Such examples are numerous in *Shang Han Lun* and show that treatment protocols for the exterior and interior must be differentiated and also take into consideration whether the condition is acute or chronic.

### 1.17 Clinical Application of Six Channel Pattern Identification

The application of the six channel system is not restricted to diagnosis and treatment of externally contracted febrile diseases alone, but can be applied to many disorders of internal medicine, external medicine, gynaecology and paediatrics. *Shang Han Lun* theory has the potential to treat a range of diseases, including cardiac and pulmonary disorders, hepatic and biliary disorders, gastrointestinal disorders and urinary disorders. The application of six channel pattern identification in internal and miscellaneous diseases is based on the following:

**Aetiology:** The aetiology of disease, which includes qi stagnation, blood stasis, water qi, phlegm fluids, food stagnation, physical exertion and internal injury, is discussed in detail in *Shang Han Lun*. For example, a water qi disorder can be due to yang deficiency resulting in generalised water swelling or oedema, where the treatment prescribed in *Shang Han Lun* is Zhen Wu Tang. However, if the water qi causes oedema from the waist down, the relevant formula in *Shang Han Lun* is Mu Li Ze Xie San. Other patterns described in the *Shang Han* are blood accumulation and stasis, with the indicated formula is Tao He Cheng Qi Tang, and the knotted heat and phlegm pattern, which is treated with a formula such as Xiao Xian Xiong Tang.

Many symptoms discussed in *Shang Han Lun* are used as points of reference in contemporary Chinese medicine. For example, in *Shang Han Lun*, Xie Xin Tang pattern is described as “glomus beneath the heart” or “xin xia pi”. This is a pattern of heat and cold complex resulting from disharmony of the spleen and stomach. Knowledge of this pattern from *Shang Han Lun* is applied extensively in the diagnosis and treatment of gastrointestinal disorders such as gastritis, diarrhoea and nausea.

**Principles of treatment:** *Shang Han Lun* discusses in detail the eight treatment methods and their appropriate applications. For example, it outlines the skilful use of diaphoretics in a variety of situations apart from simply promoting sweat in order to releasing the exterior. Such strategies as: releasing the exterior in order to disperse qi, releasing the exterior in order to transform phlegm fluids, transforming qi in order to disperse water, are only a few examples of treatment protocols outlined in *Shang Han Lun*. Furthermore, some gynaecological disorders can be expressed in terms of six channel theory, as for example the adoption of the strategy of harmonising Shao Yang in the treatment of menstrual irregularity. It should also be noted that particular emphasis is placed on the three causes: the cause of season, the cause of region and the cause of the individual constitution. All of these have a bearing on the ultimate treatment.

**Herbal formulas:** A range of contemporary diseases encountered in clinic can be treated by *Shang Han Lun* formulas. Examples of this are Ma Xing Shi Gan Tang in the treatment of pneumonia, Yin Chen Hao Tang for hepatitis, Ban Xia Xie Xin Tang in the treatment of acute gastritis and Bai Tou Weng Tang for bacterial enteritis. A famous Qing practitioner, Ke Yun Bo, once said, “The six channel system in *Shang Han Lun* can be used to address not only shang han disorders but hundreds of diseases.” *Shang Han Lun* in fact stands as a guide for the diagnosis and treatment of many contemporary disorders.

### 1.18 Ebb and Flow of Qi in the Six Channels

The ebb and flow of qi in the six channels is significant for the understanding of the exacerbation of disease and also for recovery. The time associated with each of the channels is based on the twelve

earthly branches but is not to be confused with the Zi Wu Liu Zhu system. The twelve two-hour periods are: Zi Shi (11pm~1am), Chou Shi (1am~3am), Yin Shi (3am~5am), Mao Shi (5am~7am), Chen Shi (7am~9am), Si Shi (9am~11am), Wu Shi (11am~1pm), Wei Shi (1pm~3pm), Shen Shi (3pm~5pm), You Shi (5pm~7pm), Xu Shi (7pm~9pm) and Hai Shi (9pm~11pm).

