Clinical Procedures in Treating Terminally Ill Cancer Patients with Vitamin C

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Let me tell you what I am not. I am not an oncologist, I'm not a pathologist, I'm not a GP, I am a psychiatrist. Therefore you may want to know what a psychiatrist is doing messing about with cancer. I think that's a legitimate question so I'd like to tell you briefly how I got into this very interesting field.

In 1951, I was made director of psychiatric research for the Department of Health for the province of Saskatchewan. I didn't really know what to do. I had one major advantage, I think, over my colleagues. I didn't know any psychiatry. You may laugh but that's very important because I didn't have anyone who could tell me what we could not do. The most important problem at that time was the schizophrenias. (They still take up half the hospital beds, and we still don't have an effective treatment.) Dr. Humphry Osmond and I began to research schizophrenia. We developed the hypothesis that those with schizophrenia were producing a toxic chemical made from adrenalin, adrenochrome. Adrenochrome is an hallucinogen which we felt was producing toxemia, in the sense that the adrenochrome worked on the brain in the same way as LSD. That was our hypothesis.

We knew that most hypotheses turn out to be wrong. We didn't think we were going to be correct but we felt that since we didn't have much choice we ought to work with it and we also wanted to develop a treatment for our schizophrenic patients. Those were the days before tranquilizers. We didn't have any effective treatment. We had shock treatment which was only temporarily helpful and insulin coma was going out of style.

Adrenochrome is made from adrenalin, so we thought if we could do something to cut down the production of adrenalin, and if we could also prevent the oxidation of adrenalin to adrenochrome, then we might have a therapy for our patients. And that immediately led us to look at two chemicals. One is called nicotinic acid or vitamin B_3. Vitamin B_3 is known to be a methyl acceptor, which, by depleting the body of its methyl groups could cut down the conversion of noradrenaline to adrenalin and that would be helpful, we thought. Secondly, we wanted to use vitamin C as an antioxidant. Looking back now it seems that we were 30 or 40 years ahead of antioxidant theories. We wanted to decrease the oxidation of adrenaline to adrenochrome. Vitamin C will do it but not very effectively. And that drew our attention to these two vitamins, vitamin C and vitamin B_3. I had an advantage because I had taken my Ph.D. at the University of Minnesota on vitamins, so I knew their background. That's why we started working with these two compounds.

Why did we start working with cancer? We were very curious about what these compounds would do. I recall that in 1952 when I was working as a resident in psychiatry at the Munroe Wing which was a part of the General Hospital in Regina, a woman who had her breast removed for cancer was admitted to our ward. She was psychotic. This poor lady had developed a huge ulcerated lesion, she wasn't healing, and she was in a toxic delirium. Her psychiatrist decided that he would give her shock treatment, which was the only treatment available at that time. I decided I would like to give her vitamin C instead. As director of research, I had the option of going to the physicians and asking them if I could do this with their patients. A friend of mine was her doctor and he said, "Yes, you can have her." He said, "I'll withold shock treatment for three days." I had thought that I would give her three grams

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per day, which was our usual dose at that time, for a period of weeks, but when he told me I could have three days only, I decided that this would not do. Therefore, I decided to give her one gram every hour. I instructed the nurses that she was to be given a gram per hour except when she was sleeping. When she awakened, she would get the vitamin C that she had missed. We started her on a Saturday morning and when her doctor came back on Monday morning to start shock treatment she was mentally normal. I wanted to know, if vitamin C would have any therapeutic effect. To our amazement her lesion on her breast began to heal. She was discharged, mentally well, still having cancer and she died six months later from her cancer. This was an interesting observation which I had made at that time and which I had never forgotten.

