Purgative Method in Shang Han Lun

Engin CAN	EVERWELL Clinic7, London
Ming Zhao Cheng	Middlesex University

Purgative method (Xia Fa –下法) was one of eight methods (八法) in *Shang Han Lun* (伤寒 论 Treatise on Cold Damage and Miscellaneous Disease) by Zhang Zhong-jing (张仲景) in the East Han Dynasty (3rd century AD).

This method functions in relieving constipation and eliminating indigested food-excessive heat from the gastrointestinal tract, and was mainly used for treatment of the yang ming fu zheng (the yang brightness fu-organ syndrome).

Under this method in *Shang Han Lun*, there are 5 main formulae for different indications in yang ming fu zheng (阳明腑证 yang brightness fu-organ syndrome) – they are Tiaowei Chengqi Tang (调胃承气汤 Stomach-Regulating Purgative Decoction), Xiao Chengqi Tang (小承气汤 Minor Purgative Decoction), Da Chengqi Tang (大承气汤 Major Purgative Decoction), Maziren Wan (麻子仁丸 Hemp Seed Pill) and Guan Chang Fa (灌肠法 Enema for Constipation). There are also a number of formulae that combine purgative method with other methods. In this article, we will discuss the 5 formulae listed above, and then another 3 formulae that combine purgative with other methods.

Tiaowei Chengqi Tang (调胃承气汤 Stomach-Regulating Purgative Decoction)

In Chinese, Tiaowei 调胃 here means regulating the stomach; Chengqi $\overline{\mathbb{A}}$ means to continue the downward movement of the stomach qi, so that all blockages are smoothly open and stagnated qi and food in the stomach are moved down to the intestines then to be passed out – in effect meaning purgative. Tang means decoction.

This formula consists of Dahuang (大黄 Radix et Rhizoma Rhei) 4 Liang /12g, Mangxiao (芒硝 Natrii Sulphas) Half Sheng /9g and Zhi Gancao (炙甘草 Radix Glycyrrhizae Praeparata) 2 Liang /6g. As Mangxiao is a mineral and legally not allowed to be used by herbalists in the UK, we may use Yuliren (郁李仁 Semen Pruni) 9g as its replacement.

Among these herbs, Dahuang is king in the formula. It is the main herb for purging pathogenic factors from the stomach and intestine; Mangxiao/Yuliren acts as the minster of the formula. It clears away heat from yang ming and softening hard masses; Gancao buffers the harsh purging effects of Dahuang and Mangxiao, harmonizes and protects the stomach-qi and co-ordinate all the ingredients. These 3 ingredients work together to purge the heat accumulated in yang ming fu-organ and at the same time protects the stomach.

The main applications of this formula were described in Clauses 207,248 and 249 of *Shang Han Lun.* The main indications are Zao (Dryness $\frac{1}{2}$) and Shi (hardness $\frac{1}{2}$) in yang ming fu-organ, as its main function is to purge pathogenic dryness-heat accumulated in the gastrointestinal

tract by laxative action, treating fever with perspiration, constipation, abdominal distention and restlessness.

Today this formula can be used to treat constipation, abdominal fullness, or painful swelling of mouth, teeth and throat due to domination of heat –dryness in the stomach and intestine, particularly in people who have a habit of having too much spicy junk food.

Xiao Chengqi Tang (小承气汤 Minor Purgative Decoction)

In Chinese, `Xiao' 小 means Minor or Small; `Chengqi' 承气 here means the same as in Tiaowei Chengqi Tang (调胃承气汤). This formula consists of Dahuang (大黄 Radix et Rhizoma Rhei) 4 Liang /12g, Houpo (厚朴 Cortex Magnoliar Officinalis) 2 Liang/6g and Zhishi (枳实 Fructus Aurantii Immaturus) 3 big pieces/9g.

Among them, Dahuang is used to purge and eliminate pathogenic factors from the gastrointestinal tract; Houpo functions in promoting qi flow and to relieve abdominal distension; and Zhishi is good at removing stagnation of qi. Working together, the 3 herbs of the formulae relieve accumulation of heat in the gastrointestinal tract in a not too harsh manner.

