

Comprehensive Cancer Care: Integrating Complementary & Alternative Therapies
Alternative Therapies: Past and Present, Promise and Limitations
Ralph Moss, PhD
June 12, 1998

Dr. Moss: Thank you as always, Jim. It is a really wonderful event, and I'm so happy to see all of you. Probably 90% of my friends in the world are in this room, and the rest of you are friends in the making. Before I go to my prepared remarks, I do want to tell you a little bit about myself, because I think it will help you to understand where I'm coming from and why I'm here.

Twenty-four years ago I was hired as the science writer at Memorial Sloan-Kettering Cancer Center, later promoted to the assistant director of the public affairs department. I was fresh out of school. I had just gotten my PhD from Stanford in classics, and made a career change to become a science writer. Within a matter of weeks, something began to happen that was to completely transform me, not just in terms of my professional status, but as a human being. I faced the biggest crisis of my life. As the Chinese say, danger is crisis and opportunity. This was my crisis but also an opportunity to do something of great significance with my life.

I interviewed an elderly scientist, Kanematsu Sugiura, who was the oldest and most senior member of Sloan-Kettering Institute. At the end of the interview, I asked him what he was currently working on. He said, amigdolyn, and it took me a minute to realize that amigdolyn was laetrile. I was absolutely astounded. We in public affairs had a statement that we were giving out about laetrile that was not that different from what you heard Dr. Rosenthal say this morning about it. Namely, to boil it down to one word, it was quackery. I was unofficially put in charge of communicating with the public on such issues. I was astonished, astounded to hear Dr. Sugiuras say that he was working on this. I said, "Why would you do

that if it doesn't work?" He said, "But it does," and took down from the shelf a book showing me the results of his experiments with laetrile.

First of all, he showed me that laetrile temporarily shrank the growth of tumors in mice. When I expressed some amazement, he showed me logs and books showing that laetrile had a very dramatic effect on lung metastases in these animals. There were 60 to 80% less lung metastases than there were in the control animals. He thought it was not a cure for cancer, but a good palliative drug and seemed to act almost like a vitamin.

Since he had been in cancer research from 1912, I took his words to have some meaning. As time progressed in the department of public affairs, we were very much involved in following this story. As the results became increasingly more encouraging and more positive in three different animal systems, the comments of our leaders at MSKCC became increasingly negative. Finally we were told to issue a statement that we had found laetrile negative in all the animal systems we had tested. This was given in 1975 in *Medical World News*, and I discuss the details in my book, *The Cancer Industry*.

At that point I decided that I was involved in a cover-up. I started to take action to thwart it, if I could, thanks to my wonderfully understanding family. By 1977 I got up at a press conference which we called at the Hilton in New York. Not surprisingly, I was fired on the next day, as they put it in *The New York Times*, "for failing to carry out his most basic job responsibility." I thought there was a higher authority which was, at the very least, the public and all the cancer patients, past, present and future. I had no evidence that laetrile was a cure for cancer.

I thought that the statements coming out of California and Mexico were tremendously exaggerated. In my first statement, I called for good fair clinical testing of laetrile, and this

would still be my position today. I don't think laetrile is top on the list of things to test, but it was my introduction to the politics of cancer. I was the most bright-eyed, bushy-tailed, idealistic 30-year-old that you'd ever seen. I thought I had the ringside seat to the cure for cancer, and next thing I knew I was out on my butt.

So that's me, and that was really the shaping event, other than personal events in my life. That was professionally, and in many ways personally, the shaping event. It has made me exquisitely sensitive to fraud, cover-up, bias, malfeasance of every kind. It taught me also that oftentimes in life you have to go against the authorities. Robert Good, who was the President of Sloan-Kettering, used to say that we need people who could see when the emperor had no clothes. It was one of his favorite analogies. It turned out that I was the little kid in the parade and he was the emperor.

Our historic task at this conference is to reconcile orthodox and so-called alternative or CAM, complementary and alternative approaches to cancer. This reconciliation will not leave the two parties unchanged. Out of this encounter a new entity can arise called integrative oncology. Cancer patients around the world are demanding such an integration. Most don't want to abandon surgery, radiotherapy or chemotherapy in order to pursue alternative treatments. They definitely don't want to be abandoned by their oncologists if they're discovered using vitamins or herbs. They demand the right to integrate immune-boosting practices with standard cytotoxic care. They demand the right to use treatments of their choice, and to be treated with understanding and respect. Professionals in this field should never make patients choose one or the other, or make believe that their approaches and practices are the only viable ones. The vast majority of patients could benefit by an integration of both approaches. So will most practitioners.

