

Cancer Control by Improving the Genes' Biochemical Environment

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Cancer is a disease of the aging but it can occur even in infancy. This finding is not a very happy one for those of us who are aging but in reality is a message of hope for everyone. For if a person can be free of cancer for sixty years it means that his/her body has been well endowed with the genetic structure that keeps us free from cancer. In other words, no one can blame our genes for causing cancer. We have not looked after our genes properly and they can no longer perform the way they are supposed to. There are no cancer genes that will mandate that we will get cancer. If these genes were really present the individual would probably not survive long past birth.

An excellent example is that some of the cancers of infancy have decreased significantly in incidence since pregnant woman began to take more folic acid. This B vitamin allowed the genes to perform their job. It does mean that since genes do not live in a vacuum but must live within a very complex chemical environment in which they can operate that something has gone wrong with the system and the environment of these genes has been so corrupted that the genes fail to do their job.

The problem is in the biochemical environment and not only in our genes. Helke Ferrie in *Vitality*, September 2007, in her article on history of modern disease describes the multifactorial processes that play a role and how they have been ignored and neglected. Even rogue genes or selfish cells as described by the Hickey and Roberts can be destroyed by a healthy body if all the biochemicals that are needed are made available.

Since genes change very slowly and

since the incidence of the cancers has increased dramatically in the past fifty years this suggests that the problem is in our gene environment in the cells of our bodies. Unluckily, the vast, bulky cancer establishment has avoided looking at the environment and has concentrated almost entirely on killing the rogue cancer cells. The modern oncological mantra is "slash, burn and poison". Not that oncological doctors want to harm their patients but they have imbibed this mantra as an infant imbibes its mothers milk and it has become their world view of cancer. This method depends upon removing or debulking the tumor mass when possible and often this is helpful. It also means giving radiation and hoping that the cancer cells will be more devastated than the normal cells of the body and finally it means using one or more of a large variety of very toxic poisons in sub-lethal doses. It is hoped that the body will survive and that the rogue cancer cells will not. Vain hope, indeed.

Various combinations of these big three are used. But where is the evidence? Surgery is probably the most effective if done in time, followed by radiation and coming far in the back is chemotherapy. The latest evidence shows that when all the patients given chemotherapy are lumped together that the additional life span achieved is no more than 3 percent at an enormous cost of discomfort, despair and disability. Isn't it about time we paid more attention to the biochemical environment our genes need.

That is what orthomolecular medicine is all about. It is based on the brilliant observations of Linus Pauling, whose discoveries form the basis for modern medicine, when he discovered that there

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was persuasive evidence that vitamin C when used in optimum amounts had anti cancer properties. Since the usual doses that can be achieved by oral vitamin C in the blood will not be toxic this means that there is enough vitamin C to allow the cell environment to improve so that the body is once more able to deal with these rogue cells as it had been doing for so many years. But vitamin C given IV is even better and may be as close to a perfect natural chemotherapy nutrient as it is toxic to these cancer cells and completely non toxic to normal cells. Orthomolecular oncology deals with the chemical environment of the cells in which the genes operate. But since oncologists have not been taught even the rudiments of orthomolecular medicine it is essential that the public learn about it so that it can teach their doctors and demand that they become interested.

I therefore welcome two new books—Hickey and Roberts' *The Cancer Breakthrough. A Nutritional Approach for Doctors and Patients*¹ and E.J. Hoffman's *Cancer and The Search For Selective Biochemical Inhibitors*.² These books, in my opinion, describe the progress that has already been made and published about which the medical profession remains ignorant or unwilling to recognize.

