

### Transcript Details

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### The Role of Integrative Therapy in Cancer Care

Announcer:

Welcome to Medical Breakthroughs from Penn Medicine, Advancing Medicine Through Precision Diagnostics and Novel Therapy.

Dr. Caudle:

For patients with cancer, the physical, emotional, and psychological tolls exacted by the disease, as well as the care course itself are often beyond measure, but new, integrative approaches to treatment aiming to help patients better cope with and recover in the fight against cancer are now entering hospital settings. On today's program, we'll explore how these integrative therapeutic models are successfully being incorporated. This is Medical Breakthroughs from Penn Medicine on ReachMD. I'm your host, Dr. Jennifer Caudle, and joining me on this episode is Dr. William Levin, Clinical Assistant Professor of Radiation Oncology at Penn Medicine. Welcome to the program.

Dr. Levin:

Great, thanks for having me today.

Dr. Caudle:

Absolutely. So, why don't we start off, uh, can you give us a little background into the various ways integrative medicine has penetrated the oncology field in academic setting such as yours?

Dr. Levin:

Sure. Yeah, I think probably it's worthwhile to start with a definition so that we're on the same page going forward. And actually, I'll paraphrase a definition – actually I'll paraphrase a definition from the National Cancer Institute. In their statement, they say that integrative oncology is a patient-centered evidence-informed field of cancer care that utilized mind-body practices, natural products, and lifestyle modifications, along with conventional cancer treatments to optimize health and quality of life for cancer patients. Um, one thing I did want to point out, um, and that is what the integrative oncology is not. And I want to make sure that people understand that we're not talking about alternative medicine here, and that is to say that these techniques and modalities in the integrative world are not being used in place of the conventional cancer treatment such as surgery and radiation therapy and chemotherapy.

Dr. Caudle:

Excellent. And thank you so much for that – that definition, and explaining that. Um, you know, just to dive a little bit deeper into the current applications in practice, can you describe how integrative therapies are being incorporated into cancer care?

Dr. Levin:

Yeah, sure. Uh, recently the National Cancer Institute actually did a survey of its 45 designated cancer centers around the country, and they asked them what were the most common – commonly offered services, um, in terms of integrative therapies. And, um, you know, the most frequently used therapies were acupuncture, massage, yoga, and meditation. And, um, this was the group that, uh, services that was utilized the most. And then the next most common, um, activity that was utilized had to do with nutritional counseling. It's specifically focusing, um, on the use of herbs and dietary supplements.

Dr. Caudle:

Excellent. So from your own observations and experiences, where have integrative approaches to cancer therapy proven most beneficial?

Dr. Levin:

Uh, yeah, well clearly the – the modality that's emerging is a real kind of work horse in this world, which would be the use of acupuncture, which comes out of the, um, uh, traditional Chinese medicine, um, world, and um that's been around for thousands of years. And we just continue to get numerous, uh, randomized clinical trials showing a significant benefit with the use of acupuncture for things such as pain control, um, prevention, and control of nausea and vomiting as related to chemotherapy use. Um, and then for, um, head and neck patients, uh, as – as I think you mentioned, I'm a radiation oncologist, and one of the side effects of radiation for the head and neck patients has to do with xerostomia or the reduction of saliva, which can be very disconcerting for patients. Um, acupuncture has clearly showed a benefit for mitigating some of these symptoms. Another area of interest here at Penn is the utilization of mindfulness meditation and yoga, and that clearly shows benefit for stress and anxiety reduction, as well.

Dr. Caudle:

Wow, that's excellent. For those of you who are just tuning in, this is Medical Breakthroughs from Penn Medicine on ReachMD. I'm your host, Dr. Jennifer Caudle. And today I'm speaking with Dr. William Levin – excuse me. And I'll rerecord that at the end.

Dr. Levin:

Sure.