There was another root to this interest. In 1959, we found that the majority of schizophrenic patients excreted in their urine a factor that we call the mauve factor, which we have since identified as kryptopyrrole. I was looking for a good source of this urinary factor. We had thought that the majority of schizophrenics had it. We thought that normal people did not have it but I was interested in determining how many people who were stressed also had the factor. Therefore, I ran a study of patients from the University Hospital who were on the physical wards. They had all sorts of physical conditions including cancer. I found to my amazement that half the people with lung cancer also excreted the same factor. By 1960, a very famous gentleman of Saskatchewan, one of the professors retired and was admitted to the psychiatric department at our hospital. He was psychotic. He had been diagnosed as having a bronchogenic carcinoma. It had been biopsied and was visualized in the x-ray and it had also been seen in the bronchoscope. While they were deciding what to do, he became psychotic so they concluded that he had secondaries in his brain. Because he became psychotic, he was no longer operable and instead they gave him cobalt radiation. It didn't help the psychosis any. He was admitted to our ward where he stayed for about two months, completely psychotic. He was placed on the terminal list. I discovered that he was on our ward, so I though he may have some mauve factor in his urine. On analysis he revealed huge quantities. I had discovered by then that if we gave large amounts of B_3 along with vitamin C to these patients, regardless of their diagnosis, they tended to do very well. He was started on three grams per day each of nicotinic acid and ascorbic acid on a Friday. On Monday he was found to be normal. A few days later I said to him, "You understand that you have cancer?" He said, "Yes, I know that." He was friendly with me because I had treated his wife for alcoholism some time before. I said to him, "If you will agree to take these two vitamins as long as you live, I will provide them for you at no charge. In 1960, I was the only doctor in Canada that had access to large quantities of vitamin C and niacin. They were distributed through our hospital dispensary. He agreed. That meant he had to come to my office every month in order to pick up two bottles of vitamins. I didn't know that it might help his cancer. I was interested only in his psychological state. However, to my amazement he didn't die. After 12 months, I was having lunch with the director of the cancer clinic, a friend of mine, and I said to him, "What do you think about this man?" And he said, "We can't understand it, we can't see the tumor any more." I thought he'd say, "Well, isn't that great." So I asked, "Well, what's your reaction?" He responded, "We are beginning to think we made the wrong diagnosis." The patient died, 30 months after I first saw him, of a coronary.

Here's another case that is very interesting. A couple of years later, a mother I had treated for depression came back to see me. Once more she was depressed. She said she had a daughter 16, who had just been diagnosed as having an osteogenic sarcoma of the arm. Her surgeon had recommended that the arm be amputated. She was very depressed over this and so I asked her, "Do you think you can persuade your surgeon not to amputate the arm right away?" And I told her the story about the man with the lung cancer. She brought her daughter in and I started her on niacinamide, 3 grams per day, plus vitamin C, three grams per day. She made a complete

recovery and is still well, not having had to have surgery. But this time I concluded that maybe B_3 was the therapeutic factor. The reason for that, of course, is very simple. I liked B_3 and I didn't have much interest in vitamin C.

When I moved to Victoria, another strange event happened. In 1979, a woman developed jaundice and during surgery a six centimeter in diameter lump in the head of the pancreas was found. They were too frightened to do a biopsy, which apparently is quite standard. They thought that the biopsy might disseminate the tumor. The surgeon closed and told her to write her will. They said she might have three to six months at the most. She was a very tough lady and she had read Norman Cousins' book *Anatomy of an Illness.* So she said to her doctor, "To hell with that, I'm not going to die." And she began to take vitamin C on her own, 12 grams per day. When her doctor discovered what she was doing, he asked her to come and see me, because by that time I was identified as a doctor who liked to work with vitamins. I started her on 40 grams of vitamin C per day, to which I added niacin, zinc and a multi-vitamin, multi-mineral preparation. I had her change her diet by staying away from high protein and fat. I didn't hear from her again for about six months. One Sunday, she called me. Normally when I get a call from a patient on a Sunday, it's bad news. She immediately said, "Dr. Hoffer, good news!" I asked, "What's happened?" She said, "They have just done a CT scan and they can't see the tumor." So then she said, "They couldn't believe it. They thought the machine had gone wrong; so they did it all over again. And it was also negative the second time." She had her last CT scan in 1984, no mass, and she is still alive and well today.

