

CENTER FOR MIND-BODY MEDICINE
COMPREHENSIVE CANCER CARE 2000

CONCURRENT: Integrative Approaches to Prostate Cancer

PRESENTERS: Raymond Chang, MD; Mark Renneker, MD

MODERATOR: Woodson Merrell, MD

COMMENTATOR: William Fair, MD

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P R O C E E D I N G S

DR. MERRELL: We have phenomenal physicians here, incredibly knowledgeable about integrative approaches to medical care. We have two speakers and a commentator today. I'm Woodson Merrell, the moderator.

Ray Chang will be coming on first, and Ray I've know for many years in New York. Ray is an internist, and he's on the faculty at Cornell Medical School, and on the attending staff at New York Hospital, Beth Israel.

Ray was formerly head of Acute Care Medicine at Memorial Sloan-Kettering for about 10 years, and approximately 2 years ago he bit the bullet, and left Memorial, and opened his own clinic, Meridian Medical Group, which is as its admission the provision of consultations in complementary medical approaches to cancer, and actually does a number of treatment modalities at his center. He'll be doing an overview of the field, and talking a little bit about systematic approach to the patient with prostate cancer.

Mark is a family physician, and he's an assistant clinical professor at UCSF; and he has a private practice in California, in San Francisco, providing -- actually, I know it's not quite correct, but he and Ray are in many ways, to my view, kind of flip sides -- bicoastal representatives of physicians who've become extremely knowledgeable about the literature in cancer, and the complementary approaches at any stage of cancer, both preventative and during treatment.

And we'll get their perspective. And Mark has just given a handout to talk about a case presentation, and to talk about some specifics of the treatment approaches to prostate cancer. And either one of them could really pretty much talk about any kind of cancer, but this was the panel we chose to have them on.

Bill Fair, probably many of you know of him in the field of prostate cancer. He's really a giant. He was the former chair of Urologic Oncology at New York Hospital, Memorial Sloan-Kettering, where he was the Chief of Urologic Surgery. He just recently retired, and is actually now heading up a project to develop clinics that will provide complementary approaches for patients who have cancer. And he'll be providing some commentary after both Ray and Mark speak.

For myself, I'm an internist, and I'm at Columbia. And also, at Beth Israel, where I'm the executive director of the Beth Israel Center for Health and Healing, also called the Continuing

Center for Health and Healing. It just opened actually two days ago, and this is very comprehensive clinic -- a medical center, affiliated with the hospital, with Einstein Medical School, that is providing global care with an integrative medical approach. We have 15 clinicians, including about 10 physicians, and about 5 CAM providers working together at this center with a very large research program and educational program. So without further ado, let me introduce Ray.

DR. CHANG: It's a great pleasure to be here, old friends, colleagues, old colleagues. And I particularly thank Dr. Fair for inviting me, and thank Woody for the kind introduction. Instead of talking about specific agents, or items, or modalities, I want to do an overview of how to strategically think about the use of complementary medicine for prostate cancer.

We can look at various treatments. We can think about this whole strategy from different angles. You can think about potentially different categories of what's applied to treat cancer, such as dietary approaches, which, of course, figures heavily, I think, in prostate cancer; the mind-body approach, which does not need further detailed discussion. Then there are the supplements.

Then I think there are some interesting things. There are foreign drugs, or unapproved drugs, which are not so easily available in this country. Then there are the off-label use of approved drugs, which I think is sort of borderline between conventional and unconventional medicine. And then there are so-called other modalities. We either don't know how they work, or it's not very well documented, somehow mysterious, but somehow known to patients, doctors, et cetera. That's not easily categorized.

Now, the reason for using a complementary -- alternative approach -- to prostate cancer I think can be summarized strategically into either quality of life issues or survival issues. Complementary approaches can be used as a primary preventative to prevent the occurrence of prostate cancer, to reduce the incidence of prostate cancer. And I think that's where there's a particularly strong role, especially based on evidence, that there are a lot of things, natural things, that have a proven record of being able to reduce the onset or the instance of prostate cancer.

Then as a secondary preventative, the idea that a patient has already received primary treatment after diagnosis -- either surgical, radiation -- and is looking to prevent occurrence; there's a role there for a complementary approach. And then, of course, if there is relapse, recurrence, et cetera, I think there is a role for treatment of active disease.

On the quality-of-life end, the use of alternative agents can be either to reduce symptoms, side effects, of the disease itself, such as pain; or to manage side effects associated with treatment, such as, for example, hot flashes associated with the hormone treatments. That would be an example.

So again, strategically, I think that's the way to think about it.

We start with some agents. I'm not here to discuss details about these agents, but just to illustrate what the broad universe of possible things there are, or agents there are, that work at a particular level.

For example, when you talk about primary prevention, you have fairly proven, to different degrees, agents such as these. Vitamin E in a Scandinavian study has been shown to reduce prostate cancer significantly. It was published, I think, two years ago; and it's a combination of alpha-tocopherol and beta-carotene (ATBC) study, involving large numbers -- I can't remember the exact number -- large numbers of men.