Some oncologists are becoming interested. I saw many indications of this at the recent meeting of the American Society for Clinical Oncology in Los Angeles. I was heartened by the scores of oncologists who came up to me at our booth and asked to discuss CAM-related topics. One paper from Columbia University showed why. Thirty-seven per cent of breast cancer patients being treated at Columbia were using CAM or alternative medicine. That was up, as Dr. Rosenthal pointed out, from just 9% at the beginning of the decade. We're looking at a 400% increase in just a few years. Patients and their representatives are in a million ways asking the leaders of both sides to put aside their personal grievances and to bring about such an integration.

There are some good signs that such an integration is in fact possible. In March, as you heard from Dr. Wittes's presentation, Dr. Richard Klausner of the National Cancer Institute and his colleagues, including Dr. Wittes, took a giant step in this direction. They removed NCI's statements on non-conventional methods from distribution over the Internet and elsewhere. These statements were woefully prejudiced and were a thorn in the side of the CAM community for decades. Dr. Klausner looked at the statements, he agreed they were inadequate. He pulled them and I salute him for that decision. I'm highly encouraged by Dr. Wittes's presence here and the other people from NCI. I found that I agreed with almost everything that he said and it's a tremendous opening, tremendous opportunity for us. In my following remarks, if I'm critical of NCI, I hope that everybody will understand that my criticism is meant in a friendly way, as part of hopefully our new partnership.

I have been disturbed by the sporadic nature of communications between the CAM community and NCI. To my knowledge, NCI has no advisors on this topic from inside the alternative community. There are no members of the National Cancer Advisory Board who are

sympathetic to CAM. We had a few patient representatives – Rose Kushner at one time was on the board and of course an outstanding person. Dick Bloch, another outstanding patient, was on the board, but neither of them had a strong record in terms of their involvement with CAM.

It's been nearly a year since NCI and the Office of Alternative Medicine jointly sponsored a conference on Patient Outcomes – Monitoring and Evaluation Systems, the acronym of which is POMES. This was an outstanding event, and it made specific recommendations for testing alternative treatments. But to date the public and the participants have not seen any outcome. As far as I know, there's not been a single communiqué back to the members and participants of that meeting. Both sides have been slow in implementing the decisions of that meeting, or in communicating with us. I'm not faulting just NCI here. OAM also bears some of the responsibility.

Recently NCI had a sterling opportunity to involve itself in a CAM project and turned it down flat. I'm referring to clinical trials that have been initiated at Columbia University using the diet therapy of Nicholas Gonzalez (the so-called Kelley Method) in a clinical trial of which Karen Antman is the principal investigator, and Ernst Wynder of American Health Foundation is the strong supporter. It has the financial backing of Procter & Gamble. Now you can't do much better in terms of orthodox support. No one in this room or in our field, I don't think, ever will assemble a more powerful constellation of supporters. Karen Antman was President of ASCO and Ernst Wynder needs no introduction, nor does Procter & Gamble.

Although they were asked in a number of ways, which I could enumerate, to involve themselves in this project, NCI chose not to. My understanding is that they said that since it was already funded by Procter & Gamble there was no reason for them to become involved. This is hearsay. In any case, they decided not to. What they did do is forward all the documents to the

Food and Drug Administration. This apparently is going to require this program, which uses over-the-counter and already approved medications, to file an IND which will delay the project by six to nine months. I needn't remind you that hundreds of thousands of people will die over the next six to nine months of cancer. Thousands will die of pancreatic cancer, which is the object of this particular study.

These are the kinds of things (I'm sure that Dr. Wittes could give us further insight into why this happened) these are the kinds of things that lead to paranoia in the alternative movement. These are the kinds of breakdowns in communication that, since we can't get through, usually, to the leaders of the cancer field, seem to be directed at harming us. I want the NCI people to understand this – when you don't have communication, it's easy to jump to the wrong conclusions about your opponent.