By this time, I had learned about Dr. Cameron's and Dr. Pauling's work with vitamin C and I began to realize that the main therapeutic factor might be the vitamin C rather than vitamin B_3. The reason I want to present four cases is that one might say that I have seen four spontaneous recoveries and the question is, how many spontaneous recoveries would one physician see in his lifetime? I don't know. Maybe this is not unusual but I think it is. The last case I'm going to give details of was born in 1908. His mother died of cancer and his father had a coronary at the age of 80. My patient had had a myocardial infarction in 1969, and again in 1977, followed by a coronary bypass. In March of 1978, he suddenly developed pain in his left groin and down the left leg. In February 1979, he developed a bulge in his left groin, and later, severe pain with movement. In surgery, a large mass infiltrating sarcoma was found, part of which was removed, but a mass the size of a grapefruit was left. The tumor was eroding into a ramus of the pubic bone. They concluded that it was not radiosensitive. In March he had palliative radiation to his left half -4500 rads. The pain was gone at the end of the radiation. On May 28, he developed a severe staph infection, and in June he was very depressed because his wife was dying of cancer and also he was suffering from drainage of chronic infection. In July he still had a purulent discharge in two areas. Now the mass was visible and palpable in the left iliac area above the inguinal ligaments. In January of 1980, he saw me for the first time. I started him on 12 grams of vitamin C per day and I recommended to his referring doctor that he give him IV ascorbic acid, 2.5 grams, twice per week, which he agreed to. I gave him niacin, vitamin B_6 and zinc to balance it out. In April, the mass began to regress and the oncologist wrote, "This is interesting. It must be something else." In other words, the patient said, the vitamin C is helping and the oncologist said, no it isn't. The oncologist put a note in the file, "He's probably responding to chemotherapy." But he had never had chemotherapy. The infection was gone. In May 1980, his x-ray showed reconstruction of the left superior pubic ramus. In July he wrote to me telling how grateful he was to be so well. In February of 1988, he went back to the cancer clinic for some recurrent facial skin carcinoma. He died in the fall of 1989 of coronary disease when he was 81. This man survived 10 years after having been diagnosed with cancer.

My practice began to grow because the first patient felt it was her duty to tell as many people as possible that I had the cure for cancer. Now I

should tell you the nature of my practice. In Canada we have a referral service. I do not take walk-ins. Every patient that comes to my office must be referred by their family doctor or by a specialist. During the early years, patients usually went to their doctor and said, "I have had all this treatment, you have told me I'm not going to do any better, will you please refer me to Dr. Hoffer." So I call these patient-generated referrals. The past four or five years, it has swung around and I am now getting a lot more doctor-generated referrals. Doctors, themselves are beginning to refer their patients to me. I would think that 80% of my patients had failed to respond to any of combination of treatment, including surgery, radiation or chemotherapy. Usually the story was that they were told by either the cancer clinic or their doctor that there was nothing more that they could do. Most of them were terminal, but not all. I see three to five new cases of cancer every week. All of them have been treated by their own doctor, their own oncologist, their own surgeon. What I do is advise them with respect to diet and the kind of nutrients they ought to take. I am seeing them much earlier in the stage of illness, which I think is very good because the earlier I can get to them, the better are the results.

Here are the results. Generally, the patients were a lot more cheerful. They had less discomfort and they lived a lot longer. A few years ago I was at a meeting at Woods Hole with Linus Pauling. This was a Festschrift for Dr. Arthur Sackler. I told Linus that I thought I had something, that I was beginning to see the impact of adding vitamin C to their program. Dr. Pauling encouraged me to work it up, to do a really careful survey and write it up for publication, which I did. I examined every cancer patient referred to me between July 1978 and April 1988 and followed them to January 1990. I did not miss a single case. A total of 134 were seen. And I dated the time that they first saw me as day zero. The only thing I wanted to look at was survival. I wanted hard data, something that couldn't be argued with. I wasn't going to say the patients were better or not better because these are subjective terms. These 134 fell into two groups. It wasn't my fault that this happened because I treated every one of them exactly the same way. I did not plan a double blind prospective study. What I planned and what I did was to advise every patient what I thought they ought to do in terms of their cancer. If they were getting radiation, I suggested they stay with it. If they were getting chemotherapy, I suggested they stay with that. I never advised them about their surgery, chemotherapy or radiation. However, out of these 134, there were 33 who did not or could not follow the program. For example, on chemotherapy, they were so nauseated that they couldn't hold anything down and if they couldn't hold the vitamins down they weren't going to do very much good. There were some who didn't believe in the program. I remember one woman with breast cancer came to see me and I advised her what to take, sending a consultation letter to the referring doctor outlining what I thought she ought to be taking. When she went back to see her doctor, he laughed at her. He made so much fun of her that she became thoroughly ashamed and she wouldn't follow the program. She died two or three months later. Another case was a doctor who had cancer and was given 30 days. He had left his wife and was running around with his girlfriend. Since he knew he was going to die, he decided that he would spend the next 30 days living as riotously as he could. He would travel all across the United States and have as much fun in 30 days as he could. His girlfriend brought him to see me because she wanted him to live longer than 30 days. He didn't believe her and he never started the program. He went to the United States and died 30 days later. These are some examples of people who wouldn't or couldn't follow the program, or they weren't on the vitamin program long enough. I had found that they must be on the program at least two months before it began to work. These were my pseudocon-trols. They're not really a double blind control, it's kind of pseudocontrol which provides an estimate of the kind of patient that I was seeing.

