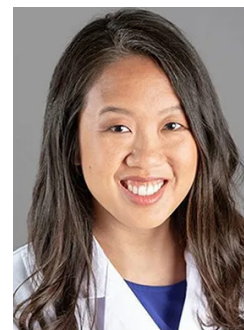


Chinese Herbal Medicine for Oncology

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This article explores perspectives in traditional Chinese herbal medicine for cancer care. First, the role of herbalists in cancer is explored and critiqued from a harm-reduction and patient-centred point of view. The diversity of cancer patients who come to a clinic is discussed, with some common pitfalls to avoid. The field of Traditional Chinese Medicine Oncology is introduced, with some historical views on diagnosis and formulation. Chinese medicine theory of cancer development is then introduced, followed by factors for consideration when prescribing. This article concludes with examples of specific herbal strategies for different problems faced in the cancer clinic.

Harm Reduction and the Role of Herbalists in Cancer

Harm reduction principles emerged from social justice interventions in healthcare and social services to advocate for the agency and autonomy of people who use drugs while minimizing the negative consequences of illicit drug use (NHRC 2021). In a broader sense, harm reduction principles fit into a philosophy of non-judgemental,

non-coercive, client-centered care that considers the values and priorities of individuals when setting wellness goals. When working with people with cancer, harm reduction concepts can apply in several ways.

People with cancer are increasingly interested in complementary and alternative therapies (Qureshi et al. 2018). As herbalists, we must acknowledge that we come to the clinical encounter with our assumptions about what may be considered a “harmful” substance or behavior. Especially in the context of cancer, strong opinions and controversies run rampant throughout the field. They can be a great source of confusion and frustration to many people who receive a cancer diagnosis.

Some practitioners believe that those undergoing radiation, chemotherapy, or even surgery are causing harm to themselves due to potential toxicities or side effects. On the other hand, some practitioners believe that refusing certain conventional medical treatments means those patients are harming themselves (Yun et al. 2013; Johnson et al. 2018). Further, those who refuse to or are unable to follow dietary or lifestyle

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suggestions are often viewed by their practitioners as self-destructive. Keeping harm reduction principles in mind will help us provide open-minded, compassionate care that empowers and respects our patients.

The reality is, in the field of oncology, it is often unclear what is the more or less harmful choice. Many conventional medical options carry significant side effects or risks. On the other hand, cancer itself is often a devastating illness, and even in Chinese medicine, we have the herbal concept of 以毒抗毒 *yì dú kàng dú* or “using poison to fight poison” (Lin and Han 2016). In my opinion, there is little room for “purism” in oncology. Anyone who has spent time in the oncology field knows the causes and outcomes of cancer are complex, highly individualized, and often mysterious. Cancer is a multifactorial illness. As such, our goals as herbalists should include both supporting length and quality of life and reducing negative symptoms and discomforts from cancer itself as well as from side effects of conventional treatment. Similarly, supporting patients to improve their energy and psycho-emotional well-being can be seen as cytotoxic (killing cancer cells) approaches to lower the tumor burden, as can addressing the health of the “terrain”

or the state of the body in which cancer has developed.

As herbalists, we can provide information about our therapies’ potential benefits and risks while supporting people to make their own informed choices and set their own priorities. This information can be drawn from both systematic studies, from our experienced teachers, and our clinical experience as long as we’re aware of the strong possibility of bias in our anecdotal evidence. From my point of view, it is the ethical choice to always be honest and realistic about expectations from the herbal approach and to refer to other practitioners if a problem is beyond one’s scope of experience or training. We may be able to gently dispense any false hopes for an easy cure while pointing out studies that show how Chinese herbal medicine can help people with cancer address their wellness goals. We have found that in certain cases and with certain types of cancer, those who take Chinese herbal medicine have a longer life expectancy on average, and may also have better quality of life (Xiang et al. 2019; Ge et al. 2021; Zhang et al. 2021). Ultimately, we need to non-judgementally meet patients where they are at and support their quality of life to whatever extent they want to prioritize.

Crataegus pinnatifida
(shan zha) fruit can
be added to formulas
to support digestion.
Photo available from
Wikimedia Commons,
2005.