Selenium has been prospectively looked at, at the dose of 200 micrograms over 4 to 6 years in about 1,000 men, to have significantly reduced the occurrence of prostate cancer by four-fold actually.

Omega 3 fatty acids, which come from fish oils, or flax, has a role. I'm not sure that there are as good studies as selenium and the ATBC study, prospective studies; but certainly based on test tube results, we know that it does inhibit prostate cancer. And also retrospective epidemiologic correlations, people with a higher intake of Omega 3 fatty acids have a lower incidence of prostate cancer.

Now, this is interesting. This is ongoing. Dr. Fair may have more information about the Prostate Cancer Prevention Trial (PCPT), which seeks to enroll 18,000 men over the age of 55 to be treated with finasteride, which is the chemical constituent that is in Proscar. However, saw palmetto contains finasteride. So arguably, there is a role for the use of palmetto in the primary prevention of prostate cancer.

Then there are things like carotene, which again, I think as of last year many people are aware of. The very small study and short study that demonstrated just over a period of weeks administration of lycopene significantly reduced prostate specific antigen (PSA) in patients with prostate cancer, presurgically, as well as led to findings at surgery of a lower grade and reduced tumor burden.

Green tea. Again, no prospective studies comparable to the ATBC study or the selenium study, or there's nothing planned like a PCPT trial. However, based on mechanisms of action, it has multiple anti-tumor effects -- green tea polyphenols ranging from inducing apoptosis to being an anti-angiogenic, and multiple other pathways, whereby one can arguably speak to say green tea is a probably useful item.

But the dose is high. Based on what we know from correlating diets and occurrence of cancer, a lot of patients seem to think drinking two cups of tea -- or drinking green tea, because that's what they read about in Prevention magazine, or other popular literature, that just drinking a few cups of tea will do it. It looks like you need at least 10 cups; these are small cups. But still, you need enough tea to give you the protective effects against cancer.

There are other interesting agents, like from soy, with the retinoids Vitamin B-3 is also very interesting. It's a differentiating agent. There are anti-oxidants being developed into drugs for treatment. There are intriguing issues here because recently there's been reports that too much calcium intake actually may increase the likelihood of developing prostate cancer, and that may have to do with the reduction of serum D-3 levels.

I've done D-3 levels in a lot of my patients to see whether it warrants supplementary Vitamin D-3. And I must say that, in general -- at least in the northeast where sunshine is relatively limited, et cetera -- at least in the northeast, most patients have relatively low Vitamin D-3 levels.

Then there are these other things which are interesting. Zinc, which has hormonal effects, may be a possible agent, but there's a dosage issue. Zinc also is a very useful agent in reducing -- or at least maintaining low copper levels. And copper being an angiogenic, which we'll talk about, has been found to be -- at least anti-copper treatments have been found to be effective in treating end state metastatic cancer, including prostate. So zinc can lower copper levels. So there's most usefulness of zinc, and also it's an adjunct for the immune system, et cetera.

Celebrex, of course, was approved late last year by the FDA for the prevention of colon cancer in those who are predisposed genetically. And it is an anti-angiogenic, and is a cyclooxygenase-2 (COX-2) inhibitor. I think that also has a role. I don't know of any trials now being planned using COX-2 inhibitors. But there are many reasons why something like Celebrex -- or even broader agents, such as indomethacin, which inhibits prostglandin E(2)(PGE(2)), which in turn is a stimulant for prostate cancer, maybe useful.

I just modified this from the National Comprehensive Cancer Network (NCCN) Prostate Cancer Treatment Guidelines, which says who should be treated with what at what stage. It's a treatment guideline for conventional oncologists.

And you look at when it is appropriate to go for just complementary medicine only, which is without radiation, hormonals, or surgery, when it's an option.

I don't want to dwell too long on the slide, but basically just to illustrate the idea, that depending on the PSA, the Gleason, and life expectancy, and, of course, stage of disease, one can argue at different stages that there are times when it's appropriate -- and this is acknowledged by the conventional folks who developed the guidelines, the NCCN guidelines -- it is appropriate to use a complementary approach only, a non-surgical, non-radiation, and non-hormonal approach.

Now, other things can be added if it's beyond primary prevention. The list that I talked about, there are those agents, and then other agents I think can be added, such as pectin, lycopene, et cetera. And then we're talking about later stage disease, other agents can be included, like PC-SPES. (WARNING: Recent developments on PC-SPES have shown it to contain estrogens and other non-herbal remedies, which have the potential to be dangerous. This info was not known at the time of this conference. When reading about PC-SPES, keep this information in mind. For more information, see the Washington Post Article from September 5th, 2004[may require registration].)

It's interesting. It's possible you can use it for prevention, but the number of pills necessary to achieve serum levels is quite large, so I don't think it's very nice to tell patients to take, just for this item alone, 40 capsules a day for prevention.

Melatonin's interesting. From Lissoni's work in Milan, Italy, where they've done a lot of studies on melatonin for various cancers, patients who have become refractory to hormonals, when melatonin is added, somehow in a lot of those patients the refractoriness was reversed.