The sequence of the six channels starts from Tai Yang, proceeds to Yang Ming, then Shao Yang before entering the three yin channels of Tai Yin, then Shao Yin and finally Jue Yin. There are six periods, each covering six hours and there is some overlapping. The periods do not represent a strict sequential flow but rather the hours during which each channel is at its peak, therefore representing the optimal period for recovery in each channel. Recovery of disease in the three yang channels takes place in the daytime, when yang rules, and recovery in the three yin channels takes place from midnight onwards. They are as follows:

Tai Yang: Si Shi, Wu Shi and Wei Shi

(9 am – 3 pm)

Yang Ming: Shen Shi, You Shi and Xu Shi

(3 pm – 9 pm)

Shao Yang: Yin Shi, Mao Shi and Chen Shi

(3 am – 9 am)

Tai Yin: Hai Shi, Zi Shi and Chou Shi

(9 pm – 3 am)

Shao Yin: Zi Shi, Chou Shi and Yin Shi

(11 pm – 5 am)

Jue Yin: Chou Shi, Yin Shi and Mao Shi

(1 am – 7 am).

### 1.19 Decoction Methods

The description of methods and administration of decoction in *Shang Han Lun* and *Jin Gui Yao Lue* constitutes a major contribution to the preparation of herbs in Chinese medicine. All of these specialised cooking techniques are significant for the efficacy of herbal medicine and some of the specifics entail:

- Direct boiling in water, which is the most common decoction method
- Straining and subsequent reboiling and reducing the liquid in order to concentrate the decoction, as is done for Xiao Chai Hu Tang and Ban Xia Xie Xin Tang
- Boiling two ingredients separately then straining each and blending them for reboiling as in Bai He Jia Zhi Mu Tang
- Establishing the duration for decoction based on the time needed for rice to be cooked, as in Fu Zi Geng Mi Tang (*Jin Gui Yao Lue*)
- The steeping of herbs in boiling hot water as in Da Huang Huang Lian Xie Xin Tang and Fu Zi Xie Xin Tang
- Prior decoction of one or more ingredients, as with Ge Gen in Gen Gen Tang and Ma Huang in Ma Huang Tang
- Late addition of one or more ingredients as with Mang Xiao in Da Cheng Qi Tang and Mang Xiao and Gan Sui in Da Xian Xiong Tang
- The separate preparation of an ingredient in order to add it last as with the melting of E Jiao in Huang Lian E Jiao Tang.
- The use of specially prepared water such as worked water (Gan Lan Shui) as in Fu Ling Gui Zhi Gan Cao Da Zao Tang and rainwater (Liao Shui) as in Ma Huang Lian Qiao Chi Xiao Dou Tang
- The use of additional ingredients such as vinegar, wine and honey as in Zhi Gan Cao Tang, Dang Gui Si Ni Jia Wu Zhu Yu Sheng Jiang Tang

and the use of wine vinegar to soak Wu Mei in preparation for its use in Wu Mei Wan

- Boil in an equal amount of water and clear wine as in Zhi Gan Cao Tang.
- Boil in soured rice water for taxation relapse, as in Zhi Shi Zhi Zi Chi Tang to improve appetite and regulate the stomach qi.

### 1.20 Administration Methods

In *Shang Han Lun* instructions regarding administration are specific and relate to the frequency and time of administration, the dose according to the constitution of the patient, the method and form of administration, and advice as to when to continue or discontinue the decoction. Such instructions are still relevant in the modern clinical situation and examples appear here:

- Frequency: To be taken in a single dose as for Gui Zhi Gan Cao Tang; or to be taken two or three times a day, as for Dang Gui Si Ni Jia Wu Zhu Yu Sheng Jiang Tang, Zhu Fu Tang, and most other *Shang Han Lun* formulas
- Time: To be taken at Ping Dan (3 – 5am), as for Shi Zao Tang; to be taken before meals as for Tao He Cheng Qi Tang and Wu Mei Wan; to be taken throughout the day, as for Huang Lian Tang (three times in the day and twice at night), or Li Zhong Tang (three or four times during the day and twice at night); the time between doses, as in Ma Huang Sheng Ma Tang where it is the time it takes to cook three dou of rice
- Manner: Taking the herbal preparation with rice water, as in the case of Ban Xia San, taking it with Gan Lan Shui or worked water as in Fu Ling Gui Zhi Gan Cao Da Zao Tang, or following it with hot gruel, as with Gui Zhi Tang when used as a sweat promotion formula, to preserve the stomach qi and enhance sweat promotion;

in Shi Zao Tang, the person should be given rice gruel for nourishment as soon as diarrhoea occurs (Clause 152).

- Dosage: A larger dose for a robust person and a smaller one for a person of weakened constitution as with San Wu Bai San and Shi Zao Tang
- Form: Herbal preparations can be made into decoctions such as Gui Zhi Tang and Ma Huang Tang, pills such as Wu Mei Wan and Da Xian Xiong Wan, powders such as Wu Ling San and San Wu Bai San.
- Method: Whether the herbal preparation is to be taken orally, as with most of the formulas, or per rectum, as with Mi Jian Dao, or to be applied topically, as for Gan Cao Jie Geng Tang, where the decoction is held in the back of the mouth so as to treat the throat
- Discontinuation: In formulas such as Da Xian Xiong Tang, Da Cheng Qi Tang, the medication should cease if the bowel moves or with Da Qing Long Tang, if sweat starts to issue; Gua Di San if vomiting is affected; Mu Li Ze Xie San if the urination is normal; and Tao Hua Tang as soon as recovery takes place,
- Repeat administration: Da Xian Xiong Wan must be taken until its efficacy is demonstrated by loose stools, and one further reduced dose of Gan Cao Fu Zi Tang is given when the appetite returns, sweating ceases, and there is vexation.

## 1.21 The Secret of Learning Shang Han Lun

*Shang Han Lun* is an ancient text which has great clinical relevance for contemporary Chinese medicine practitioners. It presents the most comprehensive and systemised body of knowledge on the aetiology, pathogenesis and development of externally contracted diseases and their treatment. The combination of herbs is extraordinarily sophisticated and skilful, and *Shang Han Lun* may be regarded as the richest and most penetrating Chinese medical text ever written. As an ancient medical text which combines both theory and practical applications, it guides practitioners in the treatment of diseases caused by pathogenic cold and provides us with penetrating insights into disease aetiology, diagnosis and treatment strategies which are relevant in the treatment of modern diseases. It offers rich rewards to students and practitioners who extract the essence of this ancient treatment system and use it to full advantage.



## Section Three

### 2.3 Tai Yang Channel Patterns

In Tai Yang disease, there are six categories of patterns: Channel patterns, fu patterns, transmuted patterns, glomus patterns, concurrent patterns, and patterns resembling Tai Yang. Each is addressed separately in the following sections, and this section describes the manifestations and treatment of Tai Yang channel patterns. In Clause 12, Tai Yang disease channel patterns are further differentiated into Tai Yang zhong feng (wind strike) and Tai Yang shang han (cold injury). Pattern identification relies on the observation of the pulses and signs described below. Successful treatment is dependent upon understanding the contraindications and modifications. Tai Yang fu patterns are dealt with in Section Four.

#### 2.3.1 Tai Yang Zhong Feng or Gui Zhi Tang Pattern

The term Gui Zhi Tang pattern refers to both the clinical manifestations and the treatment protocols of Tai Yang zhong feng (wind stroke) otherwise known as an exterior deficiency pattern.

##### CLAUSE 12

太阳病中风，阳浮而阴弱，阳浮者，热自发，阴弱者，汗自出。啬啬恶寒，淅淅恶风，翕翕发热，鼻鸣干呕者，桂枝汤主之。

Tai Yang zhong feng, yang is floating and yin is weak, where yang is floating, there is spontaneous fever, where yin is weak, there is spontaneous sweating. Huddled aversion to cold, wetted aversion to wind, feather-warm fever, with a snuffy nose and dry retching, Gui Zhi Tang.

