Traditional Formulas for Cancer: Observations from China

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Introduction

Recently I was fortunate enough to spend three months in China interning at two different hospitals in order to complete my doctorate in Acupuncture and Oriental Medicine. The first was the Chengdu Hospital of Traditional Chinese Medicine (TCM) and the second was the Shanghai Hospital of TCM. My time was spent exclusively with various experts of internal medicine and herbal therapeutics, with an emphasis in oncology. The following information represents a summary and compilation of the most common formulas for the major cancers seen between the two hospitals. The information presented here was compiled from my daily journal, personal notes, and interpretations recorded during each clinical shift. As such, it is not intended as prescriptive, but as field information.

An interesting topic, apparent upon reflecting on my time in China, is the trend in Traditional Chinese Medicine movement towards standardization, reflected in this article. It is important when examining this material to understand what is meant by standardization. Conventionally in TCM, each practitioner determines the individual diagnostic pattern based upon their own subjective and objective findings and this determines their formula selection. Standardization, as it was explained to me, is a way to increase diagnostic accuracy and prescribing consistency. Each disease is discussed by a group of leading specialists for that disease, in this case cancer. These experts then identify the most common pattern manifestations for each cancer, and agree upon the best accompanying formulas (discussed below). These patients are then prescribed the biomedical standard of care for the particular cancer, and supplemented with pharmaceutical herbal extracts.

All herbs are listed in Table 1 by pinyin name and botanical name as per *Chinese Medical Herbology and Pharmacology* by Chen and Chen. In TCM, herbs are differentiated by the part used, so multiple herbs may be listed as the same genus and species, though they are different herbs distinguished by channel, energetics, and action.

Cancer formulas

By far, two formulas and one single herb stood out as the most commonly prescribed for all cancer types, regardless of pathology or whether the TCM pattern was differentiated by an excess or deficiency state, two diagnostic parameters of TCM. The first formula is Liu Jin Zi Tang (Six Gentleman Decoction) comprising ren shen, bai zhu, fu ling, zhi gan cao, chen pi and ban xia. Traditionally it is used to tonify the "Qi", strengthen the spleen and transform phlegm (Bensky & Barolet 1990, p 238). The second formula is Liu Wei Di Huang Wan (Six Ingredient Pill with Rehmannia) comprising shu di huang, shan zhu yu, shan yao, fu ling, mu dan pi and ze xie. This formula is used to nourish the "Yin" and kidneys (Bensky & Barolet 1990, p 263). Both formulas were combined with system specific formulas (see below) based upon the specific TCM pattern. Huang qi (Astragalus membranaceus) as a single herb modification was added to almost every formula as a matter of course and was considered to be an indispensable part of treatments. Both formulas are used for deficiency conditions of "Qi" and "Yin" respectively. This reflects the overall theory of cancer treatment in TCM of supporting the zheng qi (the true or constitutional "Qi" of the body) to cultivate the "root" (Peiwen, Zhiqiang et al, 2003, p 64), known as "Fu Zheng Gu Ben". "Fu Zheng Gu Ben" therapy is a method that

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relies heavily on tonification. It is generally agreed upon by practitioners and scholars of Chinese Medicine that cancer is the result of dysfunction that results in "qualitative changes in the structure and function of the Zang-Fu organs, Qi, blood, Yin and body fluids" (Peiwen, Zhiqiang et al, 2003, p 19). Tonification is a method of normalizing and building these substances. "Qi" is defined as energy, life force, or vital force. "Root" is an analogy used to symbolize the constitutional state of the body in homeostasis or underlying causative factors. "Branch" by contrast represents symptoms or acute manifestations.

Historically cancer was "attacked" with toxic herbs, a method known as using poison to treat poison, "yi du gong du". Today, the concept of "yi du gong du" is seen more as the use of pharmaceutical extracts of the toxic herbs as well as modern chemotherapeutic agents. Combining "Yi du gong du", using chemotherapy, and "Fu Zheng Gu Ben" using traditional formulas we can effectively treat both the "branch" and "root" manifestations of cancer.