Drs. Hickey and Roberts published previous books *Ascorbate: The Science of Vitamin C*. (reviewed in *JOM*, 2005,20:122-123) and *Cancer: Nutrition and Survival*. In the first half of this interesting book the authors describe in very simple terms what cancer is. It is caused by rogue cells in the body which no longer cooperate with the rest of the body for the good of the organism. They are selfish cells interested only in personal survival. As I see it, following these suggestions, these are cells whose survival has been threatened by one or more deficiencies of essential nutrients or by xenobiotic molecules so that they can no longer behave as normal

cells and can only do a much more simple task of growing. Restoring these factors and removing the toxic xenobiotics might persuade these rogue cells to resume their previous normal activities. The rest of the book describes some of the nutrients that have been investigated most thoroughly such as vitamin C, vitamin K, vitamin D, vitamin E, selenium, iodine and many more. Enough information is provided so that the interested investigator or cancer patient can further study what these nutrients have already been shown to do. The last portion of the book describes a few programs that have worked. They are easy to follow, really inexpensive, completely harmless and should be considered by every person with any concern about cancer.

Hickey and Robers are rather critical of the oncological establishment as am I and they let us know their views very early in the book when they quote Linus Pauling who wrote "Everyone should know that most cancer research is largely a fraud and that the major cancer research organizations are derelict in their duties to the people who support them".

E. J. Hoffman's *Cancer and The Search For Selective Biochemical Inhibitors* is familiar to me as I previously reviewed Dr. Hoffman's first book published in 1999 (*JOM* 2000, 15: 224-225). This book not only points out the value of using natural substances in dealing with cancer but contains much more clinical research data and it is a natural book to be read after reading the one by Hickey and Roberts. The first book does an excellent job of wetting one's interest and the book by Hoffman follows up by providing material that would be very hard for any individual to master on his/her own if he had to go through the literature. It is very thorough. I have been more or less familiar with the history of the environmental treatment of cancer from the first book written by Irwin Stone when he summarized the

literature that suggested that vitamin C had an important role to play. Dr. Stone introduced Linus Pauling and aroused his interest in vitamin C. Almost everything I have heard or read and some I had forgotten is in Hoffman's book. I can not abstract it as it is such a complex subject but I do hope that the fact that I like it so much will persuade you to read it after you have read the Hickey and Roberts book. One of these days books such as these will to everyone's surprise become medical school texts. But we do not have to wait until then. We can read, study and absorb as much of the information possible and can then really become equal partners with doctors with respect to prevention and treatment of cancer. After all it is a joint effort. But you the patient have the most to lose or gain by making the wrong selection of doctor or treatment. Orthomolecular therapy is not dangerous and can be combined with any other treatment that is considered essential.

The confusions suffered by patients and their families is well described in the front page story in the *New York Times*, July 29, 2007, entitled "Cancer Patients, Lost in a Maze of Uneven Care: Sick, Scared and Daunted by Complicated Choices". And the choices are not that complicated when one avoids orthomolecular treatment which is not discussed in this front page article by Denise Grady. The choice is between surgery, radiation and chemotherapy. It is clear that none of the options are successful or else there would not be the marked divergence of opinion between specialist surgeons and oncologists. When we really do have an effective treatment this kind of confusion does not exist. All diabetes specialists will agree that to treat diabetes mellitus one needs insulin and the most progressive physicians agree that nutrition control is also needed. Very few specialists will disagree with the use of antibiotics for many bacterial infections even though

they will not agree for their use in treating virus disorders. The confusion is the hall mark of the ignorance and failure of the oncological profession. These two books will help clarify some of the issues with respect to the use of gene environmental therapy. And in sharp contrast with the use of surgery, radiation and toxic xenobiotics the use of orthomolecular methods is free of dangerous side effects. A wrong decision with any of the standard treatments may lead to death. This will not happen with the use of orthomolecular substances.

References

1. Hickey S, Roberts H: *The Cancer Breakthrough. A Nutritional Approach for Doctors and Patients*. Lulu Enterprises, Morrisville, NC 27560. 2007 .
2. Hoffman EJ: *Cancer and The Search For Selective Biochemical Inhibitors, Second Edition*, CRC Press, New York, 2007.