

[Lorren] Welcome back. Thank you so much for joining us for the Caring Ambassadors Program video series, Learn from the Experts.

We're very excited to welcome back Misha Ruth Cohen, a Doctor of Oriental Medicine and a Licensed Acupuncturist, and the Clinical Director of Chicken Soup Chinese Medicine, in San Francisco, CA, as our featured author in this video, Integrative Medicine, Complementary Therapies, and Chinese Medicine in Lung Cancer. In this session, Misha will be discussing Chinese Herbal Medicine. I'm Lorren Sandt, the Executive Director at Caring Ambassadors Program, and I'm joined today by Cindy Langhorne-Hatfield and a panel of people living with lung cancer and caregivers.

We hope that this video will provide helpful insights and information for patients and caregivers dealing with lung cancer. If you're interested in learning more about the Caring Ambassadors Program and our mission to help patients with lung cancer, please watch the video series.

Please share this information with anyone who might find it useful. Together, we can make a difference in the lives of those affected by lung cancer. Welcome back, Misha.

[Misha]I'm going to focus a little bit on Chinese herbal medicine right now. So, there are many Chinese and Western herbs that are used by people with cancer. It is really important that a qualified certified practitioner of herbal medicine should be the one that prescribes herbs. In some states where practitioners are licensed to practice acupuncture or naturopathic medicine and are also qualified

to practice herbal medicine, that's a big plus. Licensure in most states does not include herbal medicine. So, there is a national certifying body called, the National Commission on the Certification of Acupuncture and Oriental Medicine (NCCAOM), that gives diplomas based on professional qualifications, in conjunction with passing a rigorous exam. My opinion is that licensed practitioners are required to adhere to professional standards or safety and more likely to be safe, their licenses depend on it. Licensed practitioners are often use formulas that are practitioner-based, which generally have a higher safety and authenticity profile of herbal formulations. So, I'm talking about, versus going to the health food store and talking to somebody and getting the herbs over the counter there, often those are not professional based formulas, and they don't have the support of a company that is looking at all of the safety profiles of the herbal medicine, very specifically, that practitioners can go back and refer to. So, this may also be true for diplomats and states without licensures that include herbal medicine. So, what you need to do as a person who would be seeking Chinese herbal medicine, would be to inquire about the professional training of the practitioner, and the type of herbs that are being used. So, Chinese herbs can be used as a adjunctive cancer treatment. There is a whole list of herbs I'm not going to go into all the details now because there are many, many herbs but there are some individual herbs such as Astragalus known as Huang Qi, American ginseng known as Xi Yang Shen, Ganoderma Mushroom which many of you know is Rei Shi, it's also Ling Zhi, Maitake mushroom and cordyceps, (Dong Chong Xia Cao) that are used in cancer supportive treatment. And the type of herbs may depend on the severity of the disease whether the type of disease a treatment whether it's chemotherapy, or radiation therapy, or immunotherapy. That is important to a practitioner be able to understand how to use the herbal medicine in conjunction with the various treatments. Some herbs may be contraindicated in some types of chemotherapy, some may improve effective chemotherapy. There are a number of different studies that have been done that show both the possibility of interactions that are positive and are negative. So, interaction just means there's an interaction between the substances and sometimes there's an interaction that improves the outcome of treatment and sometimes there's interactions that would decrease the capability of the treatment to work. So, these formulas based on Spatholobus, or Ji Xue Teng, helped to improve levels of fatigue, improve blood counts, decrease

anemia, and neutropenia, and allow for fewer side effects. So, there have been quite a few different studies in Taiwan than investigated the frequencies and patterns of Chinese herbal medicine for lung cancer patients and effect on their survival probability, and the conclusion in the Taiwanese study in 2018, was that the use of Chinese herbal medicine as adjunctive therapy might increase the survival of lung cancer patients.

Herbal formulas such as Ji Xue Teng decrease bone marrow suppression, enable the continuation of chemotherapy treatments at a normal schedule. We use formulas in our clinic to help people with this. We use them in conjunction with the Western physicians, with their permission, what we often will have people take herbal formulas for a certain period of time and see if there can be changes, in neutrophils for example, to allow somebody to be able to continue their chemotherapy in a timely fashion.

So, now I want to talk a little bit about drug herb interactions. I started to mention it previously but 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. The Western practitioners such as, licensed Naturopathic, or Integrated Medical doctors, may use complementary and alternative medicine treatments that are evidence-based. Traditional herbal and dietary methods have been used for centuries but the newer technology is nutritional supplementation, concentrated herb extract, should be studied for safety and efficacy as well. A lot of the practitioners of Western practitioners and Naturopathic practitioners use more modern substances and some of those have only been around perhaps for 50 years or 60 years and some even less, which is very different than Chinese herbal medicine which has been studied, and using billions of people, for a very long time. One of the interesting things that I think about, I think about Chinese herbal medicine having a huge not randomized control study but a huge observational study of billions of people, and when herbal formulas don't work, they're basically thrown away, if they kill people they're thrown away, doctors have tested them in their practices and discuss them for hundreds if not thousands of years. and so a number of the herbal treatments are gone that were toxic. Some of the herbal treatments that are toxic are still with us and they have been able to be modified so that they are not toxic. That's a little bit of aside, but I think that's important to understand when we're

looking at research, we have to look at the whole picture of how herbal medicine has been used, and supplements have been used. Now there are conflicting opinions and evidence about the use of herbs and supplements together with Western treatment, particularly among oncologists and cancer researchers, who may be more focused on ensuring that if there's proper chemotherapy, and radiation treatment, and immunotherapy, then on the herb or supplement program. Therefore, it is really important to be aware of the potential adverse interactions between drugs, herbs, and some supplements. Often with certain foods too, like grapefruit, which is contraindicated for many, many, many, types of medicines. I'm not sure that everybody's always told everything about the foods that are contraindicated and there's so much more focus on herbs and drugs, but there needs to be all of it needs to be looked at. Practitioners 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 oncologists, the Pharmacists, and other health care providers with information about an individualized treatment. And then, it's important that the practitioner disclose all of the herbs and supplements, not to have secret formulas, that are proposed for a patient's treatment to the oncology team, for a review before implementing the treatment plan. When I put together a treatment plan and I'm using acupuncture and herbs most physicians have little or nothing to say about the acupuncture but, they would like to know about the herbal formulas and the supplements. So I will write a report that can be reviewed by the doctors who are treating the person in the oncology clinic and be able to look at it and determine, oh, is this going to be okay, is this not going to be okay, do I not know anything about it, do I need to ask more questions, and we're able to communicate about that. So this is really a prudent course of action for all practitioners who work with people who've been diagnosed with cancer, and especially those undergoing intensive Western treatments. Chinese medicine studies that emphasize the alleviation of side effects and improving Western treatment, again, may be the most beneficial to pursue presently, in addition to studies about cancer prevention.

So herbal formulas and nutritional supplements may be manufactured to different state standards of purity and quality. There're such things called Good Manufacturing Practices (GMP) for food or pharmaceutical products. So pharmaceutical GMP standards are stricter than food standards and this may be

of importance for the potency of a product. Furthermore, the pharmaceutical GMP includes higher standards of testing for pesticides, toxins, bacteria, molds, and proper identification of label ingredients. The GMP standards provide guidelines for the manufacturing site, methods of production, and quality control, and the manufacturing guidelines vary from country to Country. For example, the Australian dietary and herbal supplements are subject to the same guideline as pharmaceuticals, which is not the case in the United States. Although there's a recent move in that direction within the U.S. that has not happened vet. The guidelines require attention to manufacturing processes, cleanliness of the buildings and grounds, equipment maintenance, personnel, and looking at other areas such as training of the personnel, sanitation, hygiene, air and water purification, production documentation. Anyway, it is advised that patients ask the practitioners about the company that they're using that manufactures the herbs including the company location, the formulas, the manufacturing standards, and defer taking herbal formulas or supplements until this information is available. I'm not saying that you have to ask a practitioner about every single formula, you want to just know that they have certificates of analysis for all of their formulas, and that they are going by Good Manufacturing Practices, and that they often, if they are using practitioner-based formulas, that is going to be much more likely that that company is going to be able to provide all of that to a practitioner, if it's necessary. The companies will provide certificates of analysis of their products. It's an authenticated document, it's issued by an appropriate authority that certifies the quality and purity of the pharmaceuticals, animals, and plants, that are being produced, or exported. There's a lot of details on the certificate of analysis that can be looked at by the practitioner, and herb identification authenticity is an important aspect of our manufacturing as well.

So now I want to talk a little bit about acupuncture. Acupuncture, as many of you know, is the art of inserting fine sterile metal needles into certain body, or ear points, to control the body's energy flow. That's the traditional definition of acupuncture. Acupuncture is relatively painless, it's often accompanied by sensations of heaviness, of warmth, movement of energy along a point or along the energy channels. Acupuncture can relieve pain, can rebalance energy, can heal symptoms, and electro-stimulation is also used regularly with acupuncture for pain. Western science has documented hundreds of mechanisms to explain

how acupuncture works. The early mechanisms were looking at stimulating serotonin levels within the brain. Additionally, acupuncture has anti-inflammatory effects, it can help improve liver function, it can help decrease inflammation. Acupressure, and acupuncture, as adjunctive cancer treatment has been studied for post-operative nausea and vomiting, chemotherapy related nausea and vomiting, and pain relief. There have been studies that have shown in, specifically in lung cancer, to show improvements in pain, appetite, nausea, nervousness, and well-being. And acupressure is a type of massage or touching therapy that uses the same principles and theory of acupuncture in Chinese medicine. Acupressure can use the same points as acupuncture,

as they're used in the body but, they're stimulated with finger, or other pressure, instead of inserting needles.

Electro-stimulation and acupuncture are used in conjunction with medications and oftentimes the use of the acupuncture with a medication shows better results with than the medication alone or better than placebo. So, the 2013, ACCP guidelines recommend acupuncture, and related techniques, in patients having nausea and vomiting from either chemotherapy or radiation therapy, as well as being an adjunct treatment option in people with cancer related pain, and peripheral neuropathy, when there's inadequate control of symptoms. What are some of the acupuncture contraindications? Acupuncture may be contraindicated in patients with bleeding disorders, however, we have never seen any contraindication with people who are taking medications that increase bleeding. Careful evaluation of laboratory studies and patient response may be necessary for safe treatment in this case, but not contraindicated. We treat people with hemophilia, and we treat people who are on drugs that may increase bleeding. People with allergies to metal should definitely not use acupuncture. People with cancer also may have increased autoimmune reactions, that's something just to watch for, and if that is a problem, acupuncture wouldn't be recommended. Rarely some people develop something called needle sickness which is a temporary sense of faintness or lightheadedness, and some people cannot tolerate acupuncture due to this.