TCM Dispensary

System specific cancer formulas differentiated by pattern

Lung cancer

No consistent formulas were used as a base for any excess type conditions; most clinicians seemed to prefer tonifying the "Yin" of the lung and then adding herbs or formulas to clear the specific excess presentation (heat, damp, stagnation etc.). Sheng Mai San (Generate the Pulse Powder) comprising ren shen, mai men dong, and wu wei zi was the base formula of choice. This reflects the "Fu Zheng Gu Ben" theory of supporting the "root", as the lung organ in TCM "governs the qi" (Wiseman & Ellis 1996, p 55). The actions of this formula are to increase the "Qi", nourish the "Yin" and generate fluids (Bensky & Barolet 1990, p 245). Additions for excess symptoms included several formulas. Wei Jing Tang (Reed Decoction) comprised of lu gen, yi yi ren, dong gua ren and tao ren is used for clearing phlegm heat from the lungs and moving stasis. Phlegm heat in the lungs is characterized by cough, shortness of breath and foul smelling sputum (Bensky & Barolet 1990, p 91). Shen Ling Bai Zhu San (Ginseng, Poria and Atractylodes Powder) was used for damp phlegm accumulation and a weak spleen, characterized by fatigue, anorexia, pallor and diarrhea. It is consists of ren shen, bai zhu, fu ling, zhi gan cao, shan yao, bai bian dou, lian zi, yi yi ren, sha ren and jie geng (Bensky & Barolet 1990, p 240). For smoldering heat in the lungs, characterized by fever, wheezing and "dry" symptoms, Xie Bai San (Drain the White Powder) was added, comprising chao sang bai pi, di gu pi, zhi gan cao and geng mi (Bensky & Barolet 1990, p 91).

Liver cancer

Hepatocarcinoma, more often than not, presented and was treated as an excess type pattern. These patterns and formulas focused primarily on clearing the excess presentations rather than tonification of the "Qi" and "Yin". Although seemingly counterintuitive to "Fu Zheng Gu Ben" therapy, when viewed within the big picture, one can see that clearing the liver of excess allows for the tonification of all the other systems. The

liver, in both western physiologic terms and Chinese medical action, is the work horse of the human body. It is the regulator of metabolic processes and the essential organ for the support and function of all the other TCM zang. Zang represent the "Yin" organs of TCM and include the liver, spleen, lung, kidney, and heart.

The liver zang is responsible for the spread and smooth flow of "Qi". It "likes unimpeded free and easy movement" (Kaptchuk 2000, p 254). This simple and often underemphasized statement reflects the importance of the liver zang's role. Without the spreading and free flow of "Qi", the other zang organs