**Gui Zhi Tang:** Gui Zhi (bark removed) 3 liang; Shao Yao 3 liang; Zhi Gan Cao 2 liang; Sheng Jiang (sliced) 3 liang, Da Zao (broken) 12 pieces. The ratio of Gui Zhi to Bai Shao must be 1:1 in order to harmonize ying and wei. Any change in this ratio will alter the function of the formula. Traditionally, Zhi Gan Cao most often referred to dry-roasted Gan Cao, but in modern times, it is usually prepared stir-fried with honey or vinegar.

**Directions:** Break the first three ingredients into pieces, add to the rest of the ingredients in a pot and decoct in 7 sheng of water. Reduce to three sheng and strain. Take 1 sheng at a moderate temperature followed by 1 sheng of hot, thin gruel to reinforce the effect of the decoction. Cover the body with a blanket for a time until the whole body is damp from light sweat. These instructions must be adhered to. Taking hot gruel and covering the body with a blanket after taking the decoction warms the body and ensures a generalised mild sweat.

The sweat must not be made to flow too freely or recovery will not take place. If the disease is resolved after the first dose, the medication must be discon-

tinued but if there is no sweating, then another dose must be given. If the disease is severe, shorten the interval between doses and administer the three doses in a half day. Observe the patient carefully throughout the day and if, after finishing one pack, the symptoms are still present, repeat. Up to three packs can be given if there has been no sweating. The patient must abstain from foods which are raw and cold, rich and greasy, meat, liquor, dairy products, foods with a bad odour and the five acrids, which are scallion, Chinese chive, leek, garlic and asafoetida (*Ben Cao Gang Mu*).

**Discussion:** Clause 12 describes a Tai Yang zhong feng pulse where yang is floating and yin is weak. Here, yin and yang refer to the pressure used in pulse taking: light pressure and a floating pulse is yang, whilst heavy pressure and a deep pulse is yin and so this simply means a floating and moderate pulse. Another interpretation relates to pathogenesis, where floating yang indicates exuberant yang and weak yin refers to deficient nutrient yin. Zhang Zhong Jing said: “Floating yang is spontaneous fever and weak yin is spontaneous sweating.” This is another way of saying that the invasion of pathogenic cold in the exterior has caused the defence yang to rise to the exterior to resist the pathogen, so the pulse is floating, and sweating has depleted the yin fluid, which is reflected in a pulse weak at the deep level. Huddled aversion to cold, implying that the person huddles in order to keep warm and fend off the cold, wetted aversion to wind, referring to a more marked aversion to wind when wet and feather-warm fever, indicating just a slight rise in temperature, are the primary symptoms of Tai Yang zhong feng. A blocked nose and dry retching are secondary symptoms of Tai Yang zhong feng and are due to the effect of pathogenic wind cold on the lung and stomach qi.

Gui Zhi Tang is the guiding formula for Tai Yang zhong feng. It harmonises the nutrient and defence qi, releases pathogens from the muscle layer by promoting sweat, nourishes the yin and regulates the yang. The chief herb is Gui Zhi, which is acrid, dispersing and warm, thus freeing the defence yang and releasing the pathogen from the exterior. The deputy is Shao Yao which is sour and cold, so by nourishing the yin, harmonises the ying and wei.

*Yi Zong Jin Jian (Golden Mirror of Medical Tradition)* states: “The combination of Gui Zhi, the chief herb, with Shao Yao promotes sweating and at the same time astringes sweat; Shao Yao, the deputy, combined with the chief herb Gui Zhi, harmonises ying and regulates wei; Sheng Jiang assists Gui Zhi in releasing the pathogen from the muscle layer; Da Zao assists Shao Yao to harmonise ying and augment yin; Gan Cao regulates all the herbal ingredients.”