It is a very benign agent. I always tell patients melatonin gets very little respect in this country because it's not prescribed. I think that's one main issue. For those of you who don't

know, melatonin everywhere else that I'm aware of, including Canada, Japan, Europe, is a prescription. So the doctors really treat it with more respect I think.

Here it's in 7-Eleven. The conventional doctors think, how much can that do. And you know, melatonin is fairly very cheap. "What can that do." It's really a shame. I think more people should look into this, melatonin. It's inexpensive, has very limited side effects, and it's great for the potential as a treatment and modality.

The Italians always use 20 to 40 milligrams, and they always gave it at 8 p.m. I tried to find out why. There's various explanations given to me; I asked them. Why 8 p.m.? The studies for England and Italy may have to do with their dinner times being later. I can't really answer it. They cannot answer it either. It's empirical. They've used 40 milligrams. Here I seldom use more than 20, but they use 40. There's no particular reason. Maybe somebody here may have an answer to that. Then there are off-label drugs that can be used I think at later stages.

Now, this I think is particularly important. We focus a lot on what people should take, and patients come in during consultation with a whole bag full of things that they're already taking, that their friends told them to take, that they read in a newsletter, or learned at a meeting, et cetera, et cetera.

A lot of times, I think there are a lot of agents that are I think dangerous that are in common supplements, that it should be noted. So I'll take a little time to discuss that there are things that should be avoided.

The Omega-6 fatty acids. There is no doubt -- at least from in vitro studies, on cell lines -- that Omega-6 is promotional to prostate cancer, and other cancers too, breast cancer included.

I call it the yin yang of fatty acids. Omega-3 is protective. If nothing else you can remember, just remember this, Omega-6 is sort of the other side of it. Of course, a lot of times in nature the co-exist; so there's some sort of a balance. But I would not take things which are heavy on the Omega-6 side, such as primrose oil, borage oil, et cetera, et cetera.

Antihistamines, which are very commonly used by patients, those of you who are not aware, histamine is now coming out as a -- I don't think it has that much promise, but it is certainly in multiple clinical trials -- called Maximine for various cancers. And histamine is used as a treatment for cancer, and there is argument that really antihistamine should be avoided.

Copper I discussed a little bit. Copper is a potent angiogenic. For those of you who have dealt with treating, or dealing with baldness, you may have heard of a patented, hair-growing shampoo or agent that's called Tricomin. It's one of the very useful hair growth tonics. And it's mainly copper; it's made of a copper complex. Copper induces cell growth, and it is also a potent angiogenic.

Professor Brewer demonstrated quite well that for end stage patients with survival expectancy of less than three months, who enrolled in this study, only to do anticopper treatment -- reducing copper -- that he achieved prolonged survival in patients if the serum copper levels were reduced to 15 or less.

So you might want to look into this. And it's in most multivitamins, so be careful. It's also very concentrated in a lot of shell fish.

Niacin is, again, in a lot of multivitamins and in Vitamin B complex, et cetera. Niacin is an angiogenic substance, and it causes a flush, and you can imagine that it does induce vascularization. This is a known angiogenic, and I would avoid that.

Of course, this is specific. Now, these things are specific for prostate cancer that one should avoid. These are more for all cancers, I think.

Angiogenic herbs. You may not be aware, but ginseng is angiogenic. Just as we tell breast cancer patients to avoid ginseng, which is also a very powerful estrogenic herb, it is also angiogenic.

This is nettles, *urtica dioica* nettles is also an angiogenic herb, and there are other angiogenic herbs that should be avoided.

Dehydroepiandrosterone, DHEA, a popular supplement, should be avoided for obvious reasons. Steroidal hormones lead to higher testosterone levels. And there are glandular agents that are popular. Some people use these -- adrenal glands, meshed, various glandulars, et cetera. It may contain unnecessary hormones that may be promotional, so I do also encourage people not to use these things.

Prolactin has a stimulatory effect on prostate cancer. Things which stimulate prolactin stimulation, such as tryptophan, which is amino acid. Those people who use amino acids should be aware. Interestingly, soy has the lowest tryptophan amino acid content as a source of protein. So soy actually has a good source of protein with a fairly low concentration of tryptophan.

Very quickly, again, the idea of having some sort of a practice guideline, for those of you who treat prostate cancer, or those patients who are interested -- there are so many items. There are 2,000 items. There are literally 2,000 individual items, not counting combinations, in a health food store.

What does one do? You're here at this meeting. I just arrived, so I haven't been to the exhibits, et cetera. I'm sure there are many, many items out there. But again, I think there needs to be some organization based on evidence to minimize confusion, to reduce arguments, and improve communications amongst patients and doctors, and amongst doctors themselves, and also, hopefully, to produce outcome and further research.

We can set up levels of evidence, the highest being multiple studies, that has either undergone meta-analysis, or at least they're multiple consistent trials showing similar results. This would be very unusual in alternative medicine or complementary medicine. But there should be at least one well designed clinical trial.