The main applications of this formula were described in Clauses 213,214 and 250 of *Shang Han Lun*. The main indications for it are Pi (stuffiness 痞) and Man (fullness 满) in yang ming fuorgan. It was used for treatment of the yang ming fu zheng due to damages to fluids (such as inappropriate treatments by sweating, vomiting and purging) leading to hard feces and pathogenic heat in the gastrointestinal tract, manifested as constipation, delirium, profuse perspiration and heat fecaloma etc. We often use this formula to treat constipation, indigestion and retention of food marked by abdominal distension or pain, anorexia, and simple or paralytic intestinal obstructions.

Da Chengqi Tang (大承气汤 Major Purgative Decoction)

In Chinese `Da' means Major or Big, here it means bigger dosage and more powerful. `Chengqi' means as same as in the above 2 formulae. The formula consists of Dahuang (Radix et Rhizoma Rhei) 4 Liang/12g, Houpu (Cortex Magnoliar Officinalis) half Jin/24g. Zhishi (Fructus Aurantii Immaturus) 5 pieces/15g and Mangxiao (Natrii Sulphas)3g /Yuliren (郁李仁 Semen Pruni) 9g We can see that the ingredients of Da Chengqi Tang are effectively a combination of Tiaowei Chengqi Tang plus Xiao Chengqi Tang, with increased dosages of Houpu and Zhishi, decrease dosage of Mangxiao and taking away Zhi Gancao

As a result of these modifications, the effect of Da Chengqi Tang is much stronger than both Tiaowei Chengqi Tang and Xiao Chengqi Tang. In Da Chengqi Tang, as in Xiao Cheng Qi Tang, Dahuang is used to purge and eliminate pathogenic factors from the gastrointestinal tract; Houpo functions in promoting qi flow and to relieve abdominal distension; and Zhishi is good at removing stagnation of qi. Mangxiao, or Yuliren, as in Tiaowei Chengqi Tang, is to clears away heat from yang ming and softening hard masses. The removing of Zhi Gancao means that its slowing and moderating effects are not needed, therefore the purging effect becomes more powerful. Working together, the 4 ingredients can effectively and quickly expel pathogenically

accumulated heat from yang ming fu-organ, i.e. the gastrointestinal tract. It loosens the bowls and promotes the downward movement of stomach qi.

In Shang Han Lun, Da Chenggi Tang is used for treatment of serious cases of the yang ming fu syndrome manifested as serious constipation, even no stool for 5-6 days or 10 days; abdominal distension and pain, tidal fever in afternoon; delirium and coma, speaking to himself as if he sees a ghost, unconscious to people around him and subconsciously touches on his clothes and bed; starring eyesight, light reaction disappearance etc. These symptoms were described in Clauses 212,215, 217, 220, 238,239, 241, 242, 252, 253, 254, 255 and 256 of Shang Han Lun. The main indications for it are Pi (stuffiness 痞), Man (fullness 满), Zao (Dryness 燥) and Shi (hardness 实) in yang ming fu – a combination of Tiaowei Chenggi Tang and Xiao Cheng Qi Tang. Today we often use this formula for treatments of infectious or non infectious febrile diseases in the climax stage marked by constipation due to accumulation of heat and paralytic or simple intestinal obstructions. Modern researches have found that this formula has the functions of relieving inflammation, anti-bacteria, promoting blood circulation of intestines, stimulating intestinal peristalsis, purging stool, tranquilizing the mind, bring down fever, etc. As this is a very powerful formula, it is not to be used in pregnant women or patients with general weakness. Once the condition is improved and the gastrointestinal tract is moving, then the use of Da Chengqi Tang should stop.

Maziren Wan (麻子仁丸 Hemp Seed Pill)

This formula consists of Maziren (Fructus Cannabis) 2 Sheng/12g, Baishao (Radix Paeoniae Alba) half Jin/24q, Zhishi (Fructus Aurantii Immaturus) half Jin/24q, and Dahuang (Radix et Rhizoma Rhei) 1 Jin/48g, Houpu (Cortex Magnoliar Officinalis) 1 Chi/30g, Xingren (Semen Armeniacae Amarum) 1 Sheng/18g. Grind all the above ingredients into powder and make pills (Wan 丸) with honey. 9 g of pills are to be taken each time, 1 – 2 times per day. Among the ingredients, Maziren, Baishao and honey have functions to lubricate and moisturize the intestine, promote bowel movement and nourish the spleen-vin. In TCM theory the lung and large intestine has an interior-exterior relationship, so here Xingren is used to regulate the lung gi indirectly to lubricate the large intestine and relieve constipation. Dahuang, Houpu and Zhishi, as in Xiao Cheng Qi Tang, promote bowels movement and remove pathogenic factors from the stomach and intestine. All herbs working together, this formula functions in moisturizing the intestines to relieve constipation. As the formula is made into pills with slowing and moisturizing ingredients, its purging effect is slower than any Chenggi Tang discussed above, but at the same time this formula protects the genuine qi of body. In Shang Han Lun, this formula is used to treat pi yue zheng (脾约证 spleen constrained syndrome), as described in Clause 247: "Fu yang mai (anterior tibial artery) pulse is floating and hesitant. A floating pulse indicates strong stomach qi, whereas a hesitant pulse indicates frequent urination (it is one of causes leading to constipation in TCM theory). This combination of floating and hesitation pulses indicates hard feces and it name pi yue zheng. Maziren Wan should be the chief formula." Today we often use Maziren Wan for treatments of habitual constipation, or the constipation caused by intestinal dryness duo to over-sweating during febrile diseases marked by rabbit-stool like feces, or