Clauses 2 and 12 both discuss the pulse and symptoms associated with Tai Yang zhong feng. Ke Yun Bo, a Qing dynasty annotator of *Shang Han Lun* identified the main symptom complex of Tai Yang zhong feng as follows: “Headache, spontaneous sweating, fever, aversion to cold, blocked nose, dry retching etc. Only one sign is needed to indicate that this is the pattern, they do not all have to be present. But a weak pulse and spontaneous sweating are the main manifestations” (*Shang Han Lai Su Ji*). Clinical observation shows that the three pertinent points associated with Tai Yang zhong feng are: (1) a weak constitution, (2) a pulse that is floating, moderate, deficient and weak and (3) fever, aversion to wind cold and spontaneous sweating.

In *Shang Han Lun*, Gui Zhi Tang is cited for a range of conditions: Tai Yang zhong feng pattern; spontaneous sweating due to disharmony of ying and wei; Tai Yang pattern when the pathogen is still in the exterior after the promotion of sweat or purgation;

Tai Yin exterior syndrome. *Jing Gui Yao Lüe* also uses Gui Zhi Tang in the treatment of nausea and vomiting during pregnancy, and for Tai Yang zhong feng in the postpartum period.

#### Ancient Application of Gui Zhi Tang

*Nan Yang Huo Ren Shu* (*Nan Yang Book to Save Life*) states: “Gui Zhi Tang can be used for people residing in the north-west region of China. For people residing around the area south of Huai River and north of Yangtze River, Gui Zhi Tang can be used during the winter and early spring. If used during the late spring and before the summer solstice, where Gui Zhi Tang is indicated, add Huang Qin 3g. This was known as Yang Dan Tang (阳旦汤); after the summer solstice, add Zhi Mu 15g and Shi Gao 30g or add Sheng Ma 3g. If the patient has a weak constitution and is cold, no modification is required.

*Shang Han Lai Su Ji* (*Shang Han Revival Compendium*) states: “Gui Zhi Tang is indicated for spontaneous sweating, nocturnal sweating, malaria and dysentery. *Wen Bing Tiao Bian* (*Treatise on Warm Disease*), advocated the use of modified Gui Zhi Tang to treat wind cold and numerous other externally contracted febrile diseases where there was aversion to cold.”

#### Modern Application of Gui Zhi Tang

- Epidemic influenza: Gui Zhi Tang with the addition of Huang Qi in the treatment of influenza which follows a Gui Zhi Tang pattern.
- Postpartum fever and spontaneous sweating: Gui Zhi Tang with the addition of Huang Qi, Dang Gui, Suan Zao Ren, Wu Wei Zi.
- Joint pain: If the pattern is related to cold with no swelling and redness of the joint and there is exacerbation of pain in cold weather, Gui Zhi

Tang with the addition of Fu Zi can be used. For a hot pattern, Gui Zhi Bai Hu Tang can be used.

- Morning sickness: For a pattern characterized by fatigue and discomfort in the stomach, Gui Zhi Tang with the addition of Sha Ren, Bai Zhu, Dang Shen, Fu Ling can be used. For disharmony of liver and spleen, use Gui Zhi Tang with Su Ye, Zhu Ru, Huang Lian. For phlegm damp, add Sha Ren, Chen Pi, Fu Ling.
- Rhinitis with sensitivity to cold: Use Gui Zhi Tang with the addition of Ting Li Zi, Chan Tui.
- Urticaria: If the pattern is characterised by itchy skin, spontaneous sweating, aversion to wind, and a floating and moderate pulse, use Gui Zhi Tang with the addition of Fang Feng, Jing Jie, Chan Tui.
- Externally contracted wind cold manifesting with fever, aversion to cold, headache, nasal congestion, a floating pulse and a thin white tongue coat: Use Gui Zhi Tang with Jing Jie 5–10g, Lu Gen 5–10g, Mao Gen 5–10g.

#### CASE STUDY 1

##### Common Cold

Extracted from: *Shang Han Lun Tang Zheng Lun Zhi*

A 28-year-old male had contracted a cold at the beginning of autumn. He presented with a fever, headache and was clammy to touch. His pulse was floating and moderate and his tongue was moist with a thin, white tongue coat. One pack of Gui Zhi Tang was prescribed, with directions to administer in three doses over the day until it brought out a sweat, with each dose being followed by a bowl of hot rice porridge, and the patient being covered with a rug. The first two doses failed to bring out a sweat but after the third dose, he came out in a mild sweat, slept through the night and was fully recovered in the morning.

