

Combining Traditional Chinese Medicine and Modern Medicine in the Treatment of Cancer: Clinical Pearls

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Traditional Chinese Medicine (TCM) therapies are making their way into the biomedical research setting, and are gaining credence in the context of modern, science-based medicine. Incorporating all forms of available evidence and data from the genetics of both patient and tumor, to the constitutional architecture determined through the application of TCM diagnostic methods, provides a collaborative framework for developing holistic, individual treatment regimens. Three TCM patterns commonly observed in cancer patients undergoing chemotherapy are: Spleen Qi Deficiency with Dampness, Liver Qi Stagnation, and Kidney Essence Deficiency.

It is well known in the medical community that the majority of today's cancer patients utilize a diverse array of medicines and therapies in their quest for health, longevity, and to overcome their disease. The informational overload provided by the Internet has created a situation in which most people are thirsting for knowledge, and drowning in information. Oncologists are often burdened with questions from patients regarding which "alternative" therapies are okay to use in conjunction with their conventional treatments. Due to the overwhelming amount of unfounded claims, anecdotal reports of cures, and the lack of valid scientific evidence to support the integration of "Complementary and Alternative Medicines", collectively known as "CAM", with standard of care medicine, most patients are directed to stay away from any unproven therapies that have the potential to interfere with their conventional treatment.

This perspective is well appreciated by those of us who have seen so many people die from cancer, regardless of their therapeutic choices along the way. However, many of us have also realized the potential to improve cancer patient quality of life and longevity through years of hard work in clinical practice, and diligent research that keeps us abreast of the newest developments in the integration of CAM with conventional therapy. As a modern medical practitioner trained and licensed in the practice of Traditional Chinese Medicine (TCM), my greatest contribution to the field of medicine may be my passionate work towards a collaborative model of health care, in which collaboration between doctrines is founded on supporting each other's strengths rather than exploiting our weaknesses.

As is the case in almost all fields of study, communication across disciplines can be a

difficult challenge to overcome. Practitioners of Traditional Chinese Medicine (TCM) use language and terminology that is specific to the TCM system, and is rarely familiar to a medical doctor, or any other medical professional for that matter. So how do we bridge the gap between our terms and appreciate each other's approach?

In the collaborative context it is not necessary for us to equate terms across doctrines, and in fact, most attempts to do so are confounding. However, useful correlations can be drawn between medical frameworks that may provide a few conceptual bridges and enable a basic cross doctrine understanding to develop. In this article I will provide a few examples of useful correlations that are relevant to cancer and cancer therapy in the collaborative context.

The biomedical community has often overlooked the relevance and importance of the contributions of traditional medical systems to the practice of medicine in general. The principles upon which these systems have been founded are derived in large part from what is called *empirical data*, that is, knowledge that has been recorded based on observations over time. In TCM, there is a foundation of literally thousands of years of data that has been gathered, recorded, evaluated, and used extensively in the clinical setting. The primary reason for this unfortunate oversight is the heavy reliance of medical science on the randomized, double-blinded, placebo controlled trial or "RCT". Especially in the realm of oncology, where the cold reality of patient mortality weighs heavily on every clinical decision made by oncologist and patient, little credence is given to any therapy without citing RCT data involving human subjects and producing a clinical outcome of statistical significance.

The RCT has become the medical doctor's

arbiter and modern medicine has begun to herald the RCT as the basis for "Evidence Based Medicine". This is inherently problematic, for many reasons, most of which are not in the scope of this article, and the most relevant one being that for a great number of clinical situations, there is no RCT data to direct the decision making process. This leaves a huge informational gap for our doctors and patients to attempt to cross, with little more than clinical experience to guide them. By expanding the definition of "EBM" to include "best available evidence", we are able to bridge the gap between RCT data and the medically relevant information embedded in the world's well established traditional medical systems. Such a reframing of the "Evidence" we use to guide our medical decision-making could provide us with an opportunity to significantly enhance our clinical outcomes in the management of cancer and chronic disease.

Slowly, TCM therapeutics with thousands of years of empirical data behind them are being brought "Under the Microscope", as stated in the Wall Street Journal in 2012 in regard to recent research being done at Yale University by doctor Yung Chi Cheung. Cheung's research into the efficacy of a TCM formula, Huang Qin Tang, known in the research as PHY906, consists of 4 herbs and has been examined in trials with animal models, and in both Phase I and II clinical trials in humans. It has been shown to inhibit the side effects of 5FU/Xeloda, and Irinotecan while also improving efficacy related to cancer cell death and reduction of tumor burden in colon cancer. With regard to PHY906, Dr. Cheung was reported as stating, "If it's still in use after a thousand years, there must be something right".

Another interesting TCM botanical based medicine is currently undergoing testing at

US cancer centers. The herb is called Ban Zhi Lian (*Scutellaria Barbata*), and is being called “Bezielle” or “BZL101”, in the research setting. This is a whole plant compound being used in the context of women with breast cancer that has been shown to extend life in some patients.¹ The herb has been traditionally used in the context of cancer, and has been applied based on the TCM system of diagnosis and treatment.

I am excited to see that TCM therapies are making it into the biomedical research setting, and that they are gaining credence within the setting of modern, science based medicine. At this point, individual therapies are being tested for their effectiveness in predetermined settings. Where TCM will really shine is studying the outcomes of patients who are being treated in a truly collaborative context. In this setting, TCM practitioners work alongside oncologists to develop programs tailored specifically to each patient. Incorporation of all forms of available evidence and data, from the genetics of the patient and their tumor, to the constitutional architecture determined by TCM diagnostic methods, provides the framework for developing holistic, individual regimens.

I hope that this article serves to provide its readers with some useful and relevant correlations between TCM and conventional biomedical concepts in the interest of further developing the potential for collaboration between doctrines.

Elemental Endocrinology

There is an elaborate endocrinological basis for the theory and practice of TCM, where the system of secreting glands is composed of twelve distinct organ networks that are defined by their functionality, not their anatomical structure. This is very important. For example, when I talk about the spleen in TCM terms, I’m not talking about the organ in my body that has the red pulp and is full of white blood cells, is viscous and is a lymph organ. I’m talking about an organ network that includes aspects of other parts of what we think of today as part of the physiologically defined digestive system. So maybe a little bit of the pancreas, some of the duodenum, and some of the spleen function.

The TCM endocrine system is also based on an elemental framework consisting of five elements: wood, fire, earth, metal and water. These five elements both generate each other and control each other, and each organ network is associated with a specific element. For early Taoist doctors, elemental principles were derived by observing the natural world, from the cyclical movement of the celestial bodies and the seasons, to the properties of geological formations, to the interactions be-



tween plants and animals, and the interplay of observable forces. The foundation of the Five Element system was based on observation of the natural world. Understanding how the characteristics of the elements and their interrelationships help to define the associations between organ networks is essential to the theory of TCM, and to what I call “elemental endocrinology”.

Pattern Differentiation

The concept of pattern differentiation in TCM is independent of a biomedical diagnosis. An individual patient’s TCM diagnosis is dependent upon the constellation of signs and symptoms that the patient presents with. The TCM exam includes a thorough health history and questioning of the patient, assessment of the patient’s pulses (taken at the radial artery bilaterally and ascribed one or more of 28 pulse qualities), an examination of the tongue, any additional physical assessments related to the patient’s condition, and a review of any relevant lab work and/or additional biomedical diagnostics. What a TCM practitioner is looking for is the existence of one or more known diagnostic “patterns”. This process is called “Pattern Differentiation” and is how a TCM diagnosis is made.

There are three TCM patterns that I observe most often in my clinic, and they are a big part of what I observe in patients with cancer who are going through chemotherapy. The three patterns are: Spleen Qi Deficiency with Dampness, Liver Qi Stagnation, and Kidney Essence Deficiency. These patterns are not always easy to define, and patients’ symptom pictures often do not follow the textbook patterns. Most of the time there’s some kind of interplay, a kind of mixture of patterns that takes place, and there are many additional, potential patterns relating to each of the organ networks, their relationships to each other, pathological factors, etc. that are factored into the equation.

Sweet Dampness and The Metabolic Syndrome

The American culture has a sweet tooth. Interestingly enough, the sweet flavor is actually considered a “tonifying” flavor in TCM, meaning it has the capacity to add energy and/or material to a system. However, a little bit of sweetness goes a long way, especially in the case of sugar. The American culture has definitely proved its voracious appetite for all things sweet and tonifying, and now we are seeing first hand how too much of a good thing can be pathological. I spend much of my clinical time discussing the importance of glucose restriction in my patients, and I often use the example of native cultures, who are among the people who are most susceptible to the detrimental effects of excessive sugar consumption. In the natural world, as a human being, sugar intake is limited.

According to the American Association for Cancer Research,² “Approximately one third of the US population has metabolic syndrome, which is defined as the co-occurrence of at least three of the following five conditions: Raised blood pressure, elevated waist circumference, low HDL or “good” cholesterol, raised triglyceride levels and raised fasting plasma glucose levels.”

Metabolic Syndrome, a conglomerate of obesity insulin resistance, dyslipidemia and hypertension has been linked with an increased risk of breast cancer.³

Middle-aged men with the metabolic syndrome were more likely to develop prostate cancer in this prospective population-based study⁴. Persons with liver cancer were significantly more likely than cancer-free persons to have a prior history of metabolic syndrome.⁵

With regard to the overuse of the sweet flavor by our culture, I’d like to introduce a very useful and relevant TCM concept: Dampness. Dampness is one of a group of terms describing what are called pathological factors. I think the best way to do this is through analogy. In China, every human organ is likened to a geological feature that parallels that organ’s functional relationship to the body. The Spleen and the Stomach are represented by lakes. The Stomach is likened to a high elevation mountain lake, and the Spleen is likened to a lowland lake with lots of water running into and out of it. The lowland lake is pond like, and when it is in a high functioning state, its waters are clear, filled with tadpoles, frogs and fishes, its shores are lined with cattails and wetland grasses, and dragonflies flit about on the water’s surface. The alpine lake, representing the Stomach in this analogy, is clear and its shores are dry and empty save for a few short grasses and wild flowers. What is pertinent in these examples is the relationship of each organ, or its related

geologic feature, to wetness or dryness. The high elevation lake tends to get dry, and its water level can decline easily, exposing more of the lake's bottom to the elements, and drying up the aquatic life there. This leads to a less fervent and thriving lake environment, and it's easy to imagine the extreme deficit of water leading to dry, cracked earth with little life and only the semblance of what was once an aquatic haven.

The Spleen, like the pond in our analogy, and in contrast to the high elevation lake, tends to gather more water in its unhealthy state. Imagine if you will, the waterways that feed the pond become swollen with water and along with it rich silt, loam and organic material. Eventually, the pond can no longer accommodate the influx of material and water, and its drainage systems become overburdened, its canals clogged. The rich materials fill the pond, and as the water evaporates, and is slowly drained away through the remaining passages, we are left with a more turbid marsh, rather than a pond, and if the imbalance continues to build, we now see a bog forming, with thick dark muck that bubbles up to release fermenting gasses. In this analogy, the pond ecosystem has changed its relationship to wetness, that is in TCM terms, it has become more *Damp*. Dampness can be likened to turbidity and increased viscosity of fluid.

The phrase, "Spleen Dampness" is referring to a pathological state existing within the functional organ network of the TCM Spleen. This may be the most common pattern I see in clinical practice, although it is not often the only pattern I am able to identify in a patient. A large part of the American culture suffers from spleen dampness. It may be the number one thing we suffer from in the US, and it is due in large part to our dietary choices. The lungs and our breath probably represent the closest interface between body and ecosystem, as we're breathing almost every second of every day, and within minutes of not having air, we begin to die. The food we eat, and

everything we take in through our mouths has a less direct effect on our mortality, however, it is one of the most profound environmental influences for our bodies. Everything we eat goes through our digestive tract, is directly interfacing with the brush border, the micro villi, and is interfacing with our whole being. I often use the analogy of gardening and permaculture, where the soil, and how we take care of it, has a big influence on what grows in our gardens, and how well it grows. Recent research into what has been aptly named, "the human biome", reveals that there is more DNA in our bodies that belong to other life forms than to ourselves.

Spleen "Qi" Deficiency and Spleen Dampness

The spleen element is earth. It represents the supportive structures of the body, is an essential part of digestion, and is manifested in the muscular system specifically. The spleen energy is observed in the muscles of the body, the tongue, the lips, the muscles of our legs and arms. The signs and symptoms of Spleen Qi Deficiency with Dampness include bloating, gas, distention, cramping, belching, heart burn/acid regurgitation, primarily after eating, and fatigue, loss of energy, heavy sensation in the body, muscle weakness, loose stools, foggy headedness and sleepiness.

There is a useful correlation that can be observed between Spleen Qi and mitochondrial energy. ATP is like the physical currency of Qi and is used to run all of the cellular energy systems. It is the energy that drives the processes in the body. In TCM, Qi moves blood in the body, maintains the organs in their positions, gives our skin its tone, and it gives the body its lift, the feeling of being alive. That's the "Qi". When the Spleen network is damp and sticky and turbid the Qi does not move well, and becomes weakened - the metabolic processes get sluggish and systems begin to breakdown. Spleen Dampness will lead to Spleen Qi Deficiency over time, and vice versa, Spleen Qi Deficiency is predisposing to a build up of turbidity and Dampness in the Spleen, especially when too much sugar and/or processed foods are brought into the digestive tract.

In the context of Spleen Qi Deficiency, Spleen Dampness, and Metabolic Syndrome, there are a number of very helpful "biomarkers" that offer additional insight. I always like to look at fasting glucose and insulin levels, HgA1c, and if there is considerable concern for glucose and insulin dysregulation, C-peptide as well. I wrote my thesis on Diabetes, and at that time was unaware of the importance of the C-peptide test in the diabetes work-up. In my first couple of years of clinical practice, I was often confounded by

lower than expected fasting insulin levels in patients with the metabolic syndrome picture and the likely existence of a desensitized glucose/insulin system based on their physical presentation. As I soon learned, C-peptide is a peptide that is cleaved during the manufacture of insulin, and is a much more accurate assessment of how much insulin is actually being made by the beta islet cells in the pancreas. I also learned that one of the reasons that fasting insulin levels are hard to interpret is due to the liver's ability to store insulin and regulate its release into circulation. It is fascinating to me that most of the insulin secreted by the pancreas first travels through the pancreatic duct, into the duodenum, through the mesenteric venous system, into the hepatic portal vein, and then into liver, before getting into circulation.

Metabolic Syndrome therapeutics would include:

- Diet: vegetables, protein, fats, specifics based on constitutional presentation
- Lifestyle: exercise, breathing, nature, sun meditative practice
- Botanical Medicine: Aromatic herbs to transform dampness, herbs to regulate Qi of Middle Jiao, build Spleen Qi, drain dampness, resolve phlegm, and address specific constitutional patterns
- Nutritional Medicine: ALA, glutamine, chromium, vanadium, choline, carnitine, BCAA's CoQ10, niacin, policosanol, RYR

Specific botanicals include aromatic herbs to transform dampness and herbs to regulate Qi in the Middle Jiao are shown in Table 1.

These herbs dry dampness, and their aromatic quality resolves turbid, damp material. One of the doctors I studied with in China, Dr Xie, used the analogy of drying wet clothes. He said that when there is not a lot of warmth or sunlight, the wind will help to get things dry. This is how the aromatic botanicals function to resolve turbid dampness in the body.

An Exemplary Formula for this condition is shown in Table 1. This formula is directed at the pattern of Spleen Qi deficiency with dampness. It is affordable and effective. The key herbs to put in harmonizing formulas and for supporting digestion are orange peel, ginger, licorice, cardamom and fennel. It is important to combine aromatic herbs with tonics. Chai tea without dairy is an example. Chai herbs are very regulating to the middle, very digestive. We have to be careful tonifying someone with a damp spleen. It's like trying to get our pond back to a high level of functioning by adding nutrients, which will end up making the whole situation even stickier. We need to dry things up a bit first. This can be done in several ways, including helping fluid drain better, creating a nice breeze to help keep energy moving and to



Table 1
Spleen "Qi" Deficiency and Spleen Dampness

Specific botanicals include aromatic herbs to transform dampness:

- Can Zhu (Atractylodes Lancea)
- Sha Ren (Fructus Amomum)
- Huo Xiang (Pogostemon Cablin)
- Pei Lan (Eupatorium fortune)

Herbs to regulate Qi in the Middle Jiao include:

- Chen Pi (Citrus Reticulata) – transforms phlegm
- Mu Xiang (Aucklandia/Saussurea Lappa) – moves Qi in Middle Jiao, and intestines
- Xiang Fu (Rhizoma Cyperi Rotundi) – regulates Qi of the liver
- Bo He (Mentha Haplocalysis) – disperses turbid Qi from abdomen

An Exemplary Formula for this condition would be:

- Liu Jun Zi Wan (6 Gentlemen tea pills) - for spleen Qi deficiency with dampness
- Xiang Sha Liu Jun Zi Wan adds Mu Xiang (Aucklandia/Saussurea Lappa) and Sha Ren (Fructus Amomum) to enhance the dampness resolving and Qi regulating aspect of the formula.

Specific formula additions based on biomedical testing include:

- Insulin/glucose disruption
 - Rou Gui/Gui Zhi (Cinnamon bark and twig)
 - Shan Yao (Radix dioscorea)
 - Ren Shen (Radix Ginseng)
 - Bai Zhu (Radix Atractylodes Macrocephalae)
- Hyperlipidemia
 - Hong qu (Monascus Purpureus)
 - Jiang Huang (Rhizoma Curcumae Longae)
 - Shan ha (Fructus Crataegi)
 - Dan Shen (Radix Salviae Miltiorrhizae)

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dry up some of the excess fluids, and warming the environment can be a good strategy in the right context. We also need to clarify or harmonize the system, clear away sticky material and unblock the drainages.

Specific formula additions based on biomedical testing are shown in Table 1.

Additional endocrine assessments could include a full thyroid panel, male or female hormone tests, a lipid panel, leptin and morning cortisol. HgA1c is a 4-month history of oxidative damage resulting from elevated blood sugar's oxidative effect on red blood cells via glycosylation. Sugar literally rusts your blood vessels. It's also good to look at dihydrotestosterone in addition to free and total testosterone levels, and I like to request SHBG (sex hormone binding globulin) as well. I like to see where testosterone is going in the body, whether in a male or a female, which will correlate with how well the patient is metabolizing in general. Cholesterol is not the enemy. It is an antioxidant and is the building block for the formation of our crucial steroid hormones.

Endocrine Pearl

Otto Warburg believed that cancer is a metabolic disease, and he was right. However, as we uncover more and more about the biochemistry of cancer, we are finding that although cancer uses glycolysis as its primary source of energy, different cancers use differing degrees of oxygen during this process. It was previously thought that cancer used anaerobic glycolysis to derive energy from sugar, but more recent discoveries have found that cancer also employs aerobic glycolysis. The story gets more complicated as fibroblasts and neutrophils get recruited and manipulated into providing the oxygen replete glycolytic product, ATP, and generating by-products of fermentation, lactate and pyruvate, that work to the cancer's benefit.

Liver Qi Stagnation

The Liver network is closely linked to the Gallbladder, and together they are responsible for metabolism of the life experience,

the production and concentration of bile leading to the emulsification of fat, and the Liver is directly responsible for the free flow of matter, energy and blood in the body. The element associated with the Liver is wood, which represents the outward, growing nature of living plants. If we take our pond example from the Spleen network analogy, and introduce the Liver's aspect in this system, we see the growth of algae, plants, and trees that interact with the environment by transforming light and carbon dioxide into organic material and oxygen. In Liver Qi Stagnation, the wood element becomes stagnant, and the free flow of energy and materials through the pond is blocked. This in turn can lead to a pathological change in our pond ecosystem, and the transformation of fluids and material is obstructed.

Liver Qi Stagnation is most often caused by the patient's inability to metabolize one or multiple parts of the life experience. The inability to metabolize the life experience can be likened to the adage, "How do you eat an elephant...?" to which the reply is "...one bite at a time". A trauma of any kind; physical,

emotional, or spiritual can result in an energetic or material burden that is not able to be broken down and moved through the digestive process towards excretion. When this occurs Liver Qi Stagnation results, and there is often a toxic burden of some kind that affects the body.

In Liver Qi Stagnation there is a loss of the free flow of energy or, "Qi" throughout the physical and energetic body. Signs and symptoms of Liver Qi stagnation include anger, depression, frustration, irritability, waking between 1 and 3 AM, digestive disturbances, cold hands and feet, premenstrual syndrome/ menstrual disturbances, breast tenderness, elevated blood pressure, headaches and eye issues. The liver's sensory orifice is the eyes, and there is a strong correlation between the Liver and the eyes in TCM. Relating to the detoxification network of the liver, and its connection with eyes, we observe in the clinic that when the liver's ability to handle the metabolism of toxins is over-burdened, the tiny capillaries and micro-machinery of the eyes get damaged. As the liver network becomes more damaged over time, the eyes show it first. Cataracts, retinal detachment, and macular degeneration are all diseases caused by oxidative damage.

Biomedical assessment would include a liver panel checking ALT, AST, Alkaline Phosphatase, Bilirubin (direct and indirect), GGT and also alpha-fetoprotein, amylase and lipase, which can be elevated with liver or gallbladder tumors, liver damage or blockage of the hepatobiliary system. When the biliary system gets backed up and bile is not dumping into the duodenum, it gets stuck in the bloodstream and elevated bilirubin can be detected in the blood. Alpha-fetoprotein is a marker for liver cancer.

Specific botanicals to promote circulation of liver qi, herbs to nourish liver blood and herbs to Clear Damp Heat are shown in Table 2. In particular, Bai Shao (White Peony or *Paenonia lactiflora*) makes a great TCM blood tonic. It softens and soothes the liver. Its active compounds include glycosides (paeoniflorin), flavonoids, proanthocyanidins, tannins, terpenoids, triterpenoids, and polysaccharides. It is spasmolytic, anti-oxidative, liver-protective, anti-mutagenic, fibrinolytic, and can be chemo-enhancing while also offering protection from chemotherapy induced side effects. In people that get floaters, and red, itchy eyes, look to the liver.

An exemplary formula is shown in Table 2. Xiao Yao Wan (Free and Easy Wanderer pills) -- for Liver Qi Stagnation with Spleen Qi Deficiency is one of the greatest formulas for women with menstrual problems, and for irritability induced by Liver Qi Stagnation in either gender. We can also use this formula

as a template, and add and subtract things based on the person.

“Jia Wei” Xiao Yao Wan adds Zhi Zi (Flos Gardenia), and Mu Dan Pi (Radix Mutan) for more heat clearing action.

Formula additions based on biomedical assessment are shown in Table 2.

An inability to adapt to toxic burden in the liver leads to Liver Qi stagnation, which in turn can lead to other patterns: Liver Fire, Liver Blood deficiency, Liver Damp-Heat and the development of heat toxins. These pathological conditions can be associated with coagulation disorders, vascular disease and heart damage, the development of autoimmune disease, and much more.

Endocrine Pearl

The Liver network plays a huge role in menstruation, and the development of Liver Qi Stagnation in a woman will often lead to menstrual imbalances. During the menstruating years of a woman’s life, estrogen comes primarily from the ovaries. When menopause begins, the ovaries stop producing estrogen, but it is still needed. The body has to undergo a biochemical shift to accommodate the lack of essence available and women move into what TCM calls the “Climacteric period”. During this time, the adrenals are still producing testosterone, which is biochemically very close to estrogen. The tendency is for the body to generate more fat around the mid-section, more adipocytes, and it is often easy for women to gain weight in this area while going through menopause. It’s the body’s natural adaptive mechanism to offset the estrogen deficiency that many women enter into, especially in a stressful, essence-depleting environment, by adding more endocrine glands in the form of adipocytes. These cells have the ability to make an enzyme called aromatase, which aromatizes circulating testosterone, thereby chemically altering its structure to become estrogen.

The estrogen is then available for use by the estrogen receptor systems in the body. With high insulin and glucose levels, aromatization can get out of hand. A depletion of available testosterone, coupled with elevating levels of estrogen pushes the metabolic machinery into more fat storage, inhibits thyroid function, and slows down the manufacture of our precious Spleen Qi.

Kidney Essence Deficiency

The kidney organ network is associated with the element of water. It is associated with the bone marrow and it is a mineralogical network that is considered one of the foundational structures of our being. The kidney network is the source of prenatal “Jing”, or “Essence” of the body. We are born with

a certain amount of Essence and that Essence is the material to make you, every moment of every day. It is stored in the kidney energy network, and includes the adrenal gland function. The adrenals, or the suprarenal glands, act as command centers for the distribution and utilization of essence, which takes on many forms. Steroid hormones and hormone precursors, such as DHEA, pregnenolone, cortisol, androstenedione, etc. all carry specific material and energetic information that is used by the body to maintain itself and its functionality. They represent the transformation of Essence into chemical/material form as essential aspects of the Blood.

The Kidney network involves the Essence, bone marrow, the brain, and the neuroendocrine system. It is emotionally linked to fear and the unknown. It is the earliest emotional system to develop, and does so during the first one and a half years of life. It is dictated by rhythm and cycles, and in the early years of one’s life, the daily rhythm of eating, sleeping and excreting.

Bone marrow is one of the fundamental substances that essence becomes. It is the material and directive force for production of the formed elements in the blood, and it generates growth factors that stimulate the growth of our tissues. In TCM, the brain is

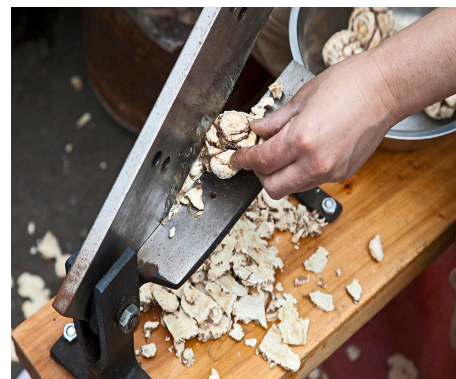


Table 2
Liver Qi Stagnation

Specific botanicals to promote circulation of liver qi include:

- Chai Hu (Radix Bupleurum)
- Xiang Fu (Rhizoma Cyperi Rotundi)
- Chuang Xiong (Rhizoma Ligustici Chuanxiong) – Ligustilide

Herbs to nourish liver blood include:

- Bai Shao (Radix Paeonia Lactiflora) – also softens the liver
- Dang Gui (Angelica Sinensis) also promotes blood circulation
- Shu Di/Sheng Di Huant (Radix Rhemannia Glutinosa)

Herbs to Clear Damp-Heat include

- Huang Qin (Radix Scutellaria)
- Zhi Zi – (Flos Gardenia)
- Long Dan Cao (Radix Gentianae)

Exemplary formula

- Xiao Yao Wan (free and Easy wanderer pills) -- for Liver Qi Stagnation with Spleen Qi Deficiency.
“Jia Wei” Xiao Yao Wan adds Zhi Zi (Flos Gardenia) and Mu Dan Pi (Radix Mutan) for more heat clearing action.

Formula additions based on biomedical assessment include:

- Liver enzyme elevations with unknown biomedical cause:
 - Niu Bang Zi (Fructus Arctii)
 - Gan Cao (Radix Glycyrrhiza Glabra)
 - Sheng Di Huang (Radix Rhemannia – raw)
 - Huang Qin (Radix Scutellaria)
 - Dong Chong Xia Cao (Cordyceps)
 - Chuan Xin Lian (Herba Andrographis)
- Elevated Bilirubin/ Jaundice
 - Yin Chen Hao (Artemisia Capillaris) Great for hepatitis C and jaundice. Fibro scan is newest technology that checks the elasticity of the tissue. It is a great assessment.
 - Zhi Zi (Flos Gardenia)
 - Da huang (Radix and Rhizome Rhei)
 - Huang Qin (Radix Scutellaria)
 - Chuan Xin Lian (Herba Andrographis)

considered the “sea of marrow”, and it is a communication network, a switchboard of sorts.

The signs and symptoms of kidney essence deficiency include alopecia, or thinning hair, tooth problems, dizziness, memory loss, neurological decline, low back pain, knee pain, spermatorrhea, osteopenia, osteoporosis, atrophy of the lower limbs, weakness of the lower back, weakness of the knees and weakness of the lower limbs. Kidney Essence deficiency is a weakening of the prenatal “Jing”, and is exacerbated by stress and aging, poor digestion/absorption/assimilation and the breakdown the daily replenishment of Essence. We have Spleen Dampness and disruption of the clear flow of essence (the muddy bog), adrenal fatigue, and hypochlorhydria.

Basic biomedical assessment includes:

- Kidney function tests
- BUN (Blood Urea Nitrogen)
- Creatinine
- GFR (Glomerular Filtration Rate)

Bone Evaluation

- Bone-specific alkaline phosphatase (indication of cancer), N-telopeptide, C-telopeptide. Especially in bone cancer.
- Vitamin D – stored solar energy – giver of life

Table 3
Kidney Essence Deficiency

Herbs to Nourish Essence:

- Sheng/Shu Di Huang (Rhemmania Glutinosa – Raw/Prepared)
- He Shou Wu (Polygonum Multiflorum). Helps to preserve hair
- Dong Chong Xia Cao (Cordyceps) – Yang/essence
- Nu Zhen Zi (Radix Ligustrum)
- Han Lian Cao (Eclipta Prostrata)
- Tian Men Dong (Wild Asparagus Tuber). Moisturizing plant for the kidneys.
- Tu Si Zi (Semen Cuscutae Chinensis)

Exemplary Formula

Er Zhi Wan (“Two Ultimate Teapill”)

- Han Lian Cao (Eclipta Prostrata)
- Nu Zhen Zi (Radix Ligustrum)

Additions for Yin/Blood deficiency

- Shu Di huang (Rhemmania Glutinosa – prepared)
- Tian Men Dong (Wild Asparagus tuber)

Additions for Yang deficiency

- Lu Rong (Deer antler)
- Russian Leuzea (Rhaponticum charthamoides)

Formula Additions based on biomedical testing include:

Osteopenia/Osteoporosis – bone loss (warming)

- Du Zhong (Eucommia bark)
- Lu Rong (Deer antler)
- Gu Sui Bu (Rhizoma Drynariae)
- Xu Duan (Radix Dipsaci)

Kidney Function:

- Huang bai (Cortex Phellodendri)
- Che Qian Zi/Cao (Semen/Herba plantaginis)
- Dong Chong Xia Cao (Cordyceps)
- Fu Ling (Poria Cocos)

In choosing specific botanicals to use, we need to make sure the person can take in and assimilate what we give them. Many people cannot digest these herbs. We have to use small amounts of tonics while working to get the dampness dried up. We need to get carminatives in place.

Herbs to nourish essence, an exemplary formula and formula additions based on biomedical testing are shown in Table 3. Salt, and the salty flavor guide energy to the Kidney network -- don't stop sea salt. We need it.

Building Blood

Many Essence building substances are cloying in nature. It is good to combine them with herbs that help to drain away or transform dampness, and herbs that promote the circulation of Qi and Blood to counter their cloying nature. Angelica sinensis is a great example, as it simultaneously nourishes the blood while promoting its circulation. In TCM we don't build Blood without also promoting the circulation of Blood, because over-enrichment leads to stagnation.

Bone broth is a therapy that I recommend for most of my patients who have cancer and are undergoing chemotherapy. It is an excellent source of minerals, collagen, and gelatin,

a substance used to nourish the Yin of the body. Get good whole bones from a good source and follow the instructions for preparation. Bone broth is a delicious base for soups and stews for deficient patients.

Because cancer sequesters iron to be used in the remodeling of genetic material, giving iron to anemic cancer patients can be dangerous. I recommend the use of bone broth in combination with powerful botanical formula to help bolster the marrow.

Dang Gui Bu Xue Tang (DBT) “Angelica Decoction to Build the Blood” is a decoction used to “raise the Qi and nourish the Blood”. It exhibits hematopoietic properties.

DBT biomedical actions include:⁶

- Promote hematopoietic function
- Stimulate cardiovascular circulation
- Prevent osteoporosis
- Increase anti-oxidative activity
- Stimulate immune response
- Increase insulin sensitivity

A recent study showed DBT, a traditional Chinese medicine formula has thrombopoietic activities in vivo in a mouse model.⁷

Li Dongyuan in China in the year 1247 described the formula as 10 qian of Radix Astragali and 2 qian of Radix Angelicae, denoting a 5 to 1 ratio of Astragalus to Angelica. Pharmacological results indicate that DBT can stimulate the production of erythropoietin (EPA), a specific hemotopoietic growth factor, in cultured cells. The two herbs have to be boiled together to achieve maximum activity.⁸

The Dang Gui Bu Xue Tang modification I use in the clinic includes:

- Huang Qi, 60-120 grams Dang Gui, 12-24 grams
- Yiyi Ren 15 grams
- Long Yan Rou 12-15 grams
- Chen Pi 12-15 grams
- Sha Ren 12-18 grams - add this at the end

Dosages vary based on severity of condition and the results of a decoction can be used for 1 day, 2 days or 3 days to alter quantity of formula taken daily.

Endocrine Pearl

I want to dispel the notion that the sun

causes cancer. The sun gives us life, and directly affects our immune system through the catalyzation of Vitamin D into a useable form. It is like the headlights for our immune systems, and it is essential for bone health. However, if we are eating a poor diet, especially one rich in processed foods, trans fats, and simple carbohydrates, and that often leads to a turbid and damp environment in the body, the adipose layer beneath our skin becomes disrupted, and our skin loses its resilience. A person in this condition will not be able to deal with the sun in a clear way.

Insulin-like growth factors, which become imbalanced in the metabolic syndrome environment, can act as co-activating factors for epidermal growth factor receptors that become growth promoters in some skin cancers. It's really back to the state of the internal terrain of the body. Is your spleen/stomach system functioning like a clean, clear flowing pond, or like a stinky bog? Are you breathing through the big stuff in your life - the big emotional issues, or are you filling up your liver with unresolved, partially metabolized crud? Are you burning up your essence more quickly than you replenish it through stress, and poor lifestyle decisions?

Pathological Factors

Some of the relevant pathological factors occurring inside the body include Blood Stagnation, Phlegm, Damp-Heat and Heat Toxins. They can be derived from what are called “pernicious external influences”, such as Wind, Damp Cold, Heat, Dryness, or Summer heat, or they may be the product of poor dietary and lifestyle choices, the result of an infection, or a malignancy.

Blood Stagnation

Cancer changes the internal environment in many ways through manipulation of the body's natural systems. For thousands of years, “Blood Stagnation” has been the primary pathological factor associated with tumors. Biomedicine defines tumors as coagulopathies, and cancer is almost always associated with hypercoagulation and elevated clotting factors. As we know, when a cancer is larger than about 2 mm's, its demands for energy become too great to support its growth, and it begins to create its own network of blood vessels through angiogenesis. It is well known that cancer patients are 7-10 times more likely to have a thrombotic event than people without cancer.

The fibrinolytic system, (also called the plasminogen activator system) controls not only the intravascular fibrin deposition but also participates in a wide variety of physiologic and pathologic processes. In cancer, the components of this system (PAI-1) are

Table 4
TCM Botanical Therapeutics for Blood Stagnation

Invigorate the Blood

- Dang gui (Radix Angelica S.) blood tonifier too
- Chuan iong (Radix Ligusticum) key chi tonic. Main headache herb
- Chi Shao (Red Peony) more blood moving than white peony
- Mu Dan Pi (Radix Moutan)

Promote Blood Circulation to Remove Blood Stasis

- Jiang Huang (rhizome Curcumae Longae) Curcumin.
Great blood moving herb. Can do many things at once
- Hu Zhang (Polygonum Cuspidatum) Best source of resveratrol
- Hong hua (Flos Carthamus)
- Tao Ren (Persica Seed)
- Dan Shen (Salvia Miltiorrhizone) Exemplary blood invigorating herb with nice action on the heart.

Break Blood Stagnation – more direct effect on clotting, tumors in ovaries and uterus

- E Zhu (Zedoaria)
- San Leng (Rhizoma Sparganii)
- Shui Zhi (Leech)

involved in tumor growth, invasion and metastasis, through their effect on angiogenesis and cell migration. These components are found in most tumors and their expression signifies not only their function but also carries prognostic value.⁹

Fibrinogen, D-Dimer and PAI-1 should be routinely checked in cancer patients. Elevated levels of any one of them is strongly predictive of life-threatening blood clot formation, increasingly so if all are elevated. Many chemotherapeutic drugs significantly increase this risk. Assessment prior to treatment can predict complications, and can be given with specific agents that inhibit hypercoagulation.^{10, 11}

Fibrin hardens clots by binding to platelets. Fibrinogen is a precursor to the formation of fibrin. D-Dimer is a peptide that is cleaved when body breaks down a clot. When D-Dimer is steady, i.e. the level in the blood is in the normal range, the body is in a state of fibrinolytic balance. Elevated D-Dimer is seen in hypercoagulative states, and is often routinely run in the ER as a part of screening for thrombosis. It can also be predictive of disease progression and mortality in cancer. The process of breaking down a tumor can be like breaking down a clot, where D-Dimer can be elevated in the context of the body taking apart a clot or a tumor.

TCM botanical therapeutics for blood stagnation are shown in Table 4.

At least 13 different anticoagulants have been obtained from leeches. The therapeutic capacity of the leech is based on secreted anticoagulants that are released while feeding. Hirudin is a specific inhibitor for thrombin, similar to Heparin.¹² We use the leech as one agent in a formula.

Fibrin digesting enzymes include lumbrokinase, nattokinase and bromelain. Lumbrokinase is a strong fibrinolytic enzyme from the

earthworm (*Lumbricus rubellus lysates*). In TCM, the earthworm, “Di Long”, clears what is called, “Wind-Phlegm” that blocks the small channels in the body.

Biomedical actions:
* Directly degrades fibrin and activates plasminogen
* Similar to tissue plasminogen activator - dissolves fibrin in thrombus
* Contains at least 6 lumbrokinase fractions (F1 to F6) with potent fibrinolytic activities.

Bromelain

Bromelain is a rich source of proteolytic enzymes that increase the absorption of protein if taken with meals. Bromelain should be undiluted and have a GDU rating of at least 2400 units, and should be taken between meals. (digests food if given with food), 1500 mg to 2 mg dosed 2-3 times per day. Its biomedical actions include:¹³

- Anti-edematous
- Anti-inflammatory
- Anti thrombotic
- Anti-metastatic
- Fibrinolytic

Nattokinase

Its properties closely resemble plasmin. Nattokinase is a potent fibrinolytic enzyme extracted and highly purified from a traditional Japanese food called Natto. Natto is produced by a fermentation process created by adding *Bacillus natto* to boiled soybeans. It can prevent the coagulation of blood and dissolve existing thrombi. It has demonstrated stability in the gastrointestinal tract. Nattokinase directly cleaves cross-linked fibrin in vitro.¹⁴ Natto is also consumed as miso and tempeh.

Phlegm

Phlegm forming foods include sweets, dairy products, refined starches and sugars and sweet fruits like bananas. Bananas are very phlegm forming and are not generally a good fruit for us. Dairy is a main phlegm former in many people. Raw dairy is better. Dairy is responsible for

casein allergy (protein) and lactose allergy (sugar). It is a mucous generating substance. Raw goat milk is better.

There is a spectrum of functionality for fluids in the body in TCM. Body fluids becoming more turbid leads to Dampness, which in turn can lead to phlegm, which is generally believed to be produced in the Spleen, and is stored in the Lungs. It commonly obstructs the sensory orifice of the Lungs: the nose, throat, sinus, and Eustachian tubes. It can also affect the heart by blocking the channels and collaterals.

Examples of phlegm masses would be PCOS (polycystic ovaries), lipomas and simple goiter/scrofula. Examples of phlegm and blood stagnation are Rheumatoid Arthritis (RA) with thickening of joints via Pannus formation, lymphedema and tumors. The early stages of RA present with painful joints, whereas later stages reveal a deformity of the joints that is caused by phlegm and blood stagnation.

Biomedical correlations are elevated insulin and IGF-1 levels, as well as leptin, and adipocyte hormones that regulate energy metabolism and balance. This is associated with increased obesity and correlates with insulin resistance via imbalances in levels of other adipose hormones, such as resistin, which increases insulin resistance by inhibiting communication between glucose and insulin and is associated with inflammation, and adiponectin, which is associated with decreased insulin resistance and improved plasma lipid profile.¹⁵

Herbs that will transform phlegm and remove phlegm obstruction are shown in Table 5. An exemplary formula is also shown in Table 5. Diet and lifestyle changes to affect

Table 5
Phlegm

Herbs that will transform phlegm include:

- Ban Xio (Rhizoma Pinelliae Ternatae) redirects rising stomach Qi – dissipates nodules
- Jie Geng (Radix Platycodi randiflorum)
- Chuan Bei Mu (Bulbus Fritillariae Cirhosae)
- Gua Lou (Fructus richosanthes)
- Chen Pi (Pericarpium Citri Reticulatae)

Herbs to remove phlegm obstruction include:

- Di Long (Lumbricus) which promotes circulation in channels
- Bing Pian (Borneol) – opens orifice
- Shi Chang Pu (Rhizoma Acori) – vaporizes turbid phlegm

An exemplary formula would be Er Chen Tang – “Two Cured Decoction” which consists of

- Ban Xia (Rhizoma Pinelliae Ternatae)
- Chen Pi (Pericarpium Citri Reticulatae)
- Fu Ling (Poria Cocos)
- Zhi Gan Cao (Honey fried Radix Glycyrrhizae Uralensis)

The TCM actions: dries dampness, transforms phlegm, regulates Qi, harmonizes digestion.

Table 6
Damp Heat

Specific botanicals that clear heat and dry dampness include:
Bitter drains fire from the body.

- Huang Qin (Radix Scutellariae), berberine rich, berberine is cold and bitter in nature, lung oriented, upper body, liver
- Huang Lian (Rhizoma Coptidis), berberine rich, more for the digestive system
- Huang Bai (Cortex Phellodendri), berberine rich, more for genito urinary tract
- Long Dan Cao (Radix Gentianae) great for liver, clears heat, good for genital herpes outbreaks
- Oregon Grape Root, rich in berberine with similar applications

An Exemplary Formula is Huang Lian Jie Du Tang --
“Coptis Decoction to Relieve Toxicity”. It is comprised of

- Huang Lian (Rhizoma Coptidis)
- Huang Qin (Radix Scutellaria)
- Huang Bai (Rhizoma Phellodendri)
- Zhi Zi (Flos Gardeniae Jasminoides)

It drains fire and relieves toxicity.

Specific botanicals are herbs that clear heat and clean toxins.
These include:

- Jin Yin Hua (Flos Lonicerae)
- Lian Qia (Fructus Forsythiae)
- Pu Gong Ying (Herba Taraxaci)
- Bai Hua She She Cao (Herba Oldenlandia) antineoplastic
- Chuan Xin Lian (Andrographis) antineoplastic
- Da Qing Ye (Folium Isatidis) antineoplastic
- Qing Dai (Indigo Naturalis) antineoplastic
- Lu Can (Camellia Sinensis) antineoplastic

An exemplary formula is Wu Wei Xiao Du Yin --
“Five Ingredient Decoction to Eliminate Toxin”. This consists of

- Jin Yin Hua (Flos Lonicera Japonicae)
- Pu Gong Ying (Dandelion)
- Zi Hua Di Ding (Herba cum Radice Viola)
- Ye Ju Hua (Flos Chrysanthemum Indici)
- Zi Bei Tian Kuei (Herba Begoniae Fim.)

TCM actions: clears heat, relieves toxicity, cools the blood and reduces swelling.

the internal constitution are the basics for the long term treatment of phlegm conditions.

Damp-Heat

Damp Heat, which is Dampness (turbidity) combined with pathological Heat, can be a result of:

- Alcohol, known to Native American Indians as “firewater”. The induction of free radical damage in the liver leads to heat, turbidity and stagnation.
- Infection induces damp heat to generate a favorable terrain for the infecting organism, and infectious agents generate Damp-Heat in the body through interaction with the immune system.
- Cancer thrives in a Damp-Heat environment and generates Damp-Heat - “metabolo-genomics”.
- Inflammation: herbs that clear heat are used to treat chronic and acute inflammation.

The combination of Dampness and Heat, leading to the formation of “Damp-Heat”, can be more detrimental, and harder to get rid of than either one alone. These pathogenic factors represent changes in the body’s ecosystem that correlate with changes that can be observed through a microscope, or through specific biomedical blood tests.

Like all living things, cancer is opportunistic. With more Damp-Heat in the body, the conditions are more favorable to support cancer. Damp-Heat conditions can manifest with inflammation and oxidative damage and the Damp-Heat terrain includes endocrine disruption, infection, toxic substances, toxic emotions, and poor diet and lifestyle choices. It is also a component of autoimmune disease progression and can be aggravated by food sensitivities/allergies that lead to turbidity. Changing the ecology of the internal environment is key.

Biomedical correlations:

Objective findings include blood pressure elevation, rapid heart rate, elevated body temperature and some infectious lesions.

Inflammatory markers include CRP (C-reactive protein), SED/ESR (Erythrocyte Sedimentation Rate) and Homocysteine. These are the main ones to look at. CRP can also be an indicator of disease progression.

Specific botanicals that clear heat and dry dampness are shown in Table 6. These are multitasking plants that change the internal environment. They have documented anti-microbial, anti-inflammatory and anti-neoplastic properties. An Exemplary Formula is also shown in Table 6.

Scutellaria Baicalensis, or Huang Qin is also known as Baikal Skullcap or Golden Root. It is an herb that clears Damp Heat, disperses Fire, expels toxins, stops bleeding and prevents miscarriage. It grows in China and Russia, and is considered a safe plant to use during pregnancy.

Heat Toxins

Heat Toxins are produced during infec-

tion, raging cellular processes, loss of control and the generation of free radicals and oxidative damage, and from poison. We may see pus, abscesses, sores and ulcerations, or byproducts of cancer metabolism. We see soreness and swelling of the throat during wind-heat invasion/early stages of an upper respiratory infection.

Specific botanicals are herbs that clear heat and clean toxins are shown in Table 6.

An exemplary formula is shown in Table 6. Hu Zhang – Giant Knotweed or Polygonum Cuspidatum is an herb of note. It is the richest known source of resveratrol, and has traditionally been used to treat cancer and address three underlying pathological factors: Phlegm, Blood Stagnation, and Heat Toxins. Several compounds found in the plant have shown anti-cancer actions, including resveratrol, emodin and chrysophanol. Specific TCM actions include expelling toxins, transforming phlegm, calming cough, moving blood, clearing heat and draining dampness.

Biomedical actions of Resveratrol currently under investigation:

- Acts as a direct antioxidant, has both estrogenic and anti-estrogenic activities (Modulation),
- Is cancer preventive: effects on biotransformation enzymes, preservation of normal cell cycle regulation, inhibits proliferation and induction of apoptosis, inhibits tumor invasion and angiogenesis, anti-inflammatory, organ system protective.
- Trans-veratrol has anti-HIV effects.
- Resveratrol enhances the effectiveness of taxol in lung cancer by altering multiple pathways including p21waf1, p27kip1, PTEN, E-cadherin, EGFR and Bcl-2.¹⁶ It reverses drug resistance of taxol in prostate cancer by down-regulating tyrosine kinases and STAT1.¹⁷
- In animal models, resveratrol inhibits vascular cell adhesion molecule expression, stimulates endothelial nitric oxide synthase (eNOS) activity, inhibits platelet aggregation, inhibits ischemia, normalizes gene expression, protects mice against diet-induced-obesity and insulin resistance, and significantly extends lifespan.



Bone Broth

Basic Bone broth ingredients

*All bones from local, organic, free range source

3-5 pounds organic bones (beef, pork, lamb or poultry)
5 to 6 quarts filtered water, or slightly more as needed
2 bay leaves
2 to 3 (5-inch) pieces kelp, kombu or alaria sea vegetable
3 tbs. lemon juice, organic red wine vinegar or raw apple cider vinegar
Additional water as needed to keep amply covered during cooking

Instructions

1. Combine ingredients in 8-quart stockpot, adding enough water to amply cover bones. Cover and bring to full rolling boil over medium heat then reduce to medium or medium-low with bubbles on surface. Skim off any foam that rises to the surface within the first 30 minutes.
2. Simmer for 12 to 14 hours, until bones are soft or broth appears milky, adding more water as needed to keep bones covered during cooking. To add more marrow and nutrients to broth mash bones, as much as you can, with potato masher after 6 to 8 hours.
3. Remove lid and simmer for 1 hour or as needed to reduce volume (so it takes p less space in storage) and equals about 3 quarts.
4. Scoop out and discard bones using large slotted spoon or pour through a large colander with an oversized bowl underneath. Allow broth to cool for ½ hour. Set fine mesh strainer over 1- to 2-quart Pyrex measuring container or 1-quart Mason jars in sink. Ladle or pour broth into strainer and measuring container or directly into 1-quart wide-mouth jars in batches. Discard scraps caught in strainer. Repeat with remaining broth. Seal jars and refrigerate.
5. Broth will become thick and gelatinous as it cools. Before using, skim off and discard fat on top. Use refrigerated broth within two weeks or freeze for longer storage.

When ready to eat, take a bowl of the broth into a separate pot, bring to a boil and put in desired vegetables and meat, salt and spices. Cook for 5 minutes and serve.

Try to consume one to two bowls per day. Individual portions can be frozen for later use.

Source: Kara Miller, Lac, MAcOM, CH, Jade Mountain Medicine

From a TCM perspective, a dynamic interplay of pathological factors and disharmonies in the organ networks, including the few that we have discussed here: Spleen Dampness, Liver Qi Stagnation, Kidney Essence Deficiency, Qi and Blood Stagnation, Phlegm, Damp-Heat and Heat Toxins, result in some of the more common diseases seen in the clinic today, including cancer.

Whole medicine addresses the whole person and supports the endocrine and neuroendocrine systems, balances the organ networks and resolves pathological factors by utilizing all relevant information and applying therapeutics based on individual presentation. With chronic, debilitating disease, my goal in the clinic is often not to “cure” the disease, but to begin a process of healing with the patient. My first goal is to slow the progression of the disease, then stabilize the disease process and strengthen the person, then reverse the disease process, which could take weeks, months, or years, and eventually find a long term, managed solution, or in some cases a “cure”. However, the practice of good medicine is not all about cure. It’s first about helping people find ways

to improve their quality of life and then helping them to live longer lives.

As someone who has developed an intimate relationship with cancer, what I call “the disease of our time”, I have dedicated a great deal of time to evaluating the potential for a holistic, collaborative approach to managing this disease. The greatest inroads we can achieve at this time come in the form of preventive strategies that improve the health and well-being of our patients. The process of “fighting cancer” is a much more difficult and disturbing place to confront this disease, and although almost every one of us has been touched by it, “the race for the cure” is somewhat of a futile endeavor.

Cancer is a term that represents hundreds, if not thousands of diseases that manifest uniquely in each individual, just as a living organism changes based on the environmental conditions it is presented with. Owing to the urgency created by the situations that so many people are presented with in the face of a cancer diagnosis, the lion’s share of our energy is directed at disease management. However, if we do not find the resources to direct our efforts and intention at the preven-

tion of this devastating disease, we may find ourselves deep in a war we cannot win.

In closing, I would like to quote one of my colleagues, and mentors, Jonathon Treasure, MNIMH. “The word cancer is used almost exclusively as a noun, and this needs to change. Although most of us do not have a diagnosis of cancer at this time, the human race, as a whole is “cancering”.

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