The root of the problem lies deep in the past, and often in events that occurred before any of us were born. The fundamental question is, why are there two oncologies? How can we overcome our differences and integrate this field? A simplistic answer is that both sides should practice good science, and then all should be well. I'm for good science, but we have to recognize the burdens of history. As a European commission discovered when it looked into this question nearly 20 years ago, the division between alternative and orthodox medicine is not principally of a scientific nature, but owes its origin, continued existence to both socio-political and scientific factors. This implies that the gap cannot be closed simply by making scientific recommendations.

There are ghosts, ghosts in this room, ghosts that hang over our meetings, that hung over the POMES meetings. These are the ghosts of William B. Coley, and Andrew Ivy, of Harry Hoxsey, and Rene Caisse, of John Beard and Kanematsu Sugiura – and all of the other scientists

and lay people who have had theories and treatments for cancer that have never received fair evaluation. These continuing controversies still haunt us, they're still with us.

I want to talk a little bit about the situation in America a hundred or a hundred and fifty years ago. The roots of our problem date from the past and date from those times. You know that a hundred and a hundred and fifty years ago, medicine in America was in a dire state. It was a regular profession centered around the American Medical Association, but it was very weak. It was beleaguered on all sides by other systems of medicine like homeopathy and eclecticism and osteopathy and chiropractic and so forth. There also was a profusion of over-the-counter medicines which claimed to cure many things, including cancer.

Even JAMA, the *Journal of the American Medical Association*, was filled with ads for patent medicines. This helped to support the organization from the 1880's into the 20th century. The medical practice and therapeutics were pretty much abysmal. There's a famous statement from Oliver Wendell Holmes, Sr., in which he said that if the entire *materia medica*, or combined medicines, were sunk to the bottom of the ocean, it would be better for mankind, but worse for the fishes. As one professor put it, "I look back on the old methods of drugging with the same feeling of disgust and horror that I look back upon the thumbscrew, the cat, and the rack." When the *Boston Medical and Surgical Journal* offered a prize for a cure for cancer in 1882, they didn't receive one credible response. That's where things stood about a hundred years ago.

There were all kinds of people, most of whom were really frauds, kooks and quacks, running around claiming to have cures for cancer. If you could go back in time you would see thousands of ads for cancer cures in newspapers and magazines. If you walked into a tavern, somebody would leave a little card by your elbow if you weren't looking particularly chipper

that day. They would paint messages of cancer cures on the sides of barns or on big rocks in the countryside. Cancer cures, cures for everything, real and imaginary.

One ingenious salesman even sneaked up onto the porch where Ulysses S. Grant was dying of throat cancer and deposited a pack of herbal chewing gum in the poor guy's lap – that was supposedly going to cure him of cancer. We don't know what was in the chewing gum, or any of these other preparations, because they were patent medicines, they were secret preparations. There's a pretty good chance that the vast majority of them were, as the reformers later said, colored water, alcohol, sugar, and very little else.

There was a logic to the reform of medicine. There was a logic to the creation of the Food and Drug Administration. But that logic went overboard, and basically destroyed every non-allopathic or non-conventional medical school in the United States. A lot of that was the work of the Flexner Report in 1910, but also of one person named Morris Fishbein, who was the editor of *JAMA* for decades. He had a particular zeal for persecuting and eliminating non-conventional practitioners. The school of thought that he focused on the most I think was called eclecticism. Probably many of you have never heard of eclecticism, because the last eclectic medical school closed in 1939. This was a vibrant school at one time and controlled about one-tenth of the medical practice in the United States.

I learned about a lot of this from a man named David Winston, who was an herbalist in New Jersey. The eclectics were really the cancer specialists of the 19th century. The orthodox medical community had surgery, but it had little else. If they could get the tumor early, which was rare, they could operate on it and remove it and possibly cure the patient. When the orthodox surgeons gave up on a patient, oftentimes they would find their way to an eclectic

physician, and they would treat them with medical means. I don't say this to be funny, but I really think that alternative medicine founded the field of medical oncology in the United States.