Pin Yin	Latin Botanical	Pin Yin	Latin Botanical	Pin Yin	Latin Botanical
bai bian dou	Dolichos lablab	hong hua	Carthamus tinctorius	shan zhu yu	Cornus officinalis
bai jie zi	Sinapis alba	hou po	Magnolia officinalis	sheng di huang	Rehmannia glutinosa
bai shao	Paeonia lactiflora	hua shi	Talc	sheng jiang	Zingiber officinale
bai tou weng	Pulsatilla chinesis	huang bai	Phellodendron amurense	shi chang pu	Acornus tatarinowii
bai zhu	Atractylodes macrocephala	huang lian	Coptis chinensis	shu di huang	Rehmannia glutinosa (Prepared)
ban xia	Pinellia ternata	huang qi	Astragalus membranaceus		
bei xie	Dioscoreae hypoglaucae	huang qin	Scutellaria baicalensis	tao ren	Prunis persica
bian xu	Polygonum aviculare	jiang huang	Curcuma longa	wu ling zhi wu wei zi wu yao	Trogopterus xanthipes (Zoological) Schisandra chinensis
chai hu	Bupleurum chinense	jie geng	Platycodon grandiflorum		
che qian zi	Plantago asiatica	ju hong	Citrus reticulata		
chen pi	Citrus reticulata	lian zi	Nelumbo nucifera		Lindera strychnifolia
chi shao	Paeonia veitchii	long gu	Os Draconis (Zoological)	xiang fu	Cyperus rotundus
chuan lian zi	Melia toosendan	lu gen	Phragmites communis	xiao hui xiang	Foeniculum vulgare
chuan xiong	Ligusticum chuanxiong	lu jiao jiao	Cervus nippon (Zoological)	xing ren	Prunus armeniaca
da huang	Rheum palmatum	ma huang	Ephedra sinica	xuan shen	Scrophularia ningpoensis
dan nan xing	Arisaema consanguineum	mai men dong	Ophiopogon japonicus	yan hu suo 	Cordyalis turtschaninovii
dang gui	Angelica sinensis	mu dan pi	Paeonia suffruticosa	yi yi ren	Coix lacryma-jobi
di gu pi	Lycium barbarum	mu li	Ostrea gigas (Zoological)	yi zhi ren	Alpinia oxyphylla
dong chong		mu tong	Clematis spp.	yu jin	Curcuma aromatica
xia cao	Cordyceps sinensis	niu xi	Cyathula officinalis	ze xie	Alisma orientalis
dong gua ren	Benincasa hispida	pao jiang	Zingiber officinale	zhi gan cao zhi ke	Glycyrrhiza uralensis (Honey fried)
e jiao	Equus asinus (Zoological)		(Prepared)		Citrus aurantium
e zhu	Curcuma zedoaria	pu huang	Typha angustifolia	zni ke zhi mu	Anemarrhena asphodeloide
fang feng	Saposhnikovia divaricata	qin pi	Fraxinus rhynchophylla	zhi shi	Citrus aurantium (Immature)
fu ling	Poria cocos	qing pi	Citrus reticulata		
fu zi	Aconitum carmichaeli	qu mai	Dianthus superbus	zhi zi zi he che	Gardenia jasminoides
	(Prepared)	ren shen	Panax ginseng		Homo sapiens (Dried
gan cao	Glycyrrhiza uralensis	rou gui	Cinnamomum cassia		placenta)
geng mi	Oryza sativa	sang bai pi	Morus alba	zi su ye	Perilla frutescens
gou qi zi	Lycium barbarum	sha ren	Amomum villosum	•	
gua lou ren	Trichosanthes kirilowii	shan yao	Dioscorea opposita		
gui ban	Chinemys reevesii (Zoological)	shan zha	Crataegus cuneata		

do not have the driving force to function. The "smooth flow of liver Qi is essential to all physiological process in every organ and every part of the body" (Maciocia 2005, p 117) and allows the "Qi", in the broad system sense to function, in turn nourishing the "zheng qi".

Chai Hu Shu Gan San (Bupleurum Powder to Spread the Liver) made up of chen pi, chai hu, chuan xiong, zhi ke, bai shao, zhi gan cao and xiang fu and Xue Fu Xu Yu Tang (Drive Out Stasis in the Mansion of Blood Decoction) containing tao ren, hong hua dang gui, chuan xiong, chi shao, niu xi, chai hu, jie geng, zhi ke, sheng di huang and gan cao (Bensky & Barolet 1990, pp 146, 314) were the primary formulas used, and illustrate this thought process. These two formulas are used to spread the liver "Oi", invigorate the blood and alleviate pain; they are differentiated by degrees. Chai Hu Shu gan San acts more on spreading the liver "Oi" and harmonizing the blood while Xue Fu Xu Yu Tang acts more strongly to invigorate the blood and opening the channels to alleviate pain. Once the main formula was selected, it was combined as a matter of course with another two-herb formula used for pain called Jin Ling Zi San (Melia Toosendan Powder) comprising chuan lian zi and yan hu suo. This formula strongly spreads the liver "Qi", clears heat, and alleviates pain (Bensky & Barolet 1990, p 295). Yan hu suo (Cordyalis turtschaniovii Bess.) is found in the category of blood invigorating and stasis resolving herbs and is the most potent herbal anodyne available (Chen & Chen 2004, p 618). Additionally these formulas could be combined again with either Sheng Mai San or Liu Wei Di Huang Wan, depending upon the level of damage to the "Yin" or Si Wu Tang in cases of Blood deficiency.