The other 101 did stay on their program at least two months. Some went off in the third or fourth month but they stayed on it for at least two months. I was encouraged by Linus Pauling.

I followed them all. First of all, I contacted their doctors. I contacted the patients that were still alive. I contacted their families. I got all their records from the cancer clinics. I had a complete file on every patient I had seen so that I knew within a matter of months exactly what had happened to them. The results were analyzed by Dr. Linus Pauling using a new technique for analyzing cohorts. The data is as follows: 33 controls - they survived an average of 5.7 months, from the first day that I saw them. There were two treatment cohorts: a cohort of 40 females with cancer of the breast, ovary, uterus or cervix. The second cohort of 61 were other types of cancer. The cohorts were divided into two groups. First were the poor responders, those who didn't do well; they survived an average of 10 months, nearly twice as long as the control. The others, the good responders, were divided into two groups. The female group survived an average of 122 months and the other group 72 months. I think this is very significant. There was a tremendous difference in the survival rate. Today, all the controls are dead, 50% of the treated group are still alive. Over the past year, I did another survey and of the remainder only three more have died. It can not be all due to cancer because I'm dealing with a population with ages between 60 and 80. They are going to die of other causes as well. This was published in the *Journal of Orthomolecular Medicine*, Volume 5, p. 143, 1990.

The Treatment

First of all, as I pointed out, I did not interfere with the treatment done by the oncologists. These patients were treated by their own doctors and I went along with whatever they did. No one can accuse me of depriving these patients of having had the best of chemotherapy, surgery, or radiation. What I tried to do was to improve their general health, to improve their immune system, to the point that they could cope more successfully with their tumors. Many of them were depressed when they came to see me. The first thing I would do would be to create a bit of hope. I don't think many doctors in cancer clinics realize the absolute importance of hope.

Let me give you another case. A woman came to see me with cancer of the breast. She didn't want to have any surgery and so she had taken a huge quantity of nutrients, including vitamin A, 500,000 units per day at one of the clinics in the USA. She wasn't doing well, the mass had opened up, she was ulcerated and in a terrible state. When she came to see me, she said to me, "Dr. Hoffer, (she was very depressed) you are my last hope." I asked, "What do you mean?" She replied, "A week ago, when I went to see my family doctor, I asked when can I see you again. He said he would not give me another appointment, because I would be dead within a week." Now, that's very negative. Hope is very important. She didn't die a week later. We started her on the program. Eventually, I persuaded her to have surgery and chemotherapy. She survived more than 30 months after that first day.

Hope is extremely important. Attitude is very important. Patients must want to live. You may be surprised to know that many people, when they are told they have cancer, are quite relieved, because they now know they don't have to live much longer. They are really quite happy to go. So you have to test the attitude of the patient. Those who came to see me, of course, were preselected, they selected themselves. So they did have the right attitude, they did want to live. They have to be optimistic and I do think it helps if they laugh a lot. I agree with Norman Cousins, that if you combine laughter with vitamins, you do get better results.

Then I advise my patients what kind of nutrition they ought to follow. The first thing I try to do is to cut their fat way down. I try to cut it down below 30 percent of calories, down to 20 or 10, if possible. I find that, in our culture, the easiest way to do that is to totally eliminate all dairy products. If you eliminate all dairy products and cut out all fatty meats, it's pretty hard to get too much fat in the diet. So, I put them all on a dairy free program. I reduce, but I don't eliminate, meat and fish, and I ask them to increase their vegetables, especially raw, as much as they can. I think it's a good, reasonable diet, which most people can follow without too

much difficulty. Having spent some time with them going over what they ought to eat, I begin to talk about the nutrients. The first one, of course, is vitamin C. I am convinced today that vitamin C is the most important single nutrient that one can give to any person with cancer. The dose is variable. I find that most patients can take 12 grams per day without much difficulty, that's the crystallin vitamin C, sodium ascorbate or calcium ascorbate. They take one teaspoon three times per day. If they do not develop diarrhea, I ask them to increase it until this occurs and then to cut back below that level. I think in many cases it would be desirable to use intravenous vitamin C and there are doctors now in Canada doing that. The amount that one gives is limited by the skill of the physician, not by the patient.