I want to show you something. This was the Scudder Alterative. Alterative is the old-fashioned name for something that alters or changes what we would call the metabolism of the body. They were frequently used for syphilis. It was the life work of a man by the name of John Milton Scudder, professor at the Eclectic Medical School in Cincinnati. Contrary to the charges often made against early alternative doctors, there was not a secret formula. This was quite openly published. I call your attention to the last item. It consisted of scrophularia (I'll read the English names), knotted figwort, tag alder, yellow dock, Chinese cordalis and mayapple, podophyllum peltatum.

I call your attention to the last item, and that was the mayapple. Mayapple was being used very early in the 19th century as a cancer treatment. The Penobscot Indians of Maine had introduced this as well as bloodroot, and some other herbs into the treatment of cancer, and this was published in a medical book in 1849. Scudder used it. Ely Jones, who was a disciple of Scudder and wrote a book about cancer in 1912, also included mayapple in his formula, so it was a standby agent.

What's interesting about this, and the reason I bring this to your attention, is that when Jonathan Hartwell, who was one of the founders of the National Cancer Institute, in charge of its natural products division, tested a bunch of different plant chemicals, he found that there was astonishing activity to one in particular, and that was mayapple. It was extremely effective at killing cancer cells. Eventually a number of semi-synthetic derivatives were made of this. These included two drugs called etoposide and teniposide. Some of you may have heard of them. Some of you may be on them. In 1973, etoposide was put into clinical trials. Within the

year, they were already assigned a major role in the treatment of small cell lung cancer and lymphoma. The drug was finally approved by the FDA in 1983. Teniposide is a slight variant; it's also widely used.

This experience changed the life of Dr. Hartwell. Dr. Hartwell also had some connections, family connections, to Maine. He died unfortunately in 1991. But he realized that on the one hand were two effective, proven, chemotherapeutic agents that were highly cytotoxic and very useful that have helped to treat thousands of people. On the other hand was a so-called quack treatment, a folk treatment, that was used by Native Americans based on their ethno-medical practices dating back to time immemorial. How do you reconcile those two things? You have to draw the conclusion that these people, the Penobscot Indians and the eclectics who followed them, had empirically hit upon the use of one agent as part of a formula that had cytotoxic activity.

I won't leap from this to say that they were curing cancer all over the place, but there's something extremely provocative about the existence of cytotoxic, chemotherapeutic agents in a formula that was denounced as quackery by the American Medical Association and in fact driven out of business. In a book by Morris Fishbein dated 1927, he writes that the eclectic formulas were "vegetable soup, the apotheosis of the old grandmother and witch doctor systems of treatment." In 1927, mind you, he predicted that chemotherapy was going to sweep away the debris of the vegetable kingdom. This was quite a statement, and of course what they swept away was probably one of the most effective drugs ever discovered.

Like many things, I owe the following data to James Duke, who will be here tomorrow. I want to say that my new book, *Herbs Against Cancer*, is dedicated to Dr. Duke and also to the

memory of Dr. Hartwell, as well as all the other scientists who have investigated and validated folk treatments.

This shows compounds with anti-cancer, anti-tumor activity, or cytotoxic activity, and genera in which specific species of plants were used or are used by the laity, by folk usage to fight cancer. One of them is repeated twice there. You'll see down on the list is taxol, which of course comes from the Pacific yew, but also can be found in the *taxus baccata* or the English yew as well. We know that this is true – many cancer treatments overlap, the folk treatments overlap with the scientific treatments. There's borrowing back and forth. Some of the things that have become exposed through science then go into the folk tradition as well through the work of people like Dr. Duke. It's not one or the other; there's already a cross-fertilization.

I also want to mention the battle between Harry Hoxsey and Morris Fishbein, which others will go into in greater detail. Here was another folk treatment. It really was the Parke-Davis trifolium elixir, which mainly contained, the herb that gave its name to this was red clover. Red clover is something that you find all over the world used as a cancer treatment. Just by serendipity Dr. Duke e-mailed me the day before yesterday with a list of ingredients of clover, knowing the topic of Hoxsey would come up at this meeting. These are just the cancer-preventing compounds. There's also anticancer, antimutagenic, antinitrosaminic, antioxidant, antiperoxinate, anti-tumor, antitumor promoter, apoptotic, cancer-preventive, tyrosine kinase inhibitors – the list goes on.