## CASE STUDY 2

## Skin Rash

Extracted from Greta Young's Case Studies

*A 31-year-old woman presented with a dry, itchy, pale red rash covering her chest arms and throat. She had had the rash ever since bush walking some weeks before. Her menstrual cycle varied from 27 to 30 days, her face was pale with pale red spots on her cheeks, and she also complained of spontaneous sweating during the day in response to little or no exertion. She was sensitive to the cold and avoided going outdoors. Her pulse was soft and the tongue pale red with a thin white coat.*

*Diagnosis: Disharmony of ying and wei, blood deficiency and wind in the channels.*

*Treatment principle: Harmonise ying and wei, nourish blood, expel wind from the skin. A modification of Gui Zhi Tang was prescribed: Gui Zhi 10g; Bai Shao 12g; Da Zao 6 pieces, Sheng Jiang 5g; Jing Jie 8g; He Shou Wu 15g; Chuan Xiong 6g; Dan Shen 8g; Zhi Gan Cao 5g (5 packs). She returned after one week showing about 70% improvement. A further 5 packs were given, with the addition of Huang Qi 15g to augment the qi and stabilize the exterior.*

## Additional Indications for Gui Zhi Tang

In addition to the key indications of pain and stiffness in the neck and head and a floating pulse, Gui Zhi Tang can be prescribed for associated disorders such as:

i) Zhong feng presenting with headache, fever and sweating, which is differentiated from a Yin Qiao San pattern by a moderate floating pulse and aversion to wind

ii) Persistence of the zhong feng pattern past the expected duration, due to the virulence and tenacity of a pathogen, and where the patient also suffers from vexation.

These and other patterns indicated for Gui Zhi Tang are described below.

## Tai Yang Zhong Feng with Headache, Fever and Sweating

## CLAUSE 13

太阳病，头痛，发热，汗出，恶风，桂枝汤主之。

Tai Yang disease, the headaches, there is fever, sweating, aversion to wind, Gui Zhi Tang governs.

**Discussion:** The Tai Yang channel governs the exterior, rules ying and wei and protects the body against pathogens. When cold invades the body, the Tai Yang channel takes the full force of the attack. Because the Tai Yang channel traverses the head, headache is one of the main manifestations. The struggle of the zheng qi against the pathogenic cold gives rise to fever, the pathogenic cold constrained in the exterior causes the skin interstices to be insecure, resulting in sweating, and impedes the flow of wei yang, causing aversion to wind. This clause describes the characteristic Tai Yang zhong feng symptoms of headache, fever, sweating and aversion to wind. Gui Zhi Tang regulates ying and wei, releases the pathogen from the muscle layer and promotes mild sweating. This clause further expands the indications for Gui Zhi Tang, emphasizing pattern identification as the core issue with the presence of sweating being the key differential factor between zhong feng (wind strike) and shang han (cold injury). The pathomechanism

of fever and sweating is explained in connection with Clause 95 below.

Headache is a symptom of all three yang channels patterns and differentiation is as follows: In Tai Yang headache, the pain is localised in the back of the head and along the neck; in Yang Ming headache, the pain is at the front of the head, particularly across the forehead and is described as a distending pain; Shao Yang headache is usually bilateral and characterised by pressure or tension.

#### CLAUSE 95

太阳病，发热出汗者，此为荣弱卫强，故使汗出，欲救邪风者，宜桂枝汤。

Tai Yang disease, there is fever and sweating, this is because the nutrient is weak and the defence is strong, so by causing sweat, there will be relief of evil wind, Gui Zhi Tang is appropriate.

