

12 May 1987

Dr. Paul A. Marks, President
Memorial Sloan-Kettering Cancer Center
1275 York Avenue
New York, NY 10021

Dear Dr. Marks:

In the New York Times Magazine for 26 April 1987 there is quoted the following remark by you: "We're ready for the next quantum jump in terms of being effective against cancer."

I believe that the next quantum jump has already been taken, although it has not been generally recognized.

I think that the greatest contribution to the control of cancer that has been made during the last two decades was the discovery that high doses of vitamin C have much prophylactic and therapeutic value against cancer. A number of people contributed to this discovery, but the major credit goes to Dr. Ewan Cameron, who was for many years Chief Consultant Surgeon in Vale of Leven Hospital, Loch Lomondside, Scotland, and is now one of my colleagues in this Institute. Dr. Cameron, starting cautiously in 1971, has treated several hundred patients with advanced (untreatable) cancer by giving them moderately large amounts of vitamin C, 10 grams per day, initially by intravenous infusion and then orally.

Except for Dr. Fukumi Morishige in Japan, we have not had much success in getting other physicians to make use of high-dose vitamin C. Dr. Cameron and I were invited to Sloan-Kettering several years ago, but we did not have much success. A few Sloan-Kettering patients were given vitamin C in modest amounts, but no significant observations were made.

My associates and I have published two animal studies, each involving several hundred mice, with the second one supported by a grant from the National Cancer Institute. In each study, one involving skin cancer caused by ultraviolet light and the other spontaneous mammary cancer, high-dose vitamin C provided almost complete protection. In the effort to control cancer, surgery, chemotherapy, and high-energy radiation have been applied aggressively. I think that this is proper. Vitamin C,

however, has never been applied aggressively.

Vitamin C is essentially non-toxic. It has been given in amounts of 100 grams or more per day by intravenous infusion, with no serious side effects. Even larger amounts, 200 grams per day, have been taken by mouth. I know one "terminal" cancer patient who took 130 grams per day by mouth for 13 years.

My associates have observed that patients receiving chemotherapy and taking 10 grams of vitamin C per day by mouth have been largely protected against the toxic side effects of the chemotherapeutic agent. One study that should be made is that of the effectiveness of increasing the dosage of the chemotherapeutic agent, until toxic manifestations begin to occur. The effectiveness of chemotherapy might be increased considerably in this way.

Another study that should be carried out is that of the possible value of 50 to 150 grams of sodium ascorbate per day by intravenous infusion given to hospitalized patients with poor prognosis. There is the possibility that regression would occur for some of them. They could then be transferred to high-dose oral ascorbate, as determined by bowel tolerance.

Dr. Cameron and I had recommended that high-dose ascorbate be given to every cancer patient, as an adjunct to appropriate conventional therapy, starting as early in the course of the disease as possible. Dr. Cameron has observed increased well being, with control of anorexia and cachexia, in the patients. This effect should be checked by a careful observation of some patients.

This is not a field in which there is need for more basic research, more studies of possible toxicity, or more animal work. What is needed now is more clinical work. I think that there is no place in the world where this work could be carried out more effectively than in Sloan-Kettering. I hope that you will not reject this great opportunity.

I hope that you will allow me to come to New York at some time, in order to talk with you about this question.

Sincerely,