hemorrhoid with constipation, etc. This pill, as it is mild, can also be used in pregnant women as well the elderly and weak patients.

Guan Chang Fa(灌肠法 Enema for Constipation)

This is described in Clause 233 "in yang ming disease, the patient sweats. If using diaphoresis to treat it, the patient will has spontaneous perspiration. If at the same time, the patient's urination is normal, then exhaustion of body fluid will occur. In this situation, although there are hard feces, no purgative method should be used. If the patient has an urge to defecate, an enema method should be used. Honey or root of cucumber, or pig bile can be used as medicine of enema."

Now Guan Chang Fa is commonly used in constipations of elderly patients who are weak. It is also used in some people's health maintenance - as in colon irrigation. There is a danger though that some people do not use it properly, even in situations where they have normal bowels movements.

The above 5 formulae are the common formulae in the application of purgative methods described in *Shang Han Lun*.

Using purgative method is appropriate for yang ming fu zheng, but in *Shang Han Lun*, purgative method is also used in non yang ming conditions, It also used in combination with other methods, as there are conditions in the course of a disease that appears that yang ming fu zheng is with other syndromes. In *Shang Han Lun*, some of these combinations were described. Due to limited space, we just discuss the following 3 examples.

Taohe Chengqi Tang (桃核承气汤 Peach Seed Purgative Decoction)

This formula is used for tai yang xu xue zheng (太阳蓄血证 blood accumulation syndrome) in the bladder, one of the two tai yang fu zheng. This syndrome is described in Clause 106, that 'Before tai yang bing (the greater yang disease) is cleared, pathogenic heat congeals in the urinary bladder. The patient behaves in a manic way. If the patient urinates blood, then the condition will be cleared away with the blood. When the exterior is not clear, it is not appropriate to purge. Clearing the exterior should be the priority. When the exterior is cleared, but the patient still feels tight and spasm in the lower abdomen, then purgative method should be used and Taohe Chengqi Tang is appropriate."

This formula consists of Taohe (Semen Persicae) 50 pieces /10g with tip and skin removed, Dahuang (Radix et Rhizoma Rhei) 4 Liang/12g, Guizhi (Ramulus Cinnamomi) 2 Liang/6g, Zhi Gancao (Radix Glycyrrhiae) 2 Liang/ 6g, Mangxiao (Natrii Sulfate) 2 Liang/6g. Modern researches have shown that the formula has the functions in promoting blood circulation of intestine, stimulating intestinal peristalsis, purging stool, tranquilizing the mind and bring down fever. We still use this formula today for treating infectious and non-infectious febrile diseases marked by blood accumulation syndrome, or simple intestinal obstruction, epilepsy and depression.

Da Xianxiong Tang (大陷胸汤 Major Chest Bind Decoction)

This formula is for re shi jie xiong zheng (热实结胸证 chest bind syndrome due to excessive heat). It is recorded in Clauses 132,133,134,135,136 and 137. In clause 135, it states that 'Shang Han for 6 to 7 days, jie xiong caused by excessive heat with deep and tense pulse and epigastric pain, and abdominal wall is as hard as a stone on palpation. This should be treated with Da Xianxiong Tang'.

This formula is composed of Dahuang (Radix et Rhizoma Rhei) 6 Liang/10g, Mangxiao (Natrii Sulfate) 1 Sheng/10g, Gansui (Radix Euphorbiae Kansui) 1 Qianbi/1.5g. Modern researches have shown that this formula has efficacies of strong purgation and diuretic, anti-inflammation and anti-sepsis. We sometimes use it for treatments of inflammatory hydrothorax and ascites, but it is not advisable to use it in the UK as in this formulas there is a mineral (Mangxiao) and a very powerful herb (Gansui) in the formula.