And then you go down the list. We're talking about anecdotes, case reports, animals, and then test tubes, theoretical only. And then there are things which there's absolutely no evidence for, which, unfortunately, I think are still very popular amongst patients. Then you can weigh your recommendations like this. Try it, consider trying it, think twice about it, and don't recommend it.

How do you apply this? You apply this based on the evidence -- the strength of evidence -- and you also consider why you're using it for what purpose, which I talk about a little up front; and you consider the benefit relative to the cost, which is what we are thinking about now.

So I'll give you a few illustrations, and then I'll pass on the podium to have cases discussed with you; you can see some of these things.

But again, you can tabulate this. Don't worry so much about the table. But based on evidence, which can be from high correlation to no evidence, and based on cost, which includes convenience as well as financial cost of agents or modalities, you can come up with whether something is doable. In some illustrations, for example, thalidomide. I haven't seen the reports, but it is in trials for prostate cancer. There are clinical trials that are ongoing. I believe there are two trials.

But it has some evidence for use, at least it's in trials. It, however, is expensive. If you don't have coverage for it, it's very expensive, and it has very significant side effects. I have very few, I should say, patients who can maintain a steady dose ongoing because they tend to drop out because of side effects. So this is one example of looking thalidomide.

PC-SPES, which I'm sure you're aware of, has levels, a high level of evidence because actually small trials have been completed. I mean, they're not very formal trials.

Now, there are reports, actually even from the recent cancer meeting a few weeks ago, from various centers, from California, UCSF, from Columbia Presbyterian Medical College, that there is usefulness even at Stage 4 disease, at hormone refractory and metastatic disease, that it reduces PSA, and perhaps may lead to increase survival.

Its cost is moderate, and there are side effects. I would grade it between low to moderate, depending on how you look at it. Then there are agents such as Vitamin E, which has a 43 percent reduction, based on the Scandinavian trial of reducing primary occurrence of prostate cancer, which I consider to be very low cost and almost no side effects. They were using a dosage of 50 international units -- no side effects. And has good evidence, and it's used for prevention. So I have no qualms about recommending something like that, for that particular purpose.

For various agents, you can go through the same thought processes, and come to then some decision about whether it's useful for any particular patient. Then there are things which I consider to be maybe low cost but no effects, but I won't recommend it because there's absolutely no evidence, that I'm aware of anyway.

So I think we can have a rational practice. And there's enough evidence by now of what may work and what may not work. We don't need to burden patients with the confusion of so many things, and what to do, et cetera. But again, I think case histories probably illustrate this better than anything else, so I'll pass on to Dr. Renneker to discuss cases. Thank you.

DR. RENNEKER: That's quite an overview, and a lot of considerations. What I'm going to try and do with my time is show how, I guess you'd say, evidence-based medicine, can be brought to meet with I guess what you'd call patient empowerment.

A fellow named Browman who's a clinical epidemiologist up in Canada, wrote an article in Journal of Clinical Oncology last summer on evidence-based medicine, and really, how you would apply it to a patient, say, recently diagnosed with prostate cancer, and trying to make a particular decision. And it was absolutely fascinating to see people who have prostate cancer want to avail themselves of every possible therapy that might help them. And on the other hand, physicians in some ways protecting I think some sort of Holy Grail ideal of some objectivity, have a hard time sometimes --

Woody was insistent that I actually be sure to show some surfing slides in this presentation, but I think you'll come to see -- and as you know, surfers are really driven. They don't follow conventions so often. And it's about the edge and about the frontier. And I've found that patients very often are coming to have to learn to live on and navigate along the edge.

I had an idea back in 1988 that there are a lot of patients out there who would just hit the wall, that had so many complex medical problems, and their doctors hadn't been able to figure it out, or had become obstructionistic, or had just given up. And that these people were just sort of -- they had given up on the system.

So I did an experiment. I put an ad in the San Francisco Chronicle, under the announcement section, right in there with sort of quicky divorces and Terra Card readers; and I just simply said, need Help? In a medical crisis, medical dilemma. Call the Medical Equalizer. And it was based on the TV show at the time, "The Medical Equalizer." And I got all these calls, I mean, from people who really, truly legitimately -- they weren't crazy. They were -- I'll go so far as to say desperate, but they knew exactly what I was talking about.

And I ran this ad as an experiment, literally, and it only ran for a handful of days, and that was it. And then this kind of word of mouth thing began; there was a physician sort of willing to take these kinds of cases, and go to bat for patients, not to treat them, but to do advocacy and research for them. And the case I'm going to present to you later in this session would be one of th people who came to me in that way.

The practice is very simple. It's taking on essentially one patient at a time, and giving them my everything, pulling out all the stops for them, and exploring the upper limits of care. What I have seen happening in medicine is a plummeting of the standard of care, the amount of time patients are given by and large; and I wanted to see, really, how much useful sort of input, or time, could result in what benefits to the patient.

And it's a profound experience. It's sort of counter to any training that we have, but you quickly discover that there are times when patients need hours upon hours acutely -- it turned in for me to the big wave equivalent of medicine because I was taking on cases that were really high stakes, sort of high wire jobs often, and going to bat of the family physician, with sometimes of heads of departments, major centers, and so on.