**Discussion:** In this clause, rong, the alternative name for ying is used to refer to nutritive qi. Under normal physiological conditions, wei is yang and circulates outside the vessels, and ying is yin, circulating within the vessels. This is described as ying and wei in perfect harmony. In the event of pathogenic attack, the wei yang rises up to contend with the exterior pathogen and this struggle manifests as fever. Because the wei yang is locked in battle with the pathogen at the surface, it fails to perform its normal function of guarding the interior and this leads to the issue of sweat from the ying. This is the explanation of the reference in the clause to sweat being caused by weak rong (ying) and strong wei, where strong wei describes not only the strong action of the defence yang but also implies the presence of a strong pathogen. The focus of this clause is on fever and sweating as identifying symptoms of Tai Yang zhong

feng and it describes the pathogenesis of Tai Yang zhong feng as weak ying and strong wei in the face of an invasion of pathogenic wind. The treatment principle is to dispel pathogenic wind and Gui Zhi Tang is the indicated formula.

### Persistent Attack of Tai Yang Zhong Feng

#### CLAUSE 24

太阳病，初服桂枝汤，反烦不解者，先刺风池、风府，却与桂枝汤则愈。

Tai Yang disease, initially having administered Gui Zhi Tang, but there is vexation with no resolution, first needle Feng Chi and Feng Fu, then give Gui Zhi Tang and there will be recovery.

**Discussion:** Gui Zhi Tang is the indicated formula for a Tai Yang zhong feng pattern. If, after the first dose, the exterior remains unresolved and the patient is vexed or restless, it could be assumed to be due to incorrect treatment, but this is not so because no change of pulse is noted in the clause. The vexation is a result of the presence of a virulent pathogen, which is met in battle by the zheng qi which has been reinforced by the administration of Gui Zhi Tang and stimulated into action. However, its valiant efforts are unsuccessful at first, and additional treatment is required to clear the channel. In this case, the advice is to needle Feng Chi (GB 20) and Feng Fu (Du 16) to expel the pathogenic wind. After the acupuncture, Gui Zhi Tang should again be given to effect full recovery. This is a classic example of the combination acupuncture and herbal treatment.

There are differing theories as to why the initial dose of Gui Zhi Tang fails to resolve the pathogen and

gives rise to vexation. Chen Xiu Yuan believed that Gui Zhi Tang can treat the disorder of the muscle and interstices but not the channel disorder (*Shang Han Yi Fang Ji Zhu* 伤寒医方集注). In *Shang Han Lei Fang*, Xu Ling Tai proposed that the pathogen is lodged in the pathway of the Tai Yang channel and it is this which causes vexation. In *Shang Lun Pian* Yu Jia Yan suggested that hot gruel may not have been taken with the Gui Zhi Tang. In *Shang Han Lun Tiao Bian*, Fang You Zhi proposed that the vexation was a manifestation of the struggle between the zheng qi and the pathogen and a sign that the patient was about to sweat and recover.

The occurrence of such symptoms are vexation, an oppressed sensation in the chest or shivering following the administration of Gui Zhi Tang, can be a sign of a transmuted pattern caused by incorrect treatment. However, as in this case, they can also be testament to correct medication and Fang You Zhi's interpretation above is the one which concurs with the theory expressed in Clause 95.

### Gui Zhi Tang in the Treatment of Exterior Deficiency

Clause 42 explains that Gui Zhi Tang is indicated in exterior deficiency patterns because of its function of promoting sweat. Clauses 44 and 45 discuss the adverse effects of purging, and confirm that even after sweating and purging, if the exterior remains unresolved, Gui Zhi Tang is still indicated. Clauses 53 and 54 explain the phenomenon of spontaneous sweating.

#### CLAUSE 42

太阳病，外证未解，脉浮弱者，当以汗解，宜桂枝汤。

Tai Yang disease, where the exterior pattern is unresolved, with the pulse floating and weak, it must be resolved by sweating, Gui Zhi Tang is appropriate.