This was the compound that supposedly was pure quackery, pure trash, that the FDA put up warning posters against in 46,000 post offices and public places in the United States. We also know that the external treatment of Hoxsey had in it arsenic and zinc chloride, and bloodroot in some of these formulas. Blood root and zinc chloride – that's Mohs' chemosurgery, for those of

you who know anything about the treatment of skin cancer. This is the most effective treatment there is for skin cancer. The conventional textbooks will tell you this – tremendously successful. When it was done at the University of Wisconsin, it became orthodox medicine, but Hoxsey was still a quack. That didn't affect his legal problems. Arsenic was taken as a sure sign of quackery. Now Dr. Raymond Warrell at Memorial Sloan-Kettering is using arsenic trioxide in the treatment of acute promyelocytic leukemia and experimenting with it in a number of other cases including prostate cancer. This was reported at the ASCO meeting.

If we're going to work together we have to agree upon certain guidelines. They basically for me go back to my experience with laetrile. We have to do away with the BS. We have to do away with the promotional activities and get down to what the facts will actually support. I was very disappointed in the performance of the NCI and the cancer establishment around the angiostatin business. I've written favorably about Dr. Folkman's work and about angiostatin, but doesn't anybody remember interferon and interleukin, aside from Dr. Epstein, tumor necrosis factor? I was recently looking into Camptothecin. Camptothecin, which is derived from a tree, cured 36 out of 36 cancers in new mice. When they put it into a human clinical situation they got two partial remissions out of 61 patients. And ASCO again, there were two studies published, phase one trials, one of them on thalidomide, which is both antiangiogenic factors, reported 3 out of 48 partial responses, and another antiangiogenic, Vitaxin, 1 out of 12 partial response. This does not warrant front-page coverage in *The New York Times*, or going along with the tide and claiming that this is some kind of imminent cure for cancer. We wish it was, but let's hold off. You can't fault the laetrile movement and then turn around and do the same thing from the point of view of orthodoxy.

I also want to say that there's a lot of outrageous behavior on the side of alternative medicine. We have seen crazy, from my point of view, crazy stuff. We had a tape, *Dead Doctors Don't Lie*. Supposedly doctors die at the age of 58. I did the math. Doctors die at the age of 73, just like every other male dominated group in America.

We had a book, Hulda Clark, *The Cure for All Cancers*. I'd love somebody to point out to me one case in that book, not 100, but just one of somebody with a biopsy-proven case of cancer who truly was cured. Supposedly every case of cancer is caused by parasite infestation with *fasciolopsis buski*. The Center for Infectious Diseases found only 1 out of 216,000 people infested with *fasciolopsis buski*.

Noni juice, the miracle cure from Polynesia, where I've tried to track down these cases that are written up through the multilevel marketing schemes, and I can't get a doctor to reply to me. Vitae Elixixir, HANSI – tremendous marketing, these are inverted pyramids, tremendous amounts of hype and promises that rest on the most flimsy of evidence, maybe one animal study. The same cure mongering goes on on both sides.

The patient is the victim. Just because something is alternative doesn't make it safe or innocuous. Last year a doctor in Michigan killed a patient by injecting him with tea that was meant for oral consumption. You probably remember the front-page story in the *Post* about a Manassas, Virginia, osteopath who set up a clinic to inject people with concentrated aloe vera juice. If the reports are to be believed, people were dropping dead in his office. Patients also reported unbelievably disgusting conditions in that clinic. I saw on the Internet a picture and a letter from a young woman who used an escharotic paste similar to what Hoxsey used in his clinic. She managed to burn off half of her cheek with this burning paste. The company in the Bahamas which sold her the paste offered her her money back.

If you want to make an integration of this field, it has to be on the basis of honesty. It has to be on the basis of people in alternative medicine criticizing the outrages that go on, but we demand honesty from conventional medicine as well. Ultimately the arbiter of what we do will be the public. How we perform here and elsewhere will be judged by the patients and their loved ones. If we're to move forward, it will have to be on a new basis. The history of evaluating non-conventional treatments in America has been plagued by failure and sometimes by fraud. If we continue to reflexively defend our past practices, we shall certainly fail again. I hope that we can all summon up the courage to create a new science of integrative oncology. 1.2 million new cancer patients this year alone demand no less. Thank you very much.