Dr. Caudle:

Dr. William Levin about integrative medicine in cancer care and the impact it may have on the therapeutic landscape. So, Dr. Levin, we just talked about some ways in which we use complementary approaches to care when making an impact in the oncology field. But looking at the other side, you know, where do you think integrative medicine applications in oncology or other fields need more vetting or review before they enter broader practice?

Dr. Levin:

That – that's actually a great question, and I thank you for asking that. Um, like I said in the beginning of our conversation, I want to reiterate that we're talking about integrative or complementary therapies, not alternative therapies. Um, so with that being said, to be more direct to my answer, I would say that the one area that we really want to be careful, um, is when people are taking natural products, and to not have a false sense of security there with that these are benign therapies that don't have an effect on the patient's wellbeing or certainly that they don't have an effect on the efficacy of the conventional treatment. So, for instance, uh, we know that some of these, uh, natural herbs and vitamins actually can have a negative impact on blood clotting, and certainly the body's ability to – to clot is compromised when patients are taking chemotherapy, so to add any of these other compounds on, could actually set the patient up for, uh, for a significant bleeding risk. Um, the other thing that I would point out is actually radiation therapy and chemotherapy take advantage of, um, certain cell functions, um, that actually, um, where the efficacy may be reduced by taking, um, these substances. So, for instance, radiation therapy, um, utilizes, um, -- I'm sorry, let me just collect my thought here. So – so radiation therapy utilizes, um, -- hold on, the word is escaping me – um, radiation therapy actually utilizes the use of free radicals. So it normally in life we hear that free radicals are bad and we take substances, the free radical scavengers. For – for our purposes. We are able to actually destroy tumor cells by utilizing free radical formations. So certainly some of, um, some of these substances people are taking certainly could, um, could reduce the efficacy of our endeavors.

Dr. Caudle:

Excellent. And I appreciate you – you talking about some of the possible negative side effects of, uh, supplements and things like that. So I do appreciate that. You know, I'd like to shift gears a bit here and focus on an article you recently published that looked at art therapy. Could you tell us a little bit about this study and the key results that your team found?

Dr. Levin:

Sure, yeah. So one my primary interests in terms of my, um, clinical interests and my research interests, um, is based on the reduction of stress and anxiety in cancer patients and caregivers. And by caregivers I'm talking about family members and friends of patients, but also professional caregivers such as nurses and physicians. And one of the things that I found in my own life to help reduce stress and anxiety is the creative process, and specifically I do a lot of photography. And so that got me thinking that maybe, uh, creative endeavors in general would be beneficial for this group of folks in terms of stress and anxiety reduction. So we designed a study to look at a single session of creating art, and what the efficacy would be in terms of stress and anxiety reduction, uh, and as we suspected, um, just in a single 45-minute session, there was great reduction in stress and anxiety for these folks.

Dr. Caudle:

Wow, that's excellent, and it's very encouraging, as well. Um, and lastly, Dr. Levin, what role do you see integrative therapy playing in future cancer research and care?

Dr. Levin:

So I think that integrative oncology is going to kind of follow suit the way our conventional therapies are being utilized right now. And

what I mean by that is for chemotherapy and immunotherapy, which is, uh, a standard therapy for – for cancer treatment, we're able to look at the molecular and genetic footprint of the cancer cells for a specific patient. And so we are then able to personalize the treatment to pick the treatment that we think will be the most beneficial with having potentially the least side effects. And I think that personalized theme is going to kind of become more evident as we utilize these integrative therapies so that we can match the right patient with the right therapy. And along with that, I think that instead of these integrative therapies being kind of an afterthought, um, once the patient has already begun treatment, or even in fact finished treatment, we will start having the conversation of how these therapies could be utilized at the beginning of treatment.

Dr. Caudle:

Well, that's really excellent. And with the hope on the horizon, I'd really like to thank you, um, our guest today, Dr. William Levin, for sharing your insights on the integrative therapies and their impact on cancer care. It was a pleasure speaking with you, Dr. Levin.

Dr. Levin:

Thanks for having me today.

Announcer:

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