Yinchenhao Tang (茵陈蒿汤 Virgate Wormwood Decoction)

This formula is for shi re fa huang (湿热发黄 yang jaundice caused by damp heat). It was recorded in Clause 236,260 and 261.In Clause 236, it states that "Jaundice will not result in yang ming bing (the yang brightness disease) if there is fever and perspiration, as interior heat would leak out by sweat. If there is perspiration only on the head above the neck but not the body, with dysuria and thirst, it indicates concretion of the interior heat and the skin will be yellow. This should be treated with Yingchenhao Tang."

The formula contains Yinchenghao (Herba Artemisiae Scopariae) 6 Liang/18g, Zhizi (Fructus Gardeniae) 14 pieces/10g, Dahuang (Radix et Rhizoma Rhei) 2Liang/6g. This formula is effective in normalizing the functions of the liver and gallbladder by cholagogic action. Today we often use it for treatments of hepatitis, cholecystitis and cholelithiasis.

There are other formulae in Shang Han Lun that are also purgative and have not been discussed in the paper, for example, Da Xianxiong Wan (大陷胸丸 which has different ingredients to Da Xianxiong Tang)in Clause 131, San Wu Bai San (三物白散)in Clause141, Dahuang Huanglian Xiexin Tang (大黄黄连泻心汤)in Clause 154 and 164, Di Dang Tang (抵当汤) in Clause 125 and Di Dang Wan (抵当丸 which has the same ingredients as Di Dang Tang) in Clause 126, Shi Zao Tang (十枣汤) in Clause 152, Da Chaihu Tang (大柴胡汤 which has different ingredients to Xiao Chaihu Tang)in Clause 103 and 165, Chaihu Jia Mangxiao Tang (柴胡加芒硝汤)in Clause 104, Chaihu Jia Longgu Muli Tang (柴胡加龙骨牡蛎汤) in Clause 107 and Guizhi Jia Dahuang Tang (桂枝加大黄汤) in Clause279. Practitioners who are interested in these formulae can refer to *Shang Han Lun* to learn more about them.

Summary

Purgative method was one of the eight methods in *Shang Han Lun*, mainly used for treatment of yang ming fu zheng (阳明腑证 yang brightness fu-organ syndrome). 5 formulae are discussed: Tiaowei Chengqi Tang (调胃承气汤 Stomach-Regulating Purgative Decoction), Xiao Chengqi

Tang (小承气汤 Minor Purgative Decoction), Da Chengqi Tang (大承气汤 Major Purgative Decoction), Maziren Wan (麻子仁丸 Hemp Seed Pill) and Guan Chang Fa (灌肠法 Enema for Constipation. Additionally, in *Shang Han Lun*, purgative method was also used in non yang ming conditions, as well as in combination with other methods in many formulae to treat different conditions. Practitioners should learn the principles and use the formulae with flexibility and innovation in modern day practice.

References:

- 1. World Federation of Chinese Medicine Societies (2008) International Standard Chinese –English Basic Nomenclature of Chinese Medicine. People's Medical Publishing House
- 2. Huang H (2005) Introduction to Treatise on Exogenous Febrile Diseases. Shanghai TCM University Press
- 3. Zhang E (1990) Prescriptions of TCM. Shanghai TCM University Press
- 4. Zhang E (1989) Research in Classical Formulas. Yellow River Press
- 5. Li P (1985) Textbook of *Shang Han Lun* for TCM Universities. Shanghai Science and Technology Press

About Authors:

Professor Engin CAN (Enqin Zhang) is a senior specialist in Chinese Medicine and a full member of the Association of Traditional Chinese Medicine (UK). He was the Director of Advanced Studies Department of Shangdong University of Traditional Chinese Medicine. He is chief editor and main author of the first English-Chinese TCM textbooks in the world-"A Practical English-Chinese Library of TCM", composed of 14 books, published by Shanghai TCM University Press in 1990.He is currently the chief of Clinic London 7 of Everwell Chinese Medical Centre in the UK.

Dr Ming Zhao Cheng is a Principal Lecturer and postgraduate programmes leader in Chinese Medicine at Middlesex University as well as the Deputy President of the Association of Traditional Chinese Medicine (UK).