I also add vitamin B_3, either niacin or niacinamide. I prescribe from 500 mg to 1500 mg per day. Before I did that empirically, now there is a lot of evidence that B_3 does have pretty interesting anti-cancer properties. Two years ago, in Texas at one of the osteopathic colleges, there was an international congress, *Vitamin B_3 and Cancer*. There is a lot of work being done in this area today. I also add a B complex preparation 50 or 100.1 think vitamin E is an extremely important antioxidant and I use that as well, 800 to 1200 LU. They also get 25,000 to 75,000 units of beta carotene. I sometimes use vitamin A. I like to use folic acid for lung cancer, and for cancer of the uterus because of work that has been done showing that folic acid might reverse a positive pap smear to negative. I use selenium, 200 mcg, three times per day. I think the toxicity of selenium has been greatly exaggerated. I had a patient from Chile, a refugee, who developed a severe lymphoma. He was operated on but it came back. He had radiation and it recurred. He had been a patient of mine for the treatment of depression when he developed his cancer. He was given three months to live. I had started him on selenium, 600 mcg per day. Like many patients, he thought if 600 is good, more is even better. He came back and said he was taking 2 mg per day, or 2,000 mcg. I became a bit concerned about that and suggested he cut down to 1,000. In any event, he recovered and he has now been alive for seven years. There is no evidence of tumor, and his major problem today is reorienting himself in a foreign culture. So I use selenium and I use a lot of it. I use some zinc, especially for prostatic cancers and I do use calcium-magnesium preparations. So this is the basic nutrient program that they all follow. The cost ranges from $50 to $75 per month. People who are dying from cancer don't mind paying this.

What are this program's advantages? Well, first of all, the increase in longevity. We have increased the longevity from 5.7 months to approximately 100 months, which is very substantial, and half of the patients are still alive. There has been a tremendous decrease in pain and anxiety, even amongst those who were dying. We do not have the final answer, but we have at least a partial answer. The use of nutrients, like vitamin C and B_3 increase the efficacy of chemotherapy by increasing its killing effect on the tumor and decreasing its toxicity on normal tissues. The same has been shown to be true with radiation therapy.

My conclusion is that vitamin C must be a vital component of every cancer treatment program. I believe the other nutrients help, adding 20% to 30% to longevity.

What do we need? We need a definitive study. When I did the study, when I wrote it up with Dr. Linus Pauling, it wasn't our belief that we had answered the question. We hoped that this would stimulate enough interest for the institutes that have the finances and the time to do these studies to get going and do them properly. We need a definitive large-scale study to tease out the relative value of all the nutrients. This is extremely important. I am not telling you that I have a treatment for cancer; I say that we have improved the results of treatment. My conclusion is that the best treatment for cancer today is a combination of the best that modern medicine can offer, surgery, radiation, chemotherapy, combined with the best of what Orthomolecular physicians can offer, which is nutrition, nutrients and hope.

A clinical trial into the effectiveness of intravenous vitamin C patients with coronavirus was conducted on February 14 at Zhongnan Hospital in Wuhan. Hereâ€™s how to help people impacted by Covid-19. By Matthew Wright For Dailymail.com.Â 'The patients who received vitamin C did significantly better than those who did not get vitamin C,' he said. 'It helps a tremendous amount, but it is not highlighted because it's not a sexy drug.' Jason Molinet, a spokesman for Northwell, said that Vitamin C is being 'widely used' as a coronavirus treatment throughout the health system. AIDS and cancer patients, the FDA procedures designed to expand access and accelerate approval have dominated its efforts at regulatory reform of drug development and the guidelines concerning research with human subjects.[72]. Despite the above reforms initiated during the late 1980s and early 1990s, concerned consumers, legislators and drug manufacturers continued to criticize the rising costs and delays of FDA review.[73] In particular, critics stressed the inefficiencies in the coordination between the FDA and pharmaceutical manufacturers in the design of clinical trial research, as well a