But I can tell you it was received actually very well by fellow physicians. They understood this; they just sometimes just wished that they had the time to do this for patients. I would say to them in describing what I do, it's kind of like the cases when somebody in your family gets a really bad medical problem, and you find yourself doing all those extra things, looking at all the literature, making the calls around the country to the people who know the most, really running ideas around, putting together a treatment array that is really targeted, and

being very safe about it, avoiding any mishaps. And they understood that; that's what physicians do for people close to them.

So I'm going to just tell you a little bit about the practice because it's unusual. I analyzed the first 30 patients or something in one year. I just want to show you, most are adults, but I do pediatrics. The average age is about 52. Most are female. About half are cancer. As Woody said, neither Ray nor I are prostate cancer specialists, but I do a lot of prostate cancer work. And about two-thirds of the patients have been using alternative complementary medicine. And all of those who haven't definitely want to, and often have come to me because of their physicians not being willing to cooperate, or in effect, threatening to drop them, if they did.

Most of these people have been dealing with these problems for a couple of years. They've seen multiple physicians already, trying to figure out what to do or what's wrong with them. As I said, most of this is by phone, and very often it's a conferencing kind of thing. I get family members from all around the country because they all want to participate and help out, and they've just always been waiting on the side lines, hoping.

And what are the general findings of this? Incorrect or absent diagnoses -- not uncommon. Even with cancer. I've overturned the diagnoses of cancer on getting further pathological review and so on. All the debate about giving the patient the prognosis or not, all too often, patients still aren't being given any reasonable sense of what's to come.

And then, false hopelessness. This is an epidemic. Patients who've just been hit over the head with a prognosis, perhaps, or even an attitude, reflecting -- as patients put it to me, being treated like a "dead man walking." And this is the critical first thing to diagnose as a physician, and to move to treat because they can't mobilize to participate.

The single ingredient I would say in why people end up having to, say, come to me, is there physicians just haven't given them enough time. I should also point out that in about 90 percent of the patients, their primary care physician has long disappeared. This often happens with cancer. And where the oncologist in effect becomes a quasi primary care physician. But most oncologists really aren't trained in that or oriented towards primary care.

A lot of patients with pain, and the family just not being allowed to participate. That just really, really is a burden, especially on the patient who's caught in between.

And general ideas of what to do from the old house of God, take your own pulse, which for me has been -- what it means is, you can't do this work of working with patients in these circumstances to the level that you can do, I think, other areas of medicine. There's only so many hours a week before you burn out, and burn out in the field of oncology is very high. And I've found just kind of a limit where I can take on cases, and no more beyond that. And if I do take on more -- I'm just like every other doctor, just sort of juggling, scrambling from patient to patient, not really being as complete and thorough as I could be, and also not bringing what I call sort of a surfer's stroke to it-- the real sense that, we're really going to do something here, and we're going to help you.

Getting the patient and family involved-- optimistic medicine. If there's a description of what I do, I would call it optimistic medicine.

And again, without any hopefulness, it's hard to work with patients. Similarly, if they have pain, it's also very hard. So that's the first priority always. And as you know, it's an epidemic of undertreated pain, still, in this country.

I seek to explore complexity; I'm fascinated by it. So it's the cases that sort of fall between the cracks, or sort of one cancer or another, and there's disagreement over really what the diagnoses are or the treatments. Those are the cases, really, that an advocate researcher can come to the plate.

I do it out of a little house right near my house. Very simple, just lots of books and fax machines, and I read about 20 pounds of journals a week. I don't actually do that much computer work. You think it would all just be readily available on the computer, but the computer and the Web at this point to me is almost a hindrance, and I think to many patients as well. They're just overloaded. They're drowning in information, unrefereed, evidence-based guidelines out the window.

I use a top flight researcher. He and I brainstorm on a case. He figures out the research questions really, digs up the information. We refine it further. I go through and annotate all that information. And for many of my cases, present them a book -- it's sort of a tailor-made book for all the issues relevant to this given person. And I expect them to do homework. And if they can't because they're too sick, to get someone else in the family to sort of be the assigned knowledge elevator, and then we really begin to work with these ideas.

I use FedEx a lot, of course. The house is right on the beach. Just to give you an idea again, these are the waves out front.

I actually started an organization called the Surfers Medical Association (SMA), back in the good 1980s; and all these surfers started coming out of the closet, around the country, around the world, 700 or so members. And it never fails to amaze me where I might find one.

So, for instance, I was calling Woody Merrell here to talk about a case, and I had never talked to Woody before, but he sort of knew me. And finally he says, "You know, I'm a member of the SMA." I had no idea. I was floored. I even once found a member in Detroit. Figure that.

But, indeed, this is full-fledged, and then we have a journal, and put on medical conferences, mainly the sports medicine aspects of surfing. And people always enjoy seeing this.

You know, one of the problems of alternative medicine, as I see it, is that they're taking on the same bad habits of traditional medicine. I mean, in their organizations, in their structuring, in their sort of drive towards money.