Meeting the Individual Needs of a Patient

After receiving a cancer diagnosis, some people explore all kinds of complementary or alternative therapies. In doing so, people with a cancer diagnosis may decide to change their lifestyle completely. They may embark on radical dietary change, take time off work to rest, reassess their priorities, turn to spirituality and self-reflection, and attempt to heal deep emotional wounds. Some near-miraculous stories have emerged from these kinds of healing journeys, although they tend to be the exception rather than the rule (Turner 2015). Other people may see their cancer as another health problem that the doctors can solve; they want to go through with the recommended treatment, carry on with their lives, and want support for side effects while recovering from conventional treatment. Others have recurrent or metastatic cancer and might be balancing which treatments can slow down its growth to keep it at bay while allowing them to have as much quality of life as possible for the time that remains. Still, others have decided they will not use any conventional medicine and want herbs to do some heavy lifting, whether or not we agree with their choice. Our herbal approach should always meet the person they are and consider their goals – rather than imposing our own goals, priorities, or values.

Dietary therapy is an area of great controversy and, unfortunately, great judgment in the hands of many well-meaning natural medicine practitioners. Some practitioners may have learned about the evidence behind the benefits of the ketogenic (keto) diet, veganism, juicing, or other dietary approaches and insist that their patients (or, in many cases, their family members) adhere to these diets. I have found this approach to nutritional counseling can cause friction between the person experiencing cancer and their family or oncology team if their desire to continue eating more conventional foods is not respected. In the cancer journey, someone might want to eat certain foods and not others for many reasons. For example, typically during chemotherapy, a person's sense of taste is altered, and they are significantly impacted by nausea and vomiting. Sometimes bland carbohydrate-rich comfort foods are the only ones that can be stomachached. People who have gone through radiation of the head and neck (with damage to salivary glands) may only be capable of eating wet, moist, or liquid foods. For some, a keto diet is tolerable for a couple of weeks but is too difficult to keep up with and may not even have strong evidence of helping their particular cancer type. For some who have a “colder” constitution, a Yang deficiency in their digestive system, or cachexia (weakness and wasting due to severe illness), a raw vegan diet may be considered too energetically cold in Chinese medicine and may contribute to digestive weakness, poor absorption, and fatigue. Some cancer patients have difficulty with the

cognitive demands that a strict diet may require, perhaps due to brain fog, anxiety, depression, exhaustion, or involvement of the brain in their cancer. Food is an emotional comfort for many people. Especially for those with a poorer prognosis, they may well refuse to live the rest of their life eating only unfamiliar, unappealing foods (Schwartz et al. 2018).

The best a conscientious herbalist can do is: to read and listen widely with an open mind, share information, and maintain the humility that none of us have entirely solved cancer, death, or meaning and joy in life. Avoid over-generalizing. Above all, respect patient autonomy. There is no one-size-fits-all approach.

The Field of TCM Oncology

To reduce the harm that cancer can cause, Traditional Chinese Medicine (TCM) herbalists can turn to TCM Oncology. TCM Oncology is a rich field of clinical practice, reflection, research, and development across China and worldwide. Numerous conferences occur every month within the field, involving front-line doctors, clinical researchers, and pharmacologists. More recently, network pharmacology scientists have also joined – adding a fascinating approach suitable to herbalism, as there are so many active components in an herb and formula (Zheng et al. 2018; Liu et al. 2020). TCM Oncology is further divided into specializations according to the type of cancer.

Cancer is not one disease, teachers remind us, but hundreds of diseases; almost every part of the body can develop cancer. Different types of cancer may be associated with various disease categories. Therefore, one of the first steps in identifying appropriate herbal formulae for a patient is to consider what disease category it may fall under. Gynecological cancers often fall under the category of zheng jia ji ju (“concretions, conglomerations, accumulations and gatherings”, i.e., various abdominal masses), historically described as shi jia (“stone-like masses in the uterus”). Certain types of advanced lung cancer may fit with the disease of fei yong (“pulmonary welling-abscess”) as described in the *Jin Gui Yao Lue* (Synopsis of Prescriptions from the Golden Chamber). The term 瘤 liu “tumor” can be traced back to the Shang Dynasty (Li 2003). However, the term would likely have applied more readily to visible

“ Our herbal approach should always meet the person they are and consider their goals – rather than imposing our own goals, priorities, or values. ”

or palpable tumors than lung cancer, leukemia, and brain cancer.

As an example, breast cancer is currently understood to relate to the disease of ru yan “乳岩” which translates to “breast rock.” Though historically it may also have been called “乳石癰” (“breast stone carbuncle”), “奶岩” (“milk rock”), and many other varied terms. (Zhu 2010; Lin 2016). Some TCM scholars believed that breast cancer belonged to the “carbuncle” or “ulcer” category of diseases and was caused by imbalanced emotions, dietary deficiencies, inadequate living environment, innate endowment, and other factors. As an early example, the book *The Rites of the Zhou Dynasty* (1100- 400 BCE) refers to physicians specializing in the treatment of “swellings and ulcerations” or “necrosis and ulcerations.” The seminal *Yellow Emperor’s Classic of Internal Medicine* (written

approaches that overlap with other carbuncle diseases. To this day, TCM Oncologists continue to draw from re-interpretations of classic texts to develop new strategies for the clinic. It is important to remember that the effectiveness of Chinese herbs lies not just in the herbs themselves, but in the correct understanding of the patient’s physiology, and thus the correct choice and combination of herbs. Therefore, we read the classics in an attempt to improve our diagnostics and provide the most effective possible herbal treatment.

TCM Theory and Cancer

The theory of Cancer Toxin (ai du “癌毒”) is a modern extension of traditional TCM theory, initially developed by contemporary TCM cancer specialist Zhou Zhong Ying (Ye et al. 2018). His theory has received fairly wide agreement in the TCM oncology literature. According to Zhou, cancer has some unique characteristics as a disease. For example:

- an insidious onset that often evades early detection
- frequent lack of a single detectable cause
- a rapidly-progressing nature that may be fatal

Cancer involves both over-proliferation of cancer cells and damage to normal tissue. As such, it involves both Vacuity and Deficiency (虚) as well as Repletion (实). According to TCM theory, the Replete or Excess Pathogens involved are typically seen to be Phlegm or Dampness, Stasis, and Toxin. Heat may also be involved, but not always. Because cancer involves both Repletion and Deficiency, a common general treatment approach used by TCM oncologists is Fu Zheng Qu Xie (扶正祛邪), which translates to supporting the Zheng Qi (the Deficiency) and dispelling Pathogens (the Repletion). Zheng Qi (正气) is also known as Righteous or Right Qi, the body’s physiological functions that maintain health and resist disease. In terms of the TCM view of cancer pathogenesis, cancer is a complex, multifactorial disorder that develops only after the dysfunction of the TCM Zang-Fu organs, Qi or Blood Stagnation, and Pathogens (邪) have accumulated over time. In the Cancer Toxin theory, Qi Stagnation leads to poor circulation of body fluids leading to Phlegm formation and Blood leading to Blood Stasis, which then produces Phlegm-Stasis (痰瘀). Long-accumulated Pathogens, especially Phlegm, Dampness, Stasis, Toxin, and often Heat, mutually reinforce each

The majestic flowers of *Platycodon grandiflorus*. The edible root (jie geng) is a key ingredient in Qing Yan Ying (Clear the Throat Drink). Photo by Guy Waterval, 2017. Available from Wikimedia Commons.



circa 250 BCE) described clinical manifestations of what appears to be akin to breast cancer, including prognosis (estimated at approximately 10 years after diagnosis), progression, metastasis, and death (Cohen et al. 2002). These examples indicate that certain cancers have been observed by doctors over the millennia, with varying approaches that we can still draw from today, depending on the characteristics of a given patient’s disease process or symptoms. For example, if we were to consider the physiology of breast cancer similar to a “carbuncle” or “ulcer” we may use treatment

other, bind together, congeal, stagnate and brew, giving rise to Cancer Toxin. The combination of Phlegm-Stasis and Cancer Toxin consolidates into a tangible mass (a malignant tumor), which takes up residence in Deficient body regions or meridians. Further, it exacerbates Zheng Qi Deficiency by rapidly consuming Qi and Blood to fuel its growth. The rapid consumption of Qi, Blood, Yin, and Body Fluids means an initial primarily Excess disease that usually leads to significant Deficiency, making its progression all the more difficult to reverse (Chen 2011; Zhou 2013).

Some challenges may arise when the patient has no particular symptoms associated with the part of the body that has become cancerous. For example, I have seen many patients with colorectal cancer who have perfectly normal bowel movements that are regular and formed and are passed without pain or cramping. In these cases, Zhou and others argue that it is still important to consider the “disease” of “Cancer” which in more modern times is associated with “Cancer Toxin”, and not simply treat it constitutionally, classically, or only according to the prevailing pattern of signs and symptoms (Lahans 2007). The components of Cancer Toxin (i.e., Zheng Qi Deficiency, Damp-Phlegm, Blood Stasis, and Toxin) will always be present when cancer is present. Therefore, even if the patient’s signs and symptoms do not show any sign of cancer, most TCM oncologists will still consider these factors in their formula.

Choosing Appropriate Medicinals

TCM doctors generally agree that cancer involves some kind of Toxin. Some of the herbs more famously known to have “anti-cancer” properties include some Detoxifying (解毒) and Attack Toxin (攻毒) medicinals. Research and clinical experience show that particular herbs from the Clear Heat and Detoxify herb categories demonstrate anti-tumor effects (Hoffman et al. 2020), as shown in Table 1.

Table 1. Well-Known “Anti-Cancer” Herbs from the Clear Heat and Detoxify Categories

- *Oldenlandia diffusa* (bai hua she she cao) herb
- *Scutellaria barbata* (ban zhi lian) herb
- *Smilacis glabrae* (tu fu ling) rhizome
- *Rhaponticum uniflorum* (lou lu) root
- *Solanum nigrum* (long kui) herb
- *Taraxacum sinicum* (pu gong ying) herb
- *Chrysanthemi indici* (ye ju hua) flower
- *Sophorae tonkinensis* (shan dou gen) root

However, from a TCM perspective, these herbs must still be used within the scope of Zheng pattern differentiation. If too many Cold or Attacking herbs are misused, they may easily harm the Spleen-Stomach, endangering Zheng Qi and Blood production (Zhou 2013). In other words, if the Spleen-Stomach organ is damaged, it impairs the transformation of our food and drink into the healthy Qi of the body, which lowers the immunity of the body and its overall resistance to disease.

Chinese medicine herbal treatments in the cancer context are complex. Ideally, they should take into account numerous factors, as listed in Table 2.

Table 2. Factors to consider

Location and type of primary cancer and any metastasis
Type or grade of the tumor
Constitutional tendencies
Zheng Qi Deficiency and various Excesses Pathogens
Goals of the formula
Signs, symptoms, discomforts, and quality of life concerns
Herb-drug interactions and other safety considerations
Possible biomedical considerations (e.g., leukopenia, hormone-positive cancer type)
Comorbidities (e.g., diabetes, heart issues, etc)
Contraindications (e.g., many TCM oncologists consider Blood-breaking herbs contraindicated for bloodborne metastasis, some consider Yin tonics contraindicated for estrogen-positive breast cancer, interactions with other medications)
Any concurrent conventional treatment and side effects (e.g., chemotherapy regimes that deplete the Spleen-Stomach Qi, radiation depleting the Qi and Yin and introduce Toxic Heat)
Modern research (clinical and preclinical research on specific herbs and/or specific types of cancer)

For some, the priority is to keep their quality of life high by minimizing the side effects of conventional therapy or the cancer itself. In this situation, some of the traditional formulas can be used as a base and modified according to the TCM diagnosis.

Lycium barbarum fruit (gou qi zi) is widely used in Traditional Chinese Medicine. Photo by H. Bell, 2009. Available from Wikimedia Commons.



Minimizing the side effects may mean using herbs that may reduce the Spleen and Stomach Qi-depleting effects of chemotherapy. Depending on the individual presentation, in cases of diarrhea, I may consider one of the formulas mentioned in Table 3. Huang Qin Tang, in particular, has undergone extensive research at Yale in mitigating the gastrointestinal toxicities of certain chemotherapy regimes (Gong 2016).

Table 3. Formulas to consider for diarrhea during chemotherapy

Formula	English Name	Quality
Fu Zi Li Zhong Wan	Prepared Aconite Pill to Regulate the Middle	Warming
Liu Jun Zi Tang	Six Gentlemen Decoction	Tonifying
Xiang Sha Liu Jun Zi Tang	Six Gentlemen Decoction with Aucklandia & Amomum	Tonifying and Regulating
Huang Qin Tang	Scutellaria Decoction	Damp-Heat Clearing
Shen Ling Bai Zhu San	Ginseng, Poria & Atractylodis Macrocephalae Powder	Tonifying and Astringent
Tong Xie Yao Fang	Important Formula for Painful Diarrhea	Harmonizing

Rebellious Stomach Qi is characterized by symptoms like nausea and vomiting. When the Stomach Qi is rebelling, it may be helpful to incorporate or modify formulas such as those mentioned in Table 4, with *Pinellia ternata* (ban xia) rhizome, *Bambusa breviflora* (zhu ru) stem shavings, *Zingiber off.* (gan jiang) dried rhizome, or other Stomach Qi-descending herbs. Additionally, I may consider formulas for food stagnation if there are signs of food retention, such as abdominal distention and fullness. Examples of food stagnation formulas I might consider are Bao He Wan (Preserve Harmony Pill), Shan Zha Wan (Hawthorn Pill), or Jian Pi Wan (Strengthen the Spleen Pill.) Alternatively, we can add herbs such as *Crataegus pinnatifida* (shan zha) fruit, *Massa fermentata* (shen qu), and *Raphanus sativus* (lai fu zi) seed to another base formula to support its digestibility. It is important to note that the prescribed pharmaceutical anti-emetics can be essential for improving quality of life and controlling nausea.

Table 4. Formulas to Descend Stomach Qi

Formula	English Name	Quality
Xiang Sha Liu Jun Zi Tang	Six Gentlemen Decoction with Aucklandia and Amomum	Tonifying and Regulating
Er Chen Tang	Decoction of Two Old (Cured) Drugs	Drying and Regulating
Wen Dan Tang	Warm Gallbladder Decoction	Clear Phlegm-Heat
Ju Pi Zhu Ru Tang	Tangerine Peel and Bamboo Shavings Decoction	Qi Descending
Ban Xia Hou Po Tang	Pinellia and Magnolia Bark Decoction	Qi Descending and Phlegm Dispelling
Ban Xia Xie Xin Tang	Pinelliae Decoction to Drain the Epigastrium	Harmonizing and Qi Descending

The various seed herbs can be invaluable for dry constipation, such as *Cannabis sativa* (huo ma ren) seed or *Prunus persica* (tao ren) seed. In my experience, it can be helpful to combine them with herbs for the Qi regulating category like *Magnolia off.* (hou po) bark, *Citrus aurantium* (zhi shi) unripe fruit, and *Citrus aurantium* (zhi ke) mature fruit, or the classic Cheng Qi Tang (Order of the Qi Decoction) formulas which combine *Rheum off.* (da huang) root, *Natrii sulfas* (mang xiao), zhi shi, and hou po bark. I have seen *Cistanche* spp. (rou cong rong)-based formulas used among older or frail patients who experience constipation and could use some Kidney Yang tonification. Several TCM formulas have been used for bone marrow suppression associated with chemotherapy, including standard patent or intravenous (IV) formulas. Typically the patient is made aware of the state of their blood counts, as their next round of chemotherapy may be delayed if they fall too low. The Chinese medicine practitioner can also check pulse, color of the conjunctiva, and other signs of weakness in Qi and Blood. While keeping in mind the nature of each herb and its suitability for that particular patient, numerous tonics have been implicated in studies showing improved platelet and red and white blood cell counts (Li et al. 2007), as shown in Table 5. Additionally, the formula Shu Yu Wan (Dioscorea Pill) from the *Jing Gui Yao Lue* (Synopsis of Prescriptions from the Golden Chamber) is also used for this purpose (Ye et al. 2018).

Table 5. Tonifying Herbs Used for Marrow Suppression

Botanical Name	Pinyin Name	Part Used
<i>Astragalus membranaceus</i>	huang qi	root
<i>Panax ginseng</i>	ren shen	root
<i>Codonopsis pilosula</i>	dang shen	root
<i>Pseudostellaria heterophylla</i>	tai zi shen	root
<i>Dioscorea opposita</i>	shan yao	root
<i>Angelica sinensis</i>	dang gui	root
<i>Lycium barbarum</i>	gou qi zi	fruit
<i>Ligustrum lucidum</i>	nu zhen zi	fruit
<i>Polygonatum sibiricum</i>	huang jing	rhizome
<i>Polygonum multiflorum</i>	he shou wu	root
<i>Spatholobus suberectus</i>	ji xue teng	root and vine
<i>Rehmannia glutinosa</i>	di huang	root
<i>Ophiopogon japonicus</i>	mai men dong	root
<i>Cuscuta chinensis</i>	tu si zi	seed

For a patient suffering from xerostomia (dry mouth), we might consider formulas such as Qing Ying Tang (Clear the Ying Decoction), Bai Hu Cheng Qi Tang (White Tiger and Order the Qi Decoction), or Gan Lu Xiao Du Dan (Sweet Dew Special Pills to Eliminate Toxin). The formula Qing Yan Ying (Clear the Throat Decoction) is a home remedy commonly used for such issues (Cui et al. 2007).

Qing Yan Ying (Clear the Throat Drink)

Sterculiae lychnopora (pang da hai) nut 50 g

Ophiopogon Tuber (mai men dong) tuber 50 g

Lonicerae japonicae (jin yin hua) flower 30 g

Platycodon grandiflorus (jie geng) root 30 g

Glycyrrhizae uralensis (gan cao) root 30 g

Directions: Soak in water for 30 minutes and then bring to a boil. Simmer for 30 minutes and strain. Drink the decoction.

Chinese herbalism can shine for fatigue after chemotherapy. Depending on the patient, it may be appropriate to use formulas such as Shi Quan Da Bu Tang (All-Inclusive Great Tonifying Decoction) or Bu Zhong Qi Yi Tang (Tonify the Middle and Augment the Qi Decoction) to help restore energy levels. These formulas tend to include tonic herbs like *Panax ginseng* (ren shen) root, huang qi root, dang shen root, *Atractylodis macrocephalae* (bai zhi) rhizome, and dang gui root.

After active cancer treatment is complete, it can be beneficial to ensure we are addressing the “disease” (cancer type) and the Zheng pattern. We may also include herbs that are specifics for treating

cancer and that are appropriate for the patient’s energetic pattern. These might include bai hua she she cao, huang qin, the various *Curcuma* spp., *Salvia miltiorrhizae* (dan shen), *Coix lacryma-jobi* (yi yi ren), gou qi zi, etc.

Regardless of whether the cancer patient is pursuing conventional treatment or not, herbal medicine can play a helpful role. Part of respecting a patient’s choice involves not causing additional harm and staying informed of possible herb-drug interactions. For example, if a patient has decided to move ahead with a certain chemotherapy regimen, we would want to make sure not to work against the cytotoxic goals of that therapy. This is a complex and evolving area of knowledge that can involve considerations of drug metabolism and half-lives. The modern herbalist can make use of various interaction databases available online, or avoid the use of herbs for the duration that the pharmaceutical drug remains in the body. Additional training in safety considerations around surgery and radiation is also recommended.

Conclusion

In conclusion, TCM Oncology is a rich field that can enhance cancer patients’ outcomes and quality of life through informed integrative care. Herbalists interested in pursuing this field have various sources to learn from, including textbooks, research papers, online courses, and conferences such as the Society for Integrative Oncology, which involves numerous TCM researchers. It is a field that demands humility from the practitioner, and that, like many, it would benefit from centering harm reduction and patient-centered treatment approaches. Every patient’s stage, type, and approach to cancer will be unique, but with careful questioning and diagnosis, we can support them effectively with herbal medicine. 🌿



*A variety of Curcuma spp. (turmeric) in flower, found in Maharashtra, India.
Photo by Sankarshansen, 2010.
Available from Wikimedia Commons.*

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