

# Complementary and Alternative Medicine and Chinese Medicine in Lung Cancer

Misha Ruth Cohen, OMD, LAc

## Introduction

Complementary and alternative medicine (CAM) in lung cancer may include Chinese medicine, Western herbal therapy, relaxation and visualization techniques, prayer, exercise, nutritional supplementation, and dietary therapy. In this chapter, the primary focus will be on Chinese medicine and related therapies that may be used in conjunction with other complementary and alternative therapies and Western medicine.

## Chinese Medicine

In China and many parts of the United States today, people with various types of cancer seek out Chinese medicine in addition, or as an alternative, to Western medical treatment. In lung cancer, Chinese medicine is used primarily for supportive adjunctive care in conjunction with Western treatments of surgery, chemotherapy, and radiation therapy. When intensive Western treatments are being used, Chinese medicine can relieve negative side effects and improve the treatment outcome.

In 2007 and 2013, a multidisciplinary panel of experts in oncology and integrative medicine updated the guidelines and made recommendations on complementary therapies for use in lung cancer patients. These include acupuncture, massage therapy, mind-body modalities, nutrition, botanicals, and exercise.<sup>1,2</sup> In the evidence-based clinical practice guidelines the American College of Chest Physicians (ACCP) panel recommended that all patients with lung cancer be asked specifically about the use of CAM and given counseling as it is important to minimize potential harm or delay in treatment. In addition, the panel concluded that mind-body modalities and massage therapy can decrease anxiety, mood disturbance, and chronic pain; acupuncture may help control pain and other side effects; and herbal products and other dietary supplements should be evaluated for side effects and potential interactions with chemotherapy and other medications.<sup>1,2</sup>

In China, where Chinese medicine is used in conjunction with Western medicine in hospitals and clinics, men and women undergoing various treatments for cancer are offered the choice to use Chinese herbal medicine, acupuncture, *Qi Gong*, and exercise as adjunctive therapies to reduce side effects and increase the efficacy of the Western treatment. Extensive research about CAM is being done in Chinese hospitals and oncology settings in conjunction with Western research approaches and treatments.

Chinese medicine is a system of medicine that has been used for thousands of years in the treatment of health imbalances and disease. Therefore, there is a particular interest in exploring research about Chinese traditional medicine in cancer and treatment options.

### *The Foundations of Chinese Medicine*

Traditionally, Chinese medicine has relied on the following forms of treatment to prevent or remedy disease and disorders: herbal therapy, acupuncture, acupressure/massage, dietary therapy, and exercise and meditation (often in the form of *Qi Gong*). These therapies are used to help the body restore balance and harmony in the mind, body, and spirit, especially when the body is attacked by a disease causing “pernicious influence” or disrupted by internal imbalances.

There are three main areas of contrast between Western and Chinese medicine: general approach to symptoms and disease, approach to cancer, and synergy between Western and Chinese medicine.

### *General Approach to Symptoms and Disease*

The Western medicine approach includes the design of drugs and other therapies to treat a specific disease or disorder. In Western medicine, different people who have the same diagnosis might be prescribed the same drug to treat the problem.

In contrast, a symptom such as pain may be viewed as a symptom of several possible disorders and disharmonies affecting an individual’s mind, body, and spirit. Chinese medicine treatment focuses on identifying the underlying disharmony (diagnosis) and creating an individualized treatment suited to that diagnosis. This makes double-blind controlled studies difficult to create because each individual person in a study may be treated differently. However, it is sometimes possible for various types of rigorous research to be conducted.

Chinese medicine traditionally did not discuss viruses, bacteria, or cancer and did not view the immune system and disease resistance in the same way as Western medicine. Therefore, it has been difficult for Western physicians and researchers to understand that Chinese medicine treatments may attack these causes of disease.

The goals of treatment are often different in Chinese and Western medicine. Western medicine is usually designed as an “all or nothing” proposition — either the therapy cures the disease or does not. In contrast, Chinese medicine may produce healing in the mind, body, and spirit, even in the presence of persistent disease.

In the 21<sup>st</sup> century, Western scientific insights and Chinese treatment of the mind, body, and spirit have begun to overlap. There is no contradiction between the two systems. When clearly understood, they can strengthen and complement each other.

### *Approach to Cancer*

Traditional Chinese medicine treatments and Western therapies approach cancer treatment from different points of view. Although most Western cancer therapies focus on killing the cancer or eliminating the tumor, the primary goal of Chinese traditional medicine is to create wholeness and harmony within a person, allowing the body to heal itself. Chinese medicine strives to make the internal constitution stronger and focuses on immune functions that allow the body to fight cancer. Western medicine is just beginning to look at some of these concepts and treatments. Instead of primarily focusing on the effect of Chinese medicine treatments on tumor-eradicating abilities, it may be more beneficial to study the effect of Chinese traditional medicine on immune responses.

Chinese medicine should be evaluated on its own terms and in light of its own treatment goals and objectives, not in terms of treatment goals and objectives defined by Western medicine. In Western medicine, the focus is on eradicating illness after it appears in the body. In contrast, Chinese traditional medicine has a focus on disease prevention, accomplished by creating balance and harmony in the body's various systems.

Studies that evaluate the efficacy of a treatment to prevent disease are difficult and take many years to complete. These studies are needed to fully understand the efficacy of Chinese medicine.

Chinese medicine and other therapies that might be used as alternative therapies are most commonly used in Asia as primary therapy in treating early stages of certain types of cancer, although not as primary treatment in lung cancer. However, most Western studies are designed to evaluate the effectiveness of Chinese medicine in treating very late stage cancers. Yet, this is frequently a stage when any treatment may be much less successful, harder to tolerate, or more difficult for patient compliance. The rationale for this research is that if it works in very late stages, then it is likely to work in earlier stages. However, in the traditional Chinese medicine literature, there is little indication that the recommended Chinese medicine therapies will stop cancer in a very late stage. Nevertheless, studies that focus on supportive treatment and palliative care in late stage disease may be helpful. Dismissing a treatment because it is not effective in very late stage cancer may deny scientists and practitioners the opportunity to study an effective treatment for early stage cancer.

### *Synergy between Western and Chinese Medicine*

Western medicine may be improved by the simultaneous use of traditional Chinese medicine therapies. In China, and in some centers in the West, people undergoing chemotherapy, surgery, and radiation therapy treatment have the choice to use Chinese medicine therapies as adjuncts to decrease side effects and increase the efficacy of Western medical treatment.

A recent meta-analysis that evaluated Chinese herbs in conjunction with platinum-based chemotherapy in non-small cell lung cancer concluded that Chinese herbal medicine based on

*Astragalus* (a Chinese herb) may increase effectiveness of platinum-based chemotherapy when used in combination with the chemotherapy.<sup>2</sup>

Herbal formulas based on the Chinese herb *Ji Xue Teng* (*Spatholobus*) may decrease bone marrow suppression and may enable continuation of chemotherapy treatments at a normal schedule. In mice, an extract of *Spatholobus* may stimulate the proliferation of bone marrow cells and relieve the bone marrow depression caused by chemotherapy.<sup>3</sup>

### *Acupuncture*

Acupuncture is the art of inserting fine sterile metal needles into certain body or ear points to control the body's energy flow. Acupuncture is painless and often accompanied with a sensation of heaviness, warmth,

or movement of energy at the insertion point or along the energy channels. Acupuncture may relieve pain, rebalance energy, and heal symptoms. Electrostimulation also may be used with acupuncture for pain.

Western science has documented several mechanisms to explain how acupuncture works.<sup>4</sup> Acupuncture may stimulate serotonin levels within the brain, resulting in a sense of well-being and pain relief.<sup>5</sup> In addition, acupuncture has anti-inflammatory effects, which may help relieve symptoms and decrease inflammation. Acupuncture also may be effective in improving liver function, evidenced by improved liver function tests (transaminases).<sup>6</sup>

Acupuncture and acupressure as adjunctive cancer treatment have been studied for postoperative nausea and vomiting, chemotherapy-related nausea and vomiting, and pain relief.<sup>7</sup> Acupressure is a type of massage or touching therapy that uses the principles and theory of acupuncture and Chinese medicine. In acupressure, the same points as acupuncture are used on the body, but these are stimulated with finger or other pressure instead of inserting needles.

Several studies have evaluated acupuncture point Pericardium 6 (P6) for both acupuncture and acupressure in nausea and vomiting resulting from chemotherapy and surgery. When electroacupuncture was used for the prevention of postoperative nausea and vomiting, electrostimulation of acupuncture points or ondansetron was more effective than a placebo, with greater degree of patient satisfaction. However, electrostimulation of acupuncture points was more effective than ondansetron in controlling nausea. Stimulation of the acupuncture point P6 also may relieve pain, and electroacupuncture had better pain relief in the recovery room than either ondansetron or placebo.<sup>7</sup> The 2013 ACCP guidelines recommend acupuncture and related techniques (with the caveat that the evidence is somewhat weak) in patients having nausea and vomiting from either chemotherapy or radiation therapy, as well as an adjunct treatment option as in patients with cancer related pain and peripheral neuropathy with inadequate control of symptoms.<sup>2</sup>

#### **Acupuncture Contraindications**

Acupuncture may be contraindicated in patients with bleeding disorders. Careful evaluation of laboratory studies and patient response may be necessary for safe treatment.

People with allergies to metal should not use acupuncture. Some people with cancer have increased autoimmune reactions.

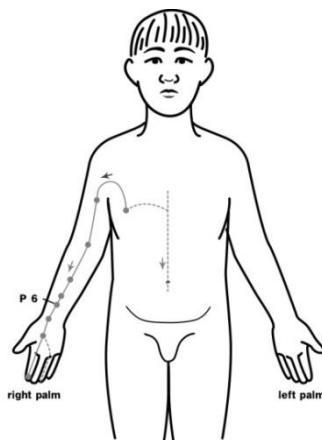
Rarely, some people develop “needle sickness” which is a temporary sense of faintness or lightheadedness and cannot tolerate acupuncture.

### *Acupressure and Massage*

There are many forms of massage and bodywork that can be used by people diagnosed with lung cancer including acupressure, Tui Na (*Qi Gong*), shiatsu, Thai massage, deep tissue massage, and long stroke massage (including Esalen and Swedish). Several studies show improvement of symptoms in people with cancer who receive massage. In a study of 1290 people with cancer who received massage, symptom scores were decreased by 50%.<sup>8</sup>

Several studies in the use of the acupuncture point Pericardium 6 (P6) in women with breast cancer showed that nausea and vomiting from chemotherapy may be decreased when used in conjunction with conventional drug treatments. Furthermore, a large clinical trial performed in several cancer centers concluded that acupressure was helpful at decreasing the amount and intensity of chemotherapy induced nausea and vomiting in women with breast cancer.<sup>9</sup>

People with cancer are best treated by specially trained practitioners trained in oncology massage, who know which areas to avoid and which kind of bodywork is appropriate. Swollen areas, fractures, skin infections, or severe hematomas should not be massaged. Lumps and areas of swelling should be checked by a Western healthcare practitioner before massaging. It is best to seek medical advice before having therapeutic bodywork if the patient has phlebitis, thrombosis, varicose veins, severe acute back pain, or fever. This is especially important in immunocompromised individuals, including people having chemotherapy, patients with HIV infection, and others with low immunity. The Society for Oncology Massage states:



*The Pericardium Channel*

“Oncology massage does not try to “fix” anything and, unlike many massage modalities, is not a series of techniques or applied protocols. Rather, it is the ability of the therapist to recognize and safely work within clinically established guidelines, considering the patient’s unique circumstance... Oncology massage education for massage therapists is important for clinical safety and therapeutic benefit. Adaptations to massage therapy techniques may be indicated both during treatment and for the rest of a person's life after treatment.”<sup>13</sup>

### *Chinese Herbal Medicine*

There are many Chinese and Western herbs used by people with cancer. Herbs should be prescribed by a qualified certified practitioner of herbal medicine. In some states, where practitioners are licensed to practice acupuncture or naturopathic medicine and are also qualified to practice herbal medicine, that is a big plus. Licensure in many states does not include herbal medicine. Therefore, national certifying bodies, such as the National Commission on the Certification of Acupuncture and Oriental Medicine, which gives diplomas based on professional qualifications (ex. graduation from a nationally accredited college) in conjunction with passing a rigorous examination. My opinion is that licensed practitioners are required to adhere to professional standards for safety and more likely to be safe (their licenses depend on it), and they often use formulas that are practitioner based which generally have a higher safety and authenticity profile of herbal formulations. This may also be true for diplomates in states without licensure that includes herbal medicine. The patient may inquire about the professional training of the practitioner and the types of herbs used.

### *Chinese Herbs Used in Adjunctive Cancer Treatment*

The list of herbs used in adjunctive support for cancer treatment is growing. There are individual herbs such as *Astragalus* (*Huang Qi*), *American Ginseng* (*Xi Yang Shen*), *Ganoderma Mushroom* (*Ling Zhi* or *Rei Shi*), *Maitake Mushroom*, and *Cordyceps* (*Dong Chong Xia Cao*) that are used in cancer supportive treatment. The type of herbs used may vary with the severity of the disease, type of disease, and treatment (chemotherapy, radiation, surgery, or immunotherapy).

Some herbs may be contraindicated with some types of chemotherapy and others may improve the effect of chemotherapy. Herbal formulas based on *Astragalus* may increase effectiveness of platinum-based chemotherapy.<sup>2</sup> Furthermore, a large treatment effect was found when adding *Astragalus*-based herbal treatment to standard chemotherapy regimens for non-small cell lung cancer. Specifically, the *Astragalus*-based herbal treatment improves survival, increases tumor response, improves performance status, or reduces chemotherapy toxicity.<sup>2</sup>

Formulas based on *Ji Xue Teng* (*Spatholobus*) are used to help support people with cancer during and after chemotherapy and radiation treatments. Anecdotal experience in our clinic suggests that a *Spatholobus*-based Chinese herbal formula designed by the author may help support patients undergoing cancer treatment (Marrow Plus®, Health Concerns, 8001 Capwell Drive, Oakland, CA 94621). Support includes improving levels of fatigue, improving blood counts and decreasing anemia and neutropenia, allowing for less side effects of medications, and importantly, increasing the ability of a person undergoing chemotherapy and radiation treatment to fulfill the treatment plan developed by the oncology team.

### *Drug-Herb Interactions*

The use of Chinese medicine as part of lung cancer treatment may be optimized with practitioners who use traditional methods together with modern research practices. Western practitioners such as licensed naturopathic or integrative medical doctors may use CAM treatments that are evidence-based. Traditional herbal and dietary methods have been used for centuries, but newer technologies

of nutritional supplementation and concentrated herb extracts should be studied for safety and efficacy. For more information go to:

<http://www.integrativeonc.org/index.php/docguide>

There are conflicting opinions and evidence about the use of herbs and supplements together with chemotherapy and radiation therapy, particularly among oncologists and cancer researchers who may be more focused on ensuring proper chemotherapy and radiation therapy than on the herb or supplement program. Therefore, it is important to be aware of potential adverse interactions between drugs, herbs, and some supplements, and the practitioner should consider the most up-to-date information to ensure maximum safety and efficacy.

Practitioners of Chinese and herbal medicine may provide the patient's Western physician, oncologist, pharmacist, or other healthcare provider with information about the individualized treatment. It is important to disclose all herbs and supplements proposed for a patient's treatment to the oncology team for review before implementing the treatment plan. This is a prudent course of action for all practitioners who work with cancer patients, especially those undergoing intensive chemotherapeutic treatments.

Chinese medicine studies that emphasize the alleviation of side effects and improving Western treatment may be the most beneficial to pursue presently, in addition to studies about cancer prevention.

### *Herb and Supplement Certification*

Herbal formulas and nutritional supplements may be manufactured to different standards of purity and quality, such as Good Manufacturing Practices (GMP) for food or pharmaceutical products.

Pharmaceutical GMP standards are stricter than food standards, and this may be important for potency of a product. Furthermore, pharmaceutical GMP includes higher standards of testing for pesticides, toxins, bacteria, and molds, and proper identification of label ingredients. The GMP standards provide guidelines for the manufacturing site, methods of production, and quality control. Manufacturing guidelines vary from country to country. For example, Australian standards are among the strictest in the world, because Australian dietary and herbal supplements are subject to the same guidelines as pharmaceuticals, which is not the case in the United States. The guidelines require attention to manufacturing processes including cleanliness of building and grounds, equipment maintenance, personnel and training, sanitation and hygiene, air and water purification, production, and documentation. It is advised that patients ask practitioners about the company that manufactures the herbs, including company location, formulas, and manufacturing standards, and defer taking herbal formulas or supplements until this information is available.

Companies can provide certificates of analysis for their products. A certificate of analysis is an authenticated document, issued by an appropriate authority that certifies the quality and purity of pharmaceuticals, animals, and plants being produced or exported. This certificate documents the formula for the ingredients, the amount of each raw material and ingredient, and the results of all the tests performed on a particular lot of the product. In some cases, albeit rare, herbs may be misidentified and added to formulas without proper authentication. Most cases of herbal toxicity are not caused by proper herbs given in the correct doses, but are caused by inclusion of the wrong herb

or supplement in a formula. Therefore, herb identification and authenticity is an important aspect of herb manufacturing.

### *Food Therapy*

Dietary therapy is an important part of Chinese medicine and complementary and alternative medicine. In Chinese medicine, food therapy and diet are the first treatments given to people who are trying to stay well and remain in balance or who are experiencing illness. In Chinese thought, the digestion must be kept healthy or a person can easily become ill. Food intake is very important to healthy digestion and assimilation of food. Therefore, anything that disrupts the function of the organs of digestion is injurious to the body's energy.

Some of the concepts of Chinese medicine most important for digestion include eating at regular times and eating cooked foods. Chinese medicine theory considers that energy is required to warm the stomach to digest foods, and cold and raw foods may be injurious to the digestive energy and should be eaten sparingly; this is especially important for people who have been sick and have had stomach pain and nausea often due to cancer treatment. (The issue of raw or cooked food is controversial, and raw food advocates argue that cooking may destroy enzymes in food important to digestion.) Furthermore, Chinese medicine advocates eating foods that are in season and grown as close to home as possible, because these foods are fresher and have more food energy and more *Qi*. Herbs can be added to foods to increase food vitality, especially for specific health conditions.

Rice is the basic food used for healing in Chinese medicine, but other grains may be used including quinoa, barley, rye, and buckwheat. Congee is a special grain porridge that is considered a very therapeutic food and used traditionally during chronic weakness diseases and convalescence from illnesses. When people diagnosed with lung cancer are being treated with chemotherapy, recovering from surgery, or having other debilitating treatments, congee is a good and easy option for nutrition and recovery. There are many varieties of congee suitable for different conditions and symptoms, and a Chinese medicine practitioner can provide recipes specific to the patient's situation.

The basic method of making congee is to cook one cup of rice (or other grains) in seven to nine cups of filtered water for six to eight hours. This can be done overnight and it is ideal to use a slow cooker such as a crock pot or any cooking pot. Herbs and/or meat or vegetables are added as directed by the Chinese medicine practitioner for the patient's specific condition.

Traditional Chinese families serve congee to the whole family weekly with herbs such as *Ginseng*, *Dong Quai*, *Codonopsis*, *Red Dates*, *Ginger*, and *Astragalus*. *Astragalus* is good in immune tonic congee. Soups are highly recommended in Chinese food therapy. Chicken soup is considered very healing by the Chinese, and many soups that are tonics are based on chicken broth. Congees may also use chicken broth as a base with specific herbs for the patient's condition.



### Tips for Eating – For You and Your Family Members

- Eat in a peaceful setting. Stop for half a minute to take a deep breath, switch gears if you need to, and slow down to really enjoy your food.
- Eat slowly enough to chew adequately.
- Eat with others whose company you enjoy.
- Eat plenty of lightly cooked (steamed or parboiled) fresh vegetables (not an excess of raw food), whole grains, beans, protein, and seaweeds. Eat one serving of steamed or cooked dark leafy greens daily, such as kale, collard greens, or broccoli. These are very rich in nutrients.
- Eat a cooked meal in the morning, the cool part of the day. This is also an important time to include good quality protein for energy throughout the day.
- In the afternoon, the warm part of the day, you may include cooling foods, such as salad or fruit if desired, and protein to regulate blood sugar.
- In the evening, eat a lighter cooked meal no later than 3 hours before bed for sounder sleep.
- Some people feel better "grazing" or eating smaller meals throughout the day. This can be helpful to people who have small appetites and have trouble gaining weight. Eating frequent small meals is also less stressful on the heart. During chemotherapy treatment this is often very helpful to decrease nausea and stomach pain.
- Drink plenty of water, but not too much water with meals.
- Avoid eating junk food, processed food, sugar, and food with preservatives on a regular basis.
- Include organic foods and home cooked foods as much as possible.
- Soups are quick and simple, nutritious, delicious, and easy to freeze and reheat.

### *Qi Gong: Exercise and Meditation*

#### *The Benefits of Exercise in Lung Cancer*

Chronic or life-threatening illness can make a person feel as if the body is beyond his or her control. Exercise and meditation can take control over quality of life and the vitality of the mind, body, and spirit.

Exercise can help decrease stress and depression, strengthen the cardiovascular system, improve appetite, maintain muscle mass, improve and maintain digestion, and avoid constipation and/or diarrhea associated with medication.

Moderate exercise is recommended, starting with 20-minute periods, three times weekly. The benefits of exercising are extensive, and regular exercise is advised. However, stamina and tolerance

for stress may ebb and flow during the course of disease and treatment. Therefore, break periods may be required, and exercise programs may be resumed when the patient has more energy and endurance.

In the general population, regular exercise that oxygenates the blood and tones the muscles helps people live longer, look younger, and think more clearly. Exercise also has emotional and spiritual benefits. In general, people with a normal stress response should get as much exercise as possible. However, patients who have lung cancer must evaluate the risks of exacerbating symptoms because of overexertion, and *Qi Gong* may be helpful in this situation.

### *Benefits of Qi Gong Exercise*

*Qi Gong* is the traditional Chinese discipline that focuses on breathing and movement of *Qi* (“life force”)<sup>10</sup> to increase physical harmony and strength and establish spiritual and emotional peace. There are

numerous different schools of practice, some very vigorous (including martial arts) and others extremely gentle. Careful, relaxed breathing is the foundation of most *Qi Gong* movements.

The energy-conserving, *Qi*-channeling practice of *Qi Gong* is designed to keep a person healthy and fit without causing stress and exhaustion. Furthermore, patients who have excessive fatigue, shortness of breath, fluid retention, or neuropathy may be required to avoid strenuous exercise; in these situations, *Qi Gong* meditation and breathing exercises can become the primary way to obtain exercise.

The Chinese practice of *Qi Gong* may improve outcomes for people with cancer, including improved immune responses and decreased symptoms associated with cancer treatment. However, most studies are small and the evidence is varied. *Qi Gong* therapy may have an inhibitory effect on cancer growth, both *in vitro* and *in vivo*, but repeat studies are unavailable for confirmation.<sup>10</sup> Furthermore, *Qi Gong* in cancer patients may improve quality of life and mood status and decrease inflammatory markers and side effects of cancer treatment.<sup>11</sup>

### *Exercise: The Circle of Qi*

This exercise was designed by *Qi Gong* master Larry Wong of San Francisco to circulate *Qi* throughout the body, replenish depleted *Qi*, and calm the *Shen* (spirit).

Sit on the floor cross-legged style or in a lotus position. If that is uncomfortable, you may stand up or lie down during these breathing routines.

Inhale to a count of four to eight, depending on comfort. There are two breathing techniques you can use, Buddha's Breath and Taoist's Breath.

For Buddha's Breath, inhale, extending your belly as you fill it up with air from the bottom of your lungs upward; exhale by pushing the air out from the bottom of your lungs first, contracting the lower rib cage and abdominal muscles, and then the upper torso.

## Chapter 9: Complementary and Alternative Medicine and Chinese Medicine for Lung Cancer

For Taoist's Breath, inhale, contracting your abdomen; exhale, letting your abdomen relax outward. You may practice these breathing techniques on alternate days.

As you inhale, imagine the air and your *Qi* flowing evenly along the pathways of the channels.

Become aware of the air as it enters through your nostrils and moves down the center of your chest to a spot on your abdomen about 1 to 2 inches below the navel. This is the area the body called the *dan*.

Now breathe out slowly and evenly, releasing the breath from the abdomen, up through the lungs, and out your slightly open mouth.

As you exhale, imagine that the *Qi* that was at the *dan* is moving down through your pelvis, through your crotch, and up your tailbone to your lower back.

Keep exhaling in a slow, steady, smooth stream that passes gently over your lips.

As you inhale again, follow the *Qi* as it moves up along your back to your shoulders.

Exhale and move the *Qi* up to the back of the head, over the top of your head, down your forehead, and returning to the nose.

At first it may be difficult to follow the flow of *Qi* through its cycle. Be patient and keep your breathing calm and your mind relaxed while focusing on your inhaling and exhaling.<sup>12</sup>

## References

1. Cassileth BR, Deng GE, Gomez JE et al. Complementary therapies and integrative oncology in lung cancer: ACCP evidence-based clinical practice guidelines (2nd edition). *Chest*. 2007;132(3 Suppl):340S-354S.
2. Deng GE, Rausch SM, Jones LW et al. Complementary therapies and integrative medicine in lung cancer: Diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines (3rd edition). *Chest*. 2013 May;143(5 Suppl):e420S-36S. doi: 10.1378/chest.12-2364.
3. McCulloch M, See C, Shu XJ et al. Astragalus-based Chinese herbs and platinum-based chemotherapy for advanced non-small-cell lung cancer: meta-analysis of randomized trials. *J Clin Oncol*. 2006;24(3):419-30.
4. Fu Q, Luo X-q, Tang Y, et al. Study on Antitumor Activity in Vivo and Effect on Hematopoiesis of Extract of *Spatholobus suberctus* Dunn. *Chinese Journal of Information on Traditional Chinese Medicine* 2008.  
a. [http://en.cnki.com.cn/Article\\_en/CJFEDTOTAL-XXYY200812016.htm](http://en.cnki.com.cn/Article_en/CJFEDTOTAL-XXYY200812016.htm)
5. Shen J. Research on the neurophysiological mechanisms of acupuncture: review of selected studies and methodological issues. *J Altern Complement Med*. 2001;7 (Suppl 1):S121-7.
6. Sugai GC, Freire Ade O, Tabosa A, et al. Serotonin involvement in the electroacupuncture- and moxibustion-induced gastric emptying in rats. *Physiol Behav*. 2004;82(5):855-61.
7. Zijlstra FJ, van den Berg-de Lange I, Huygen FJ, et al. Anti-inflammatory actions of acupuncture. *Mediators Inflamm*. 2003;12(2):59-69.
8. Gan TJ, Jiao KR, Zenn M, et al. A randomized controlled comparison of electro-acupoint stimulation or ondansetron versus placebo for the prevention of postoperative nausea and vomiting. *Anesth Analg*. 2004;99(4):1070-5.
9. Cassileth BR, Vickers AJ. Massage therapy for symptom control: outcome study at a major cancer center. *J Pain*

*Symptom Manage.* 2004;28(3):244-9.

10. Dibble SL, Luce J, Cooper BA, et al. Acupressure for chemotherapy-induced nausea and vomiting: a randomized clinical trial. *Oncol Nurs Forum.* 2007;34(4):813-20.
11. Chen K, Yeung R. Exploratory studies of Qigong therapy for cancer in China. *Integr Cancer Ther.* 2002;1(4):345-70.
12. Oh B, Butow P, Mullan B, et al. Impact of medical Qigong on quality of life, fatigue, mood and inflammation in cancer patients: a randomized controlled trial. *Ann Oncol.* 2010;21(3):608-14.
13. Cohen MR, Doner K. *The Chinese Way to Healing: Many Paths to Wholeness.* Lincoln NE: Authors Choice Press; 2006.
14. Society for Oncology Massage. <http://www.s4om.moonfruit.org/#/health-care-professionals/4558534846>