The SMA at one point, they wanted to have this board of directors, and president, and all this other kind of stuff. And this was our first board meeting, and at that meeting we realized we are miserable with the structure, and we have damned it. And we have since become a completely horizontal organization.

And then, furthermore, on the edge, a passion that I have -- and again, my practice I have a passion for, and surfing I have a passion for, and I don't want them to block each other in any way, and I keep looking for ways for them to work together.

I just love going to these extreme places, like Alaska. This is up in Alaska. And then more recently, Antarctica, where I spent the month of February, sailing, looking for surf, the first sort of expedition in Antarctica to look for surf.

This is Shackleton's men. Back in 1914, as you remember this whole year-and-a-half of struggling to stay alive on ice, and then giant waves. And I read the Shackleton stuff; I thought, I'm going down there.

This is our snow-covered boat. That's a surfboard up there. Facing icebergs.

I tell you what, when I'm doing this stuff, I really, truly am thinking about, this is not dissimilar to what my patients go through, being somewhere out without maps, encountering horrible bizarre things sometimes. But also for many patients, thriving.

How many patients have you known who have said, "I would never wish cancer upon anyone, but having had cancer, and what I've gained from it, I don't know that I would change that."

I'm going to run a case by you, in brief. And would tell you that I've written the case up on one sheet of paper, and I have with it a rather long handout, that's modified, from a talk I gave in November for common will. And it's basically all the things that I've learned in my practice of things that tend to have not been done on cases dealing with cancer. And it's basically seeking optimal cancer care.

The case, though, is of a 57-year-old writer, who's father had died of prostate cancer, and he began having regular PSA screening, which turned up a high PSA of about 22. He had a biopsy done, and it showed it to be an aggressive type of prostate cancer, a Gleason 7, but the bone scan, the MRI, seemed to show no spread. And so, he decided to have radical prostatectomy, removal of the entire prostate.

All the lymph nodes were negative on that. He was staged as a T-2B, which is essentially Stage 2. The surgery, left him impotent, but he still had libido, and could enjoy sex, he said. And significantly, his post-surgical PSA dropped to 0.1, which is negligible or 0. It stayed that way for about 14 months, and then began to climb.

Now, this is five years ago. He was terrified. Everybody told him this meant recurrence. They pressed upon him that he should start doing hormone therapy. Discussion was given of radiation therapy, if it was still localized to the prostate area. He had multiple further scans. He had biopsies of the prostate bed, trying to figure out where this was coming from. It never turned up where the recurrence apparently was.

And as his PSA was climbing, he was trying to decide what to do with hormone therapy, a friend pressed upon him some herbs from a healer and he noticed that taking these herbs, his PSA dropped. Then he sort of ventured into sort of changing his diet to a more vegetarian diet, and his PSA dropped a little bit more. And that point, he was ready to sort of go that whole route, but he still went and had consultations with major cancer specialists at cancer centers on the subject of chemotherapy or radiation therapy. Both told him such adverse things, that he said, not unless I absolutely need it; I'm going to try everything I can to avoid that.

And he began to see a nutritional oncologist who prescribed him a more exacting diet specific to prostate cancer recovery, taking various supplements, phytochemicals. He got in touch with me. We began to research lots of different questions of specific substances that he would read about in prostate cancer newsletters or on the Internet.

And I bring up this case because what he and I became was sort of almost like a cross-fire show, or PBS, I mean, trying to sort of argue out these things. And it was all about evidence; this is a very smart man. And it was also, though, about intuition and hunches.

And what the problem with this evidence-based approach to medicine is, patients often have a whole other means of decision-making, and bringing facts and information to it isn't the entire process.

So he became involved with homeopathy, acupuncture, Shiatsu, Native American healing-- these were sort of the body things. He also began taking PC-SPES, and he was delighted with that because it was sort of a break any time the PSA would accelerate, and he could bring it back down. And we experimented with sort of intermittent PC-SPES approaches, as has been used with antigen blockade therapy.

As soon as the Celebrex stuff hit, or the Vioxx as a possible sort of COX-2 inhibitor or angiogenic inhibitor, he started on that. The Vitamin D-3 aspect that Ray had mentioned, he started on a low dose of that. He kept up the sulfamethoprim and the finasteride that he'd been on for a while for some prostate enlargement.

He really wanted an immunotherapy, so we researched all the possible immunotherapies in the country at that time. Chose one up in the Seattle area, which was a dendritic cell therapy; and he went into that. I'm not sure if it was every three weeks that he went there, and it was sort of the healing journey, he calls it, or the ritual, or the actual dendritic cell therapy. But he had very good responses to dendritic cell infusions, and his PSA would just keep dropping every time he got one-- not every time, but close to it.

His PSA never went over 5. And where he is now, five years out, is his PSA is still 2.2. The most important part of his work, he would say, in addition to the mind-body work, is the soul work. And he describes that as, first of all, he needed doctors working with him who were optimistic, informed, innovative, and interested in him. And then he said, secondly, it was the cancer and healing literature. He's a writer, so he just grooved on things that Jeanne Achterberg wrote or Rachel Remen wrote, Lawrence LaShan's work. He began to incorporate these ideas, truly, into his life.