Breast cancer

Breast cancer in TCM is directly correlated to liver pathologies, as the liver channel passes through the breast (Deadman & Al-Khafaji 1998, p 469). As such, the liver is the focal organ for treatment, and considered the root of the pathology. The excess formula, therefore, remains **Chai Hu Shu Gan San**. For deficiency type states **Dang Gui Xiao Yao Wan** (Tangkuei and Peony Powder) comprising dang gui, shan yao, fu ling, bai zhu ze xie and chuan xiong is used. This formula nourishes the liver blood, spreads the "Qi", and strengthens the spleen to resolve damp (Bensky & Barolet 1990, p 251), effectively

treating all the "root" pathologies of cancer formation: blood stasis resulting from "Qi" deficiency; phlegm accumulation resulting from spleen deficiency; dampness and liver stagnation; heat toxins produced by stagnation of "Qi", blood, and phlegm; and "Zheng qi" deficiency.

In both excess and deficient conditions you should combine **chai hu** (*Bupleurum chinense* DC.), a liver herb that acts to harmonize the exterior and interior, spread the liver "Qi", and is a known hepatoprotectant (Chen & Chen 2004, p 84) and **yu jin** (*Curcuma aromatic* Salisb.), an herb which clears heat, spreads "Qi", moves blood, and opens the orifices. Yu Jin is known to be anti-inflammatory (Chen & Chen 2004, p 621). These additions represents the overall thought process of clearing the liver of excess. It should be noted that in TCM, Curcuma is differentiated by the part used into three separate herbs: yu jin (Radix), jiang huang (Rhizoma), and e zhu (Rhizoma) of *Curcuma zedoaria* Berg. (Chen & Chen 2004).

Gynecologic cancers

The liver channel is again the key, but also blood pathologies, especially those involving stasis. In TCM, physiological functions of the uterus and ovaries are associated with the heart, liver, spleen, and kidneys (Maciocia 2005, pp 226-229), as well as the Ren Mai (Conception) and Chong Mai (Penetrating) vessels (Wiseman & Ellis 1996, p 73). Clinically, the most practical method of intervention appeared to be treating the liver, using the same formulas described above for both hepatocarcinoma and breast cancers. One addition is the herb **xiang Fu** (Cyperus rotundus L.). Xiang Fu is one of the most common herbs used to regulate "Qi". It acts directly on the liver channel, and is particularly useful for gynecological conditions (Chen & Chen 2004, p 495).

Although doctors agreed that treatment of the extraordinary vessels can be very effective for gynecological cancers, their individual herbal selection was less consistent. Several herbs were given to act on the two main extraordinary vessels. To nourish the Ren Mai and strengthen the Chong Mai: Gui ban (Chinemys reevesii Gray.); e jiao (Equus asinus L.); zi he che (Placenta hominis); zhi mu (Anemarrhena asphodeloides Bge.); xuan shen (Scrophularia ningpoenisis Hemsl.); huang bai (Phellodendron amurense Rupr.); sheng di huang (Rehmannia glutinosa Libosch. F.); and gou qi zi

(Lycium babarum L.). To regulate the "Qi" of the Chong Mai: Yan hu suo (Cordyalis turtschaniovii); chuan lian zi (Melia toosendan Sieb. et. Zucc.); xiang fu (Cyperus rotundus); yu jin (Curcuma aromatic); qing pi (Citrus reticulate Blanco.); and xiao hui xiang (Foeniculum vulgare Mill.).