**Discussion:** In a Tai Yang exterior pattern, there will be fever, headache and aversion to cold, but the pulse may be either floating and tense or floating and weak or moderate. A tense, floating pulse characterises an exterior excess pattern, where Ma Huang Tang is the indicated formula. The point made by this clause is that one must diagnose according to the pulse. In this clause, the weak pulse is synonymous with a moderate pulse in that they both indicate deficiency. Therefore, the floating weak pulse in Clause 42 shows that the pattern is one of exterior deficiency, which is a Gui Zhi Tang pattern, and not one of exterior excess, which is a Ma Huang Tang pattern. This differentiation is critical. It is inappropriate to promote excessive sweating in a deficiency pattern and Gui Zhi Tang must be used to promote mild sweating only in order to avoid damaging the qi. A moderate and weak pulse is associated with insufficient or damaged zheng qi and if Ma Huang Tang were administered, yin and yang would be damaged. This clause reminds us that spontaneous sweating is not the only indicator of a Gui Zhi Tang pattern, and that the pulse should also be observed.

#### CLAUSE 44

太阳病，外证未解，不可下也，下之为逆，欲解外者，宜桂枝汤。

Tai Yang disease, the exterior pattern is unresolved, one should not purge, purging would be adverse, if you wish to resolve the exterior, Gui Zhi Tang is appropriate.

**Discussion:** The standard strategy of treatment for an exterior pattern is to release the exterior, not to

purge, which can be used only in an interior pattern. Clause 44 explains that purgation is contraindicated where the exterior pattern is unresolved and, it would, in fact, have unwelcome outcomes. It further stipulates that where an exterior pattern is unresolved, Gui Zhi Tang is the appropriate formula to use to release the exterior. Where there is constipation, the situation can be misleading, and care must be taken to make the correct diagnosis. If an exterior pattern is also present, the exterior must be resolved first by promoting sweating. Purgation can only be used once the exterior pattern is resolved and failure to follow this golden rule can result in a transmuted pattern and is therefore considered to be adverse treatment.

Purging is absolutely contraindicated in a simple exterior pattern; in a complex pattern affecting both the exterior and the interior, the strategy is to release the exterior before purging. However, one must act as the situation dictates and differentiate the relative urgency of the exterior as compared to the interior in order to determine the most appropriate treatment strategy.

## Exterior Pattern Unresolved by Sweating

### CLAUSE 45

太阳病，先发汗不解，而复下者，脉浮者不愈。浮为在外，而反下者，故令不愈，今脉浮，故在外，当须解外则愈，宜桂枝汤。

Tai Yang disease, initial sweating does not resolve, and where there is then purgation, the pulse will be floating and there is no recovery. Floating means it is in the exterior, but contrarily, there was purgation, so it does not bring recovery, currently the pulse is floating,

then it is in the exterior, one must resolve the exterior, then there will be recovery, Gui Zhi Tang is appropriate.

**Discussion:** Clause 45 describes the situation where the initial promotion of sweating fails to resolve the exterior Tai Yang pattern, and following that, purgation is used, the pulse remains floating and there is still no recovery, explaining that the floating pulse shows the pathogen is still in the exterior, and so incorrect purging will not bring recovery. However, because the pulse is still floating, we know that the pathogen has not fallen in to the interior; it is still an exterior pattern which can be resolved only by releasing the exterior, and so Gui Zhi Tang should be used. Because the earlier therapies of sweating and purgation have damaged qi and fluids, Ma Huang Tang is inappropriate, and Gui Zhi Tang must be used because it treats an exterior pattern where there is underlying deficiency.

In order to establish if the exterior syndrome still prevails, two points can be considered: Clause 44 simply says that where the exterior is not resolved, Gui Zhi Tang should be used to release the exterior. Clause 45 advises first to ascertain whether the exterior syndrome is present by the pulse sign and then, if the pulse is floating, to give Gui Zhi Tang. Clauses 44 and 45 both advocate the use of Gui Zhi Tang and both place emphasis on a floating pulse as a means of confirming that the pathogen is still in the exterior. It could be inferred that as long as the pulse is still floating, sweating can be promoted; however, a floating pulse is a feature of various patterns and cannot be used in isolation to diagnose an exterior syndrome. Other signs and symptoms must be analysed in order to reach an accurate diagnosis.