He realized that he was miserable with the work he'd been doing for the family newspaper. He left that. He went off on his own to live in a town where he'd always loved living before. He began doing wonderful things now with his family, his friends, and he had a sense of community that he always wanted to write about. And it was the divided racial community in the town he grew up in the Midwest, and he wrote a beautiful book about that.

And as he went through this soul work, as he called it, he said he had a transformation. And the things he writes to me now, the discussions we have, all evidence that from when I first spoke with him those years ago.

So that in a nutshell is the case. I'm going to turn this over, I guess, to Bill to talk about our presentations. And I thank you.

DR. FAIR: No surfing slides, no slides at all. I just had a few comments -- which I guess the job of a commentator is -- about the presentations. And I'll just run through them in no particular order, just as they popped up in the presentations.

First, Ray Chang I think gave a beautiful exposition of not only what's out there, but the complexity of what's out there, and how difficult it is to be dogmatic about many of these things. He mentioned the area of carotenoids, and genistein and things like that. And I believe any dietician will tell you that taking these things as a supplement, as an individual capsule, is totally different, in many cases, from taking them as a food. And you can't, more or less, approximate the amount of genistein you might get in soy by how much you could get in a capsule.

I'll just give you one little story about lycopene, and it's true that the retrospective study looked like lycopene was protective. However, we took lycopene -- I took human prostatic cancer that had metastasized, put it into a nude mouse, and the tumor grew up. And then fed the animals, some of them lycopene, and some of them not lycopene. The tumors grew much faster in the animals receiving lycopene.

Well, what does that mean? I mean, here we have a retrospective analysis from the Harvard School of Public Health, saying that, if you eat more tomatoes, that you can reduce your incidence of prostate cancer; and we have these animals that we feed what they're saying is the primary carotenoid in tomatoes, and the tumors grow faster. It simply means we have more studies.

So, yes -- do I think you should eat cooked tomato products? Absolutely. Do I think you should take lycopene capsules? I'd have my reservations about that.

Similar things about, like selenium and Vitamin E. Those studies have been pointed out, look encouraging. Those studies were designed with other primary endpoints in mind, and they need to be confirmed. We don't know whether selenium in a prospective study really will inhibit prostate cancer.

It's kind of interesting. Ray was mentioning about copper. Before I went to medical school, I was a pharmacist. And some of you may know the product Selsun, the dandruff shampoo. Well, I was in pharmacy school a long time ago when that was coming out, and there was a tremendous battle about whether or not Selsun should be approved. And it was originally a prescription item, had to get a prescription from your doctor because we were worried about whether the selenium would be absorbed through the scalp and have toxic effects. And now we're advocating people take 200 micrograms of selenium a day. It's sort of interesting the way things have flip-flopped.

Ray had asked about the PCP trial for men over the age of 55 taking finasteride. I don't know a single urologist -- academic urologist -- that I respect that thinks that's a good trial.

First of all, 55, it's too late to start preventing prostate cancer, because a man that gets prostate cancer at 65 has had it when he's 35. And I think we really need to go upstream further. And it seems to me that all that money put into a study like that could be better

utilized looking at other ways of chemo preventive, maybe with functional foods or something else like that.

I think that what Ray -- well, both speakers mentioned about the COX-2, inhibition, I think it looks very interesting. There was a study at the American Neurologic Association recently, showing in animal models taking hormone-resistant prostate cancer, putting it into animals, feeding some of the animals COX-2 inhibitors and the others that controlled, and show a dramatic growth in prostate cancer.

This is a thing about melatonin. For those of you who are interested, there was an article in Scientific American in the last three or four months. It was something called "The Tick Tock of the Biological Clock," and it had a lot to about melatonin. And I've been interested in melatonin, because as had been mentioned, melatonin does have anti-cancer effects, and why is not used more by oncologists.

But the interesting thing is -- again, both speakers pointed out that it's not just taking another pill; that there are studies that show that if one looks at the melatonin levels in the body after meditation, you can get dramatically improved levels of melatonin in the blood stream, sometimes even higher levels than you can get by taking an exogenous supplementation. And Jon Kabat-Zin and his colleagues up at Massachusetts have done that.

Why do you take it at 8 p.m.? I don't know either, Ray. But the theory that I've been told is, as you know, melatonin's stored in the pineal gland, and it's highest in the morning when we wake up, and then it dissipates during the day. So at 8:00 it's actually at the lowest level.

So you give the melatonin when the serum levels and pineal levels are at the lowest, so that you'll have more melatonin to take up, and you'll start with a higher charge of melatonin the next morning. It sort of makes sense, but I don't know anyone that's really studied it.

I would like to comment now on some of Mark's excellent presentation. And again, I think he pointed out some of the things that Michael Lerner addressed today.

There is a difference between curing and healing. There is a difference between disease and illness. And I think Mark was pointing out his practice as a physician in healing the illness, not necessarily curing the disease.

And Ambroise Pere who's the father of surgery -- and as a surgeon I always like to quote this -- had a saying three centuries ago, "To heal sometimes, to comfort always." And I think that was sort of a predecessor, if you will, of the "common will" approach; that is, you can expand life, even if you can't extend life.

And this beautiful case that Mark showed, I just had a few comments. For those of you in the audience who are wrestling with the problem of what to do, we now know that -- it's interesting, this man had his PSA checked regularly, and yet, his PSA was found to be elevated at 22, presumably from irregular value. That's a very worrisome sign. Prostate cancer doesn't behave that way. And when that happens -- goes from normal to 22 -- you have to suspect that there's big-time disease, i.e., metastatic disease. And I think that with a Gleason 7 would, in my mind, not qualify this man for a radical prostatectomy and I'd be very suspicious in the beginning that he had metastatic disease.

He went ahead and had this surgery, and his PSA went down to 0.1. And again, this is a little bit of trivia, but at that time, 0.1 probably meant non-detectable disease. Currently the assay is so sensitive, we can measure 0.07. So 0.1 means that this man never was cured of prostate cancer; he still had a small amount of prostate cancer. That's the time to begin your prevention, or your secondary prevention, if you will.

I give lectures, a few lectures recently, on the theme, which again, Mark is pointing out -- both of the speakers -- and it's a provocative title, "Do We Need to Cure Cancer?" And I'm not sure we do. And I say this as a patient. What we need to do is to slow down the progression of cancer so that we can maintain or improve the quality of life.

We're never taught in medical school that we need to do that; we're taught that we're never going to cure heart disease, or diabetes, or arthritis, or a host of other chronic conditions. But cancer, we have to pull out all stops, regardless of the side effects, or regardless of the danger to the patient.

And then the history of medicine is replete with examples like this. The most recent has been the autologous bone marrow transplantation in women with breast cancer. And yet, the idea that we should spend large amounts of money to pursue the cure for cancer, rather than saying, okay, we won't cure this disease; what can we do to have this man or this woman -- again, to use common will -- expand life, even if extension is not possible, I think is a goal that we have ignored for all too long.

Mentioning about the PSA, well, PSA, the one thing you have to keep in mind is, we don't know -- we think that it's good if the PSA goes down, but any of the gentlemen on the panel I'm sure will tell you, they've seen people with wildly metastatic tumor with a normal PSA. So just the fact that the PSA goes down may just mean that that tumor's not making PSA; it may not mean that the tumor's dying.

I guess the thing that I wanted to say most of all, that, again, had been emphasized before, particularly in Mark's approach, that the treatment or the slowing down of cancer is not just one thing; it really is a lifestyle change. And that the approach when one takes on the treatment of a disease, that it's not only just giving a pill or an herb, but it has to be a whole change in that patient's activities.

Finally, one of the things that I always say to prostate cancer groups, that PSA is prostate specific. Antigen, I often think it's prostate specific, anxiety, and men, don't get to hung up -- we know it takes a long time for, even a person like this that's had a radical prostatectomy and detectable PSA, we know that just with very little treatment that the likelihood that he would develop metastatic disease before eight or nine years is pretty minimal.

And I think that it's important to remember that no one ever died of an elevated PSA. PSA alone, it should be taken -- as was done here -- as an indication that, yes, we may start some other treatments, but there is a role for complementary medicine. The ideal role for complimentary medicine is in a patient like this, rather than doing hormonal or other therapies that are going to impact his quality of life, and may not improve or extend his life at all. Thanks.

Any questions?

DR. RENNEKER: I do have just a quick comment. Thanks, Bill, for echoing some of what I was describing there.

One of the interesting points when I started up on this case was just that. I questioned whether he'd ever been actually cured of his disease by the surgery. And I bring this up because it was a very difficult thing to discuss, because a person would hate to think they had a needless surgery, or that the surgery wasn't warranted, even in the first place, meaning he made a bad decision. And it's very tricky to sort of address that point.

But he did give me permission to talk with his surgeon. Because I was concerned that if there were some residual prostate tissue as a possibility, that could potentially warrant possibly even a second surgery, or even radiation therapy. And I wanted to talk to the surgeon about if he, perhaps, left some gland at the apex.

And there is literature that describes -- different surgeons have different approaches. And we like to think they take this thing out in total, but that's pretty tough to do. And furthermore, there is literature that there actually are extra prostatic -- meaning it's outside the prostate - - sources of PSA sometimes. And I think it was useful, this inquiry, and it further led to us looking in the ureter for possible PSA production.

Another point to bring up was a monoclonal imaging technique that can look for prostate cancer. And I think it's significant in that right about the time he and I started working together, a paper had been published showing it works, but it only works if you do this a lot. And that it varied from center to center, and the centers that didn't do much, they had a lot of false positives and false negatives.

The point I'm making is that there is enormous geographical variation in how disease is seen, how disease is treated, how disease is worked up. And I think one of the biggest advantages to having someone who has a more widespread knowledge, or willingness, to look, let's say, in the whole country, the whole world, is that then the patient can come to understand those potential limitations of where they are, no matter how great the center may be.

DR. MERRELL: We need to close now. Thank you very much.

(Whereupon, the PROCEEDINGS were adjourned.)

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