Esophageal cancer and gastric cancer

The main base for both excess and deficient patterns in these cancers was Ban Xia Hou Pu Tang (Pinellia and Magnolia Bark Decoction), due mainly to the fact that these cancers are seen as an accumulation of phlegm. It contains ban xia, hou po, fu ling, sheng jiang and zi su ye. Its action is to move "Qi", break up masses, and direct rebellious "Oi" downwards (Bensky & Barolet 1990, p 291). Typically it was combined with Er Chen Tang (Two Cured Decoction) to strengthen the phlegmtransforming action, dry damp, and regulate "Qi". It contains ban xia, ju hong, fu ling and zhi gan cao (Bensky & Barolet 1990, p 432). When stomach "fire" was present, mu li (Ostrea gigas Thunb.) and long gu ("dragon bone" or fossilized bone) were added. Both are mineral herbs containing high amounts of calcium (Chen & Chen 2004, pp 797, 758).

Dong chong xia cao (Winter bug Summer herb, Cordyceps sinensis Berk.) was added to all formulas regardless of pattern. Dong Chong xia cao is a fungus that parasitizes and grows in a caterpillar. It is an adaptogen with known anti-cancer action and traditionally said to tonify the kidney "Yang" and strengthen the "Jing" or essence. It also acts on the lungs and transforms phlegm (Chen & Chen 2004, p 883). It was combined with herbs found in the category of "reduce food stagnation", the most common herb being shan zha (Cretagus cuneata Sieb.).

For deficiency patterns in gastric cancer, where the "Yin" of the stomach has been damaged, the formulas Liu Wei Di Huang Wan and Liu Jin Zi Tang were used as the primary base formulas and combined with dong chong xiao cao and shan zha. Esophageal cancer commonly has shortness of breath as a complication. Ting Li Dao Xi Fei Tang (Descurainia and Jujube Decoction to Drain the Lungs) consisting of lu gen, yi yi ren, dong gua ren, and tao ren ,was added to the above herbs to address



this issue. **Ting Li Dao Xi Fei Tang** is used to clear the lung of fluid and phlegm in cases of wheezing, shortness of breath, whole body edema (non-pitting), and abscess (Bensky & Barolet 1990, p 91).

Gastrointestinal and colorectal cancers

Treatment of these cancers was the most consistent among the doctors in terms of formula selection, but had the largest variance for individual modification due to the abundance of associated complications such as diarrhea, constipation, bleeding etc. Excess presentations were treated with Bai Tou Weng Tang (Pulsatilla Decoction), which contains bai tou weng, huang lian, huang bai and qin pi. It is designed for intestinal disorders where heat, toxins and pain are present (Bensky & Barolet 1990, p 99), and specifically works to clear and transform the excess. The deficiency pattern formula Tong Xie Yao Feng (Important Formula for Painful Diarrhea), in contrast, acts more on the spleen and liver directly, to influence the transformation of food and nutrients, and the spreading of "Qi". It contains fried bai zhu, fried bai shao, fried chen pi and fang feng (Bensky & Barolet 1990, p 149).

Lower jiao cancers

In Chinese medicine the body is divided into three burners or "jiao": upper, middle and lower. These burners act as a system to refine energy, nurture the body, and remove waste. It is said that the upper is like a mist, the middle is like a cauldron, and the lower is like a sluice or gutter (Wiseman & Ellis 1996, p 74).

Lower Jiao cancers primarily include renal, prostate, and bladder, but may also include some gynecological presentations. **Ba Zheng San** was the overwhelming formula of choice for all excess conditions involving the bladder and prostate. It contains mu tong, hua shi, che qian zi qu mai, bian xu, zhi zi and da huang, and is used to clear "heat" from these organs via diuresis. It is often used for acute conditions such as glomerulonephritis and cystitis (Bensky & Barolet 1990, p 192). In contrast, when "cold" is present resulting from deficiency, **Bei Xie Fen Qing Yin** (Dioscorea Hypoglauca: Decoction to Separate the Clear) is used. It contains bei xie, yi zhi ren, wu yao and shi chang pu (Bensky & Barolet 1990, p 201). This formula is designed to warm the kidneys, drain dampness, and to separate clear urine from turbid

(cloudy) urine that results from weak kidney "Qi" and "Yang", leading to accumulation of cold and dampness. "Yang" here may be viewed in part as the metabolic drive.

In cases of renal-specific cancers, the formulas were differentiated between "Yin" and "Yang" action. For "Yin" deficiency, Liu Wei Di Wang Wan was again the formula of choice as it is kidney "Yin" specific. For "Yang" deficiency, a function also controlled by the kidney in TCM, Fu Gui Ba Wei Wan was used. This formula has several names, but it is Liu Wei Di Wang Wan plus fu zi (Aconitum carmichaeli Debx.) or rou gui (Cinnamomum cassia Presl.). These herbs strongly invigorate the "Yang", warming the interior (Chen & Chen 2004, pp 438, 437). It should be noted that Cinnamomum is differentiated by part as gui zhi (the twig) and rou gui (the cortex).

Blood cancers and lymphoma

Generally the treatment for blood cancers focused on moving the blood. Blood cancers result from, and manifest as, both phlegm and stasis patterns. Tonification was mild, as the doctors believed that supplementing the "Qi" would increase proliferation of malignant cells. "Qi" tonification can be viewed as an up-regulation or stimulation of the immune system, an effect attributed to many "Qi" tonic herbs (Chen & Chen 2004, p 833). They did not, however, seem to make a distinction between stimulation and modulation of immunity, an important consideration.

The excess presentation formula for blood cancers is Shi Xiao San (Sudden Smile Powder) consisting of wu ling zhi and pu huang (Bensky & Barolet 1990, p 316) plus Ge Xiao Zhu Ye Tang (Drive Out Blood Stasis Below the Diaphragm Decoction), which contains wu ling zhi, dang gui, chuan xion, tao ren, mu dan pi, chi shao, wu yao, yan hu suo, gan cao, xiang fu, huang hua and zhi ke (Bensky & Barolet 1990, p 316). These formulas are found in the category of "invigorating the blood and dispelling stasis". What specifically differentiates the use of Ge Xiao Zhu Ye Tang from the use of Xue Fu Xu Yu Tang (Drive Out Stasis in the Mansion of Blood Decoction), for blood cancers is unknown. These are adaptations of the same formula. Use is typically distinguished by pathology level (above or below the diaphragm), and the presence of palpable masses, which is irrelevant in blood cancers. In cases complicated by severe heat, **Qing Qi Hua Tang** (Clear the Qi and Transform Phlegm Pill) was used in place of Shi Xiao San. It is comprised of dan nan xing, ban xia, gua lou ren, huang qin, chen pi, xing ren, zhi shi and fu ling. This formula has a stronger action for clearing heat, transforming phlegm, and directing and regulating "Qi", over moving blood (Bensky & Barolet 1990, p 437).

For lymphomas, transforming phlegm and clearing heat was the primary principle. The base formula is **Yang** he **Tang** (Yang Heartening Decoction) and is found in the category of "warming the channels", used here to disperse cold and phlegm accumulation blocking the channels. The action of this formula is to warm the "Yang", disperse cold, and nourish the blood and "Qi" that has become stagnant. Classically it was indicated for "Yin" swellings, seen here as palpable nodes. It contains shu di huang, lu jiao jiao, rou gui, pao jiang, bai jie zi, ma huang and gan cao (Bensky & Barolet 1990, p 217).

Conclusion

The way in which these formulas have become "standardized", in my opinion, is not negative. It does not necessarily reflect a move away from the traditional towards a Western approach. Rather it represents a streamlined approach, mixing both empirical observation

and clinical experience with evidence-based practice to achieve the best outcomes. Combining the best traditional formulas with modern chemotherapeutics helps practitioners to truly integrate, effectively treating both the "branch" and "root" manifestations of cancer.

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