Wellness News

supporting & empowering people

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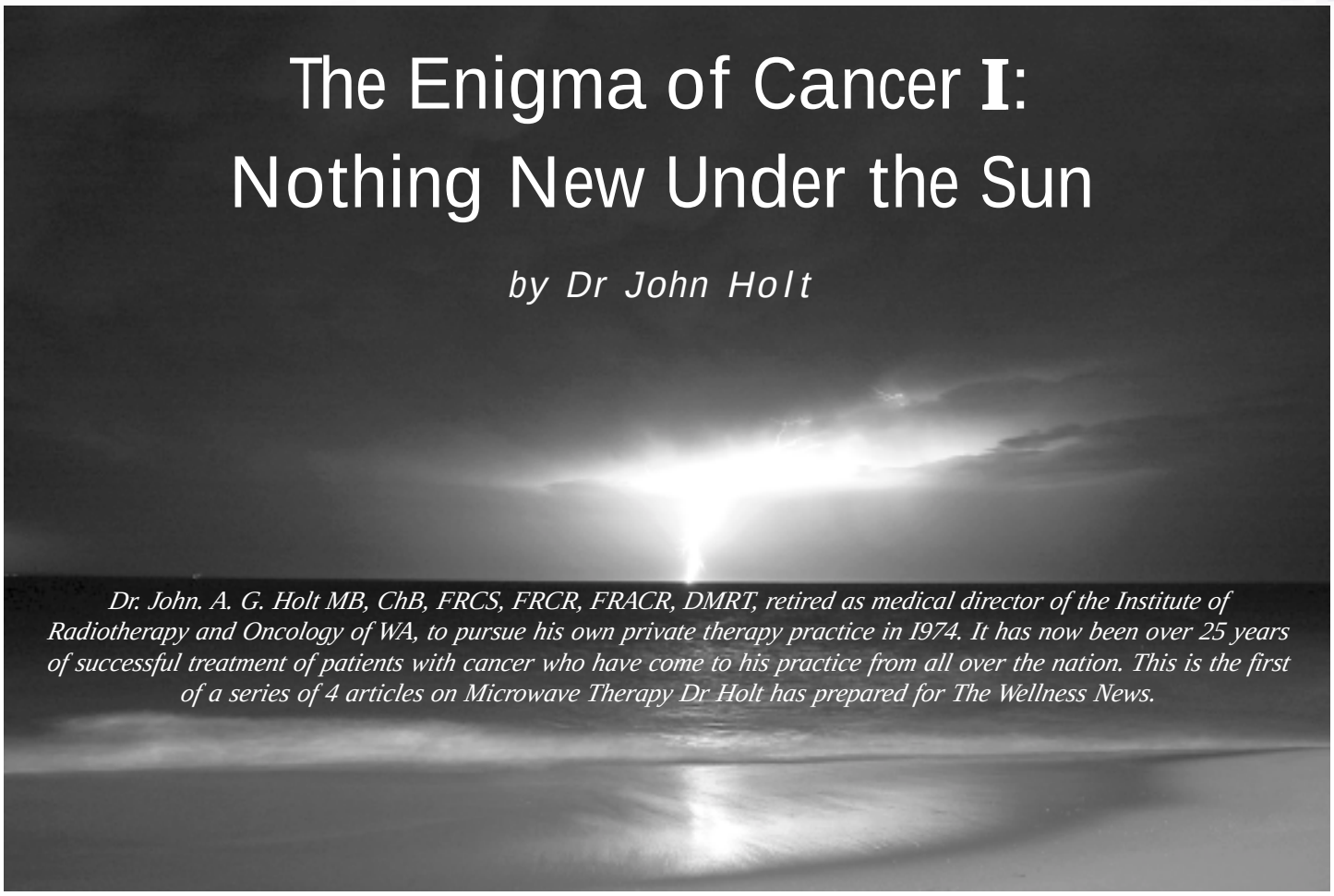
February 2002 Vol. 17 No. 1



The Enigma of Cancer I: Nothing New Under the Sun

by Dr John Holt

Dr. John. A. G. Holt MB, ChB, FRCS, FRCR, FRACR, DMRT, retired as medical director of the Institute of Radiotherapy and Oncology of WA, to pursue his own private therapy practice in 1974. It has now been over 25 years of successful treatment of patients with cancer who have come to his practice from all over the nation. This is the first of a series of 4 articles on Microwave Therapy Dr Holt has prepared for The Wellness News.

The history of cancer treatment is the story of medical indifference. As the best example of ignored cures, which point the way towards my own research, start with cancer patients having been cured by lightning.

In 1776 a woman in Ireland suffering from ulcerative breast cancer was struck by lightning while she stood at a window during a very severe thunder storm. Reported by Dr Eason, the bolt of lightning "set fire to the thatch roof, forced the chimney piece from the wall and raised the carpet from the floor, striking the patient on the left shoulder across the diseased breast and down her back, burning her night gown slightly". The lightning strike left her paralysed for several hours but without permanent damage except to the cancer. Within two days the breast cancer had softened and begun to shrink and before long it had completely disappeared.

Eason suggested "since lightning and electricity are of the same nature, should we not be encouraged to try ye electric shock against indurated swelling glands? And may it not serve at least to assist other remedies when the case is stubborn." It was 120 years before this suggestion was used by Dr Reading in Philadelphia, who passed 15-20 milliamperes of current through electrodes inserted into a cancer for 10 minutes or more until the tumours became inflamed, separated and eventually disappeared

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The Enigma of Cancer I: Nothing New Under the Sun

completely. In 1880 an English farmer awaiting surgery for extensive lip and chin cancer was ploughing his fields. The lightning struck his lip, his belt buckle and killed both the plough horses. He soon recovered but the most astonishing feature of this case is the healing process, which was set up in the lip and chin soon after the accident. The cancer lessened and in a few weeks every trace of the disease structure disappeared. This was reported (Allison) in the first issue of *The Lancet* journal in UK. A case of divine intervention? Possibly. But others followed a similar path, and prior to the first World War, Dr Reading used electric currents in the treatment of cancers on the rectum and colon. By 1965 Dr Strauss had treated 250 cases with long term survival and cure rates superior to surgery, the majority having preserved full use of their rectum and avoiding a colostomy.

The indifference and apathy to this proof that cancer was a better electrical conductor than normal tissue must have appeared dull compared to the discovery by Madam Curie of radium, the ionising radiation and particles which it emitted. The notoriety surrounding possible cell kill from radioactive materials in the 1890's sold newspapers and evidence that cancer was an excellent conductor of electricity was both tame, dull and not newsworthy.

Radium and x-ray therapy methods were dangerous, unknown territory to be explored, would create mammoth industries in developing the method and glamorous compared to a battery, two pieces of wire connecting it to two metal skewers poked through a cancer.

Treatment of cancers with x-rays and radioactive materials (all "ionising" radiation) is a unique killer of cancer because it is a biological killer of the disease. Myxomatosis is a classic example as a rabbit killer. Rabbits grow all the time and the numbers of baby rabbits in a colony is always proportional to the size of the colony. If 100 breeding pairs of rabbits produce 500 babies every three months then 1000 pairs of rabbits will produce 5000 youngsters in three months!

This is the peculiarity of every living organism on earth that it grows in this manner. To explain this system John Napier (1550-1617) in Scotland invented Naperian or exponential logarithms to describe this unique situation. Anna Laird's paper is the best description of this type of mathematics. As a mathematical expert in the Argonne Laboratory in Chicago she proved experimentally with animals and cancer that they all obeyed exponential growth.

So we have a unique growth situation (life) obeying "exponential' expansion and as soon as rabbits were brought into Australia they became a pest in perfect living conditions. There are three methods of controlling rabbits. Shooting, the same results as surgery. Complete extermination is cure. An all or nothing law. Poisoning with strychnine baits, 1080 rabbit poison etc is only effective for those rabbits stupid enough to be conned by easy food. The response is variable, never complete, never curative and soils the entire environment. Other animals are killed as well. This is the equivalent of cytotoxic chemotherapy - non specific poisons which kill a few cancer cells but are harmful to a lot of the normal, harmful to the immune cells which are the equivalent of snakes, dingoes, eagles and other rabbit predators, yet in the case of solid cancer never curative and only partly curative for non solid cancer.

But x-ray therapy is different. Ionising radiation is a direct killer of a growing cancer situation. It is unique because the mathematics of the killing of a growing cancer cell colony is by a reverse exponential mathematical function.

This is the explanation of the apparent simplicity of radiotherapy treatment. It is very rarely appreciated but the best results in x-ray therapy come from giving the same dose every day over 20 maybe 30 or more daily doses. This uniform daily dose is the best you can use because one is treating an exponentially growing cancer with a dose which decreases the exponentiality of the growth. Automatically therefore this is the proof that ionising radiation kills by the direct reversal of the exponential growth of its target. Whatever the biochemical target is in the cancer cell responsible for exponential growth it MUST be the direct target of ionising radiation!

In rabbit terms x-ray therapy is the direct equivalent of myxomatosis. Myxomatosis is a virus which lives on fleas, the fleas live on the rabbits, provided the virus grows faster than the fleas grow and the fleas grow faster than the rabbits grow, then the rabbits can all be eliminated if and when rabbits contaminated with virus ridden fleas can be introduced throughout their entire population.

I learnt this in 1954 when I gave up general surgery to train in radiotherapy. If x-ray therapy did not directly target the cause of cancer growth then the radiotherapists would have to use a scale of dosage starting with two units one day, four units the next, eight units the next, 16 units the next and so on! That would be chaos indeed. Such a system was tried by a radiotherapist of great repute and were it not for his early death, he would have come under intense legal fire for the series of holes that he produced in various patients' skin cancer using such a regime. As a professor of radiotherapy he had no idea at all of the mathematics of the tool with which he was treating patients.

This brings the next question. Obviously all the rabbits could be killed and cured of the infestation obtained, if the rabbits that were infected with virus ridden fleas could be so treated. Answer: isolated pockets of rabbits

exist which cannot be infected. They are not responsive to treatment. This is why x-ray therapy has such a variable outcome in treating humans. Unlike fleas which will hop onto rabbits themselves, the targets for x-ray therapy may or may not be receptive and killed. When active, doses of 160-200 rads are lethal but when inactive, 10,000 rads or more is not lethal!

The work of van den Brenk, the doctor who attracted me to migrate from the UK to acquire his expertise, had shown that cancer cells have varying numbers of these particular targets (all the same) in each cancer cell in any particular type of cancer. Only two are required to be active at any one time to provide the energy for the cell division. So the first few doses of x-ray therapy will probably kill one target. Another one becomes active. And so on until they are all killed. With radiation however the normal tissues have limits of total dose/time before they too are damaged. Cancers therefore fall into a series from "radiosensitive" where only two or three targets exist in each cell (eg malignant lymphomata, seminoma of the testis) to "radioresistant" where anything up to 30 or 40 targets may exist in each cell (eg osteogenic sarcoma of bone, primary glial [brain] cancers).

For external x-ray therapy to cure cancer, the total number of targets which can be killed with the best radiotherapeutic techniques is approximately 6 to 7 per cell. Using implanted radioactive devices and materials the number killed can be up to 9, possibly 10 per cell. So in cancer of the tongue for example a rachum implant will cure twice as many patients as with external therapy, despite the danger to the radiotherapist who must insert the radioactive material. In cancer of the neck of the womb we are very fortunate in that the woman's vaginal cervical uterine cells are very, very tolerant of radiation. So dosages of three times as much as you can safely apply to the tongue can be used in this region. This is why it remains the best curative method known to medicine for those particular gynaecological diseases.

As x-ray targets are active or inactive it is pointless, expensive and futile to use radiations which act in a similar manner (electrons, protons, neutrons etc) to cure more cancer than is possible with simple x-rays.

Because ionising (x-ray etc) radiation kills exponentially and cancer grows exponentially and this is the only biological killer available in the universe then some method of "radiosensitising" the cancer to make the x-rays more effective is obviously the first method to consider to improve the results of cancer treatment. Once such a method is discovered then it MUST also directly target the biochemical cause of life and cancer. This is then easily identified. Not one cytotoxic chemotherapeutic drug yet developed kills cancer exponentially and therefore none are radiosensitisers. ❖

Next month: The Enigma of Cancer II, Radiosensitising Agents

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My Story

By Elvina Johnson

My name is Elvina Johnson and in July '97 I was diagnosed with Osteogenic sarcoma, a form of bone cancer in my left femur. I was referred to the Children's Hospital in Melbourne where I underwent 2 months of chemotherapy, which caused major side effects to my body. I spent 95% of that 2 months either having treatment or in isolation neutrapenic suffering from low blood counts, horrible ulcers throughout my body and constant nausea and vomiting.

In October it was obvious that the chemotherapy could not save my leg and I had my left leg amputated. Five days after this operation I resumed intensive chemotherapy until the following April. Two weeks after completing my course of chemotherapy, a chest x-ray showed that I had relapsed with secondary cancers in my left lung. Surgery/thorocotomy was performed the following day.

In July '98, three months from surgery I had my first C.T. scan on my lungs. The results showed that I had relapsed again with multiple metastasis (cancerous nodules) throughout both lungs. The Children's Hospital offered an experimental chemotherapy, which was being trialed at that stage, however they could not offer much of a chance as the cancer was at an advanced stage.

I was reluctant to continue chemotherapy as the side effects for this protocol were severe and there was only 5% chance that it would work. At that stage I made the decision to cease treatment and enjoy myself travelling, as I knew that I was playing with minimal time.

After researching many treatments from around the world, I arrived at Microwave therapy by Dr. John Holt, as for the first time through every different treatment option, it all made sense what he was explaining. It was black and white and seemed back to the basics therapy. The next day we contacted Dr. John Holt in Perth and he sent some information to us. I was convinced that this treatment would help me. He agreed to treat me and we flew to Perth the next week.

We stayed in Perth for the month of August where I had 15 treatments over three weeks, one per day. The treatment was completely different to what I expected. Being so used to the horrible side effects of chemotherapy and the constrictions it gave me, I was thrilled when there were no side effects with this treatment. At that stage I wasn't sure of what to think or expect but I developed the attitude that if all else fails, I had a great holiday in Perth and fantastic quality of life.

Each treatment consisted of a quick infusion of a glucose blocking agent, which acted as a mock of natural glucose. Then I had a dose of insulin to lower my blood sugar and I then went under a small box, similar to the average x-ray machine. After an hour I was finished and ready to enjoy the day. The only side effects which I experienced during the 15 treatments were slight nausea during the first infusion, which passed in a matter of two minutes or so, and tiredness.

A C.T. scan six weeks later showed that the galaxy of smaller tumours had gone leaving only 6 nodules left. No fluid had formed in the pleural spaces and there was no spread. A month later in October, I went back to Perth for a second course of treatment. As the first time, I had an enjoyable holiday and found the treatment a breeze. This time I was quite confident in Dr. Holt and his practice.

A follow-up scan in November showed that there was no change since the first treatment and that the six nodules were slightly less dense. Dr. Holt reