

Traditional Chinese Medicine's (TCM) Complementary Role in Treating Western Medicine-Induced Cancer Therapy Side Effects

Dr. Lee Chen-Yu, BA, OMD and Marc Wasserman presenting in Nanjing China on May 16, 2014 Here are slides form their presentation. Dr. Lee spoke about his work using Traditional Chinese Medicine (herbs) to reduce the toxicities of Western conventional treatments.

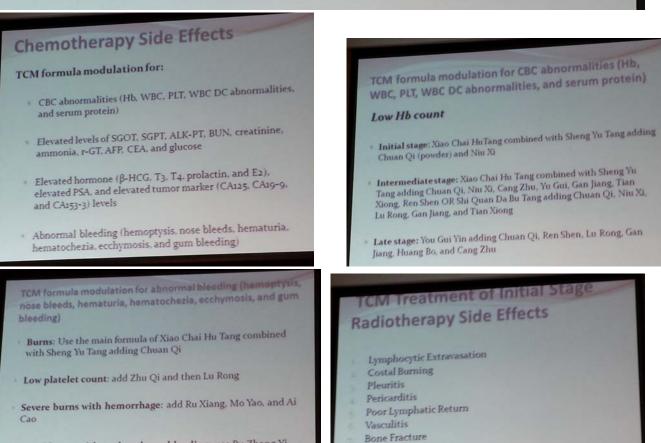
Surgery Specific methodology as follows: Anesthesia suppresses the immune system Resection interferes with the normal function of the nervous, vascular, and lymphatic system, **Chemotherapy Side Effects** neurotransmitters, and the flow of qi in the channels Treatment of Initial Stage Radiotherapy Side Effects and network vessels Both physical and emotional trauma arises through Treatment of Intermediate and Long-Term Side neuroendocrine imbalance and tumors may crop up at Effects of Chemotherapy and Radiotherapy surgical sites Chemotherapy Radiotherapy Burns, cloud swelling, hyaline deposits, sclerosis, Damages vascular walls, endomyocardium, uterine and ovarian, liver and kidney, nerves and soft tissue, and the endocrine system stenosis, fibrosis, atrophy, necrosis, and loss of normal Suppresses cell growth at the growing points and growth plates, periosteum, epithelial cells, and endocrine and functioning cells Growth suppression and burn lesions of blood vessels, nerves, bone marrow, epithelial cells, soft tissue, and exocrine glands Interferes with bone marrow differentiation leading to periosteum Hemorrhaging, atrophy, adhesions, stenosis, and nerve desiccation and fibrosis Suppresses and interferes with the normal metabolic and conductance interference causing pain and phantom endocrine functions of the brain, nervous system, spinal cord, kidney, liver, spleen, lung, pancreas, thymus, blood pain Interferes with bone marrow differentiation causing vessels, testis, and ovaries Triggers dementia; and may lead to the development of loss of bone mass, desiccation, and acceleration of secondary cancers. apoptosis

Main Formulas:

① Xiao Chai Hu Tang combined with Sheng Yu Tang adding Chuan Qi

⁽²⁾ Shi Quan Da Bu Tang adding Chuan Qi (powder), Huai or Du Niu Xi, Xi Lu Rong (powder), Gan Jiang, Tian Xiong, and Huang Bo

③ You Gui Yin adding Chuan Qi, Ren Shen (powder), Lu Rong, Gan Jiang, Tian Xiong, and Huang Bo



Skin Burns

Lung Lesions

Inadequate Hematopoiesis

Rectal burns with anal prolapse bleeding: use Bu Zhong Yi Qi Tang or Gui Qi Jian Zhong Tang adding Chuan Qi, bleed Shang Yang (LI 1), Er Jian (LI 2), and San Jian (LI 3) acupoints on the Large Intestine (LI) Meridian, needle He Gu (LI 4) and Chi Ze (Lu 5), and apply moxibustion on Bai Hui (GV 20)

Lymphocytic Extravasation

Treatment basis:

·Dual qi and blood deficiency with yang deficiency and possibly even great yang-supplementation in order to rapidly improve the patient's condition

-Lymphocytic extravasation results from the interference of normal growth hormone secretions (epidermal growth factor (EGF)) levels) caused by burnt granulation tissue

Necessitates major tonification of the qi, blood and yang; which stimulates production and secretion of epidermal growth factor (EGF) to promote granulation tissue growth enabling wounds to heal

Lymphocytic Extravasation

Prescription:

Gui Qi Jian Zhong Tang. Shi Quan Da Bu Tang, or Bu Yang Huan Wu Tang gradually adding Gan Jiang, Fu Zi and Rou Gui (increasing the amount up to 5-8 gian) and add Ren Shen (starting from 3 gian up to 5 gian)

■For esophageal burns→add a large dosage of Huang Qin

• When the patient begins treatment with great yang supplementation medicinals the lymphocytic extravasation may have a rancid odor of decaying flesh, but as the granulation tissue grows the decaying flesh odor will dissipate

Costal Burning

- Classified as steaming bone heat with fever arising after dusk and peaks in the middle of the night with night sweating occurring near dawn
- fever subsides during the day but the patient's body temperature still remains above normal

Treatment basis: osteomyelitis, Shao Yang heat, and steaming bone taxation heat

Costal Burning

Prescription:

 For night sweating, late afternoon tidal heat, and fatigue present at the onset → immediately add blood-activating. blood-cooling, osteomylitis-abating medicinals (Qing Hao, Zhi Mu, and Di Gu Pi or Huang Bo, Mu Dan Pi and Chi Shao)

Otherwise the bone marrow will erode and necrotize

At this time Qing Hao, Zhi Mu, Di Gu Pi, and Huang Bo→serve as sovereign medicinals unless tumor markers are extremely high

Pleuritis

Prescription:

- Yin-nourishing and heat-abating medicinals such as Sha Shen. Mai Dong, Yuan Shen, and Sheng Di
- If hemoptysis presents Ou Jie and Ce Bo Ye or heavy dosages of Huang Qin and Mu Dan Pi and add a small amount of Ma Huang and Xing Ren
- If there is no pleural effusion → Ye Gan Ma Huang Tang. Xiao Qing Long Tan, or Xiang Sha Liu Jun Zi Tang adding Ma Huang, Xi Xi, Wu Wei Zi, Zi Wan, Kuan Dong Hua, and Bai Guo
- If treatment is ineffective→Gan Jiang and Rou Gui must be added

Pleuritis

Prescription:

- Yin-nourishing and heat-abating medicinals such as Sha Shen. Mai Dong, Yuan Shen, and Sheng Di
- If hemoptysis presents Ou Jie and Ce Bo Ye or heavy dosages of Huang Qin and Mu Dan Pi and add a small amount of Ma Huang and Xing Ren
- If there is no pleural effusion → Ye Gan Ma Huang Tang, Xiao Qing Long Tan, or Xiang Sha Liu Jun Zi Tang adding Ma Huang. Xi Xi, Wu Wei Zi, Zi Wan, Kuan Dong Hua, and Bai Guo
- If treatment is ineffective→Gan Jiang and Rou Gui must be added

Pleuritis

Wet pleuritis presenting with viscous phlegm-+ Lai Fu Zi, Zhi Ke, Zhi Shi, Bai Jie Zi, and Huang Qin to transform phlegm and abate heat

Treatment Basis:

 If watery phlegm presents → yang deficiency, kidney yang deficiency, and water flooding phlegm

 If pleural effusion presents this condition is classified as water amassment → Chai Ling Tang or Ting Li Da Zao Xie Fei Tang

Pericarditis

Prescription:

- Yu Sheng Bu Yang Huan Wu Tang adding Mu Dan Pi, Zhi Zi, Di Gu Pi, Huang Lian, Fu Ling, and Ze Xie
- For afflictions involving the myocardium Huang Lian is superior to Huang Qin
- Any type of inflammation will result in edema, especially endomyocarditis and myocarditis.→ must add Fu Ling and Ze Xie, which can alleviate coughing and panting caused by pericardial and pleural effusion

Poor Lymphatic Return

Prescription:

- Bu Yang Huan Wu Tang adding Cang Zhu, Fu Ling, Ze Xie, and Yin Xing Ye
- Poor lymphatic drainage often presents with scleredema that remains pitted after applying pressure and requires the addition of at least 8 gian of Yin Xing Ye

Prescription:

Initial stage: stasis heat pattern -- disperse inflammation and abate heat using Xiao Chai Hu Tang combined with Sheng Yu Tang adding large dosages of Huang Qin and/or Huang Lian and Huang Bo

Vasculitis

- Remission stage: remove heat-clearing medicinals and replace with qi-supplementing and blood-supplementing medicinals to promote granulation
- Late stage: when vessels atrophy and collapse the condition is classified as qi and blood deficiency with yang deficiency \rightarrow qi and blood-supplementing formulas adding Gan Jiang, Fu Zi, and Rou Gui and a small dosage of Huang Qin to counterbalance the heat

Bone Fracture

Prescription:

- Radiotherapy induced bone fractures → large dosages of Gan Jiang, Fu Zi, Rou Gui, and Di Gu Pi should be added to the original formula
- If the bone fails to heal (non-union) this condition is classified as true cold and false heat → great yangsupplementing medicinals, while also adding steaming bone heat-abating medicinals to guard against osteomyelitis arising

Skin Burns

Prescription:

- Especially for radiotherapy following surgery → great yangsupplementing medicinals adding qi and bloodsupplementing medicinals
- Externally apply Da Huang (powder) sprinkling powder on the lesion to prevent viruses and bacteria from infiltrating the wound and forming a protective "medicinal membrane" barrier
- Da Huang (powder) should be left on allowing it to naturally "shed" off and once it has "shed" and there aren't any remaining lymphatic secretions then apply Zi Yun Gao

Lung Lesions

- Lung lesions commonly occur in lymphatic ducts, vasculature, and nerves
- If spontaneous pneumothorax arises then it is necessary to prevent pulmonary fibrosis from manifesting
- Classified as dual deficiency of qi and yin → Xiao Chao Hu Tang combined with Sheng Yu Tang adding Tian Men Dong, Mai Men Dong, Bai He, and Xuan Shen
- For pulmonary fibrosis presenting with hemoptysis Zuo Gui Yin adding other medicinals

Intermediate and Long-Term Side Effects of Chemotherapy and Radiotherapy

- Nerve Damage
- Liver and Kidney Inflammation and Failure
- Injury to the Endangium and Endomyocardium
- Mucous Membrane Swelling, Vasculitis and Hemorrhagic Purpura
- Osteolysis and Bone Pain
- Bone Marrow Desiccation and Suppression of Hematopoiesis
- Gonadal Atrophy

Inadequate Hematopoiesis

*Disruption of normal differentiation of bone marrow and hematopoietic function due to lack of regulatory control of bone and bone marrow from the central nervous system and blood, leading to inadequate hematopoiesis and aberrant nerve conductance

Lungs secrete precursor hormone to EPO

During radiotherapy peripheral damage may occur in the lung; injuring lymphatic ducts and vasculature in the thoracic and abdominal region and causing burning, spasm, stenosis, and eventually anemia

Inadequate Hematopoiesis

Prescription:

Shi Quan Da Bu Tang, You Gui Yin, or Xiang Sha Liu Jun Zi Tang adding Gan Jiang, Fu Zi, Rou Gui, Tu Si Zi, Huang Qi, Ren Shen, Chuan Qi, Lu Rong, Fu Ling, and Ze Xie (to prevent swelling)

Nerve Damage

*Chemotherapy and radiotherapy → disrupts and severs nerve pathways causing organ damage while the body's repair mechanisms are slow to respond

•Vascular walls become fragile and atheroscleritic and prone to infarct, hemorrhage, cerebral atrophy, hydroencephalus, reduced gyri, thickening of the sulci, and swelling of the dura mater and pia mater

 Cerebral neuropathy arises with neural transmission disruption presenting with symptoms of lumbar and leg weakness; speech difficulties: dysphagia; loss of smell, taste, and touch senses; mental sluggishness and lethargy; numbness; action tremor; and general weakness and malaise

Nerve Damage

Prescription:

- Yu Sheng Bu Yang Huan Wu Tang adding Gan Jiang, Fu Zi, Rou Gui, Huang Qin, Tian Ma, Ren Shen, and Chuan Qi
- If progressive atrophy of the cerebral spine presents → add Lu Rong

Nerve Damage

- Stem cell research indicates that Ren Shen and Lu Rong
 offer excellent efficacy enabling young stem cells to quickly
 proliferate and evolve into hematocytes thus effectively
 reducing the numbers of aged stem cells
- These young stem cells are adept at homing and will initiate repair and restoration. If these young stem cells are further selected then the homing time can be further accelerated

Liver and Kidney Inflammation and Failure

Initial stage: hepatitis, renal edema, and nephritis

 Intermediate & late stage: damage to the liver and kidney such as chronic hepatitis, renal failure, and uremia arise

Liver and Kidney Inflammation and Failure

Prescription:

- For drug-induced hepatitis and nephritis Xiao Chai Hu Tang combined with Sheng Yu Tang adding large dosages of Huang Qin, Huang Lian, and Huang Bo or Mu Dan Pi and Chi Shao
- For drug-induced hepatitis → large dosages of Huang Qin is most effective
- I For hepatitis and nephritis → add Cang Zhu, Fu Ling, and Ze Xie

For patients with tumors originating in any organ whose chemotherapy or radiotherapy has induced hepatitis or nephritis → Xiao Chai Hu Tang combined with Sheng Yu Tang adding Cang Zhu, Fu Ling, and Ze Xie

Liver and Kidney Inflammation and Failure

- If a case presents where the kidney has already been damaged and the initial stage of edema presents then the extent of water amassment must be carefully assessed
- If there is extensive water amassment Wu Ling San (replacing Gui Zhi in the original formula with Rou Gui) adding Huang Qin, Huang Lian, and Huang Bo or Zhi Zi Bai Pi Tang combined with Wu Ling San adding Chuan Qi
- Ren Shen prevents and treats hepatic cirrhosis, uremia, and proteinuria and it can be used throughout all stages in the treatment of liver and kidney damage

Injury to the Endangium and Endomyocardium

 Immediately after injection of chemotherapeutic agents → burns, edema, increased heart rate, and short inhalation with panting → followed by rapid degeneration and atrophy

Injury to the Endangium and Endomyocardium

Prescription:

- Xiao Chai Hu Tang combined with Sheng Yu Tang adding other medicinals
- Xiao Chai Hu Tang combined with Sheng Yu Tang enters Shao Yang and the heart and resolves burns, inflammation, thrombostenosis, and atrophy of endangium

Injury to the Endangium and Endomyocardium

- Repeated insult from chemotherapeutic agents damage to the endomyocardium and myocardium may arise
- At the onset there will be edema in the myocardium and thus a surging, large, rapid and forceful false pulse may present
- If this false pulse is misinterpreted to mean the patient is in robust physical condition -> prescribing cold bitter, swellingdispersing and heat-abating medicinals
- This errant basis of treatment and prescription will severely compromise the patient's physiological vitality

Injury to the Endangium and Endomyocardium

- This treatment regimen will ensure that the endangium remain free of inflammation, atrophy and collapse
- Even if the patient does present with atrophy, after a few weeks improvement and recovery will occur, and the patient will be able to continue receiving chemotherapy injections

Mucous Membrane Swelling, Vasculitis and Hemorrhagic Purpura

Commonly present following the injection

 Steven-Johnson Syndrome, affecting mucous membrane throughout the body (e.g., nasal mucosa, cornea, oral cavity, esophagus, trachea, urethra, and vagina mucosa) may present immediately following injection

Caustic side effects of chemotherapy may induce an acute allergic reaction producing severe inflammation and lymphedema, burning and inflammation of the endangium throughout the entire body, and even induce hemorrhagic purpura over a large area of the body

*Clinical presentations: skin rash, cough, sore throat, stomach pain, and constipation

Mucous Membrane Swelling, Vasculitis and Hemorrhagic Purpura

- Prescription: Xiao Chai Hu Tang combined with Sheng Yu Tang assessing degree of inflammation and swelling to determine amounts of Huang Qin, Fu Ling, and Ze Xie
- For patients with inadequate hematopoiesis → add Gan Jiang, Fu Zi, Rou Gui, and Ren Shen
- If treatment is ineffective, change the basis of treatment to dual supplementation of spleen and kidney qi and blood → Xiang Sha Liu Jun Zi Tang combining Liu Wei Di Huang Tang adding Huang Qi and Ren Shen
- If treatment is still ineffective → change the basis of treatment to supplementation of kidney yang → You Gui Yin adding other medicinals

Mucous Membrane Swelling, Vasculitis and Hemorrhagic Purpura

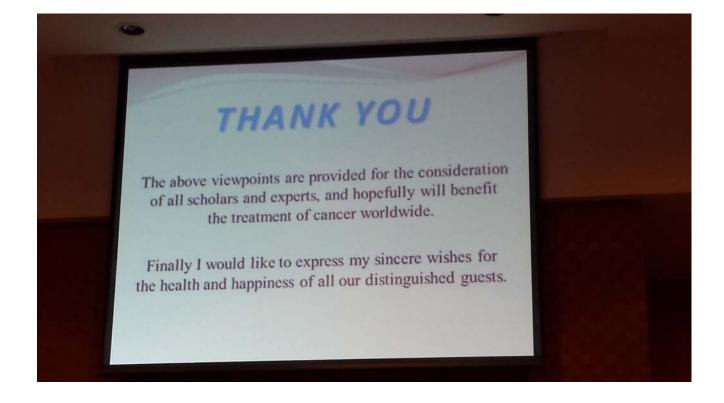
Variations of these formulas based on specific symptoms:

- For edema of the tracheal mucosa → add Ma Huang, Xing Ren, Ting Li Zi, and Fang Ji
- Prevents tachypnea (hasty breathing), panting, inhaling short breaths, and being able to breathe while sitting up but not when reclined
- Defends against progression into pulmonary edema, pulmonary hypoxia, pulmonary embolism, cardiopulmonary disease, and pulmonary congestion
- If the nasal mucosa is affected → add Ma Huang, Xin Yi, Bai Zhi, and Xi Xin

Mucous Membrane Swelling, Vasculitis and Hemorrhagic Purpura

Variations of these formulas based on specific

- symptoms: For urinary tract burns that induce enlarged prostrate in males → add Long Dan Cao to prevent urinary retention from arising
- (if burning, hypertrophy, urinary retention or reflux arises in the endothelium anywhere in the urinary tract, e.g., bladder, urethra, prostrate, and kidney, it can cause hydronephritis and exacerbate into renal failure)
- If the endometrium is damaged from burns caused by chemotherapy menstruation may not occur, the endometrium may atrophy or more commonly adhesions form→TCM can remedy this condition by using the above formula(s) adding Chuan Qi



If you are interested in Traditional Chinese Medicine, you MUST have a practitioner to work with. All Chinese herbal formulas are made for the individual. The above mentioned herbs will be 'adapted' for the person they are prescribed for. All of the slides above are simply a guide for your TCM practitioner. Your local practitioner could contact Dr. Lee (native Cantonese-language speaker) <u>chenry.lee@msa.hinet.net</u> Or contact Mr. Marc Wasserman (studying with Dr. Lee for the last decade) <u>mhwasserman@gmail.com</u> Dr. Lee is located in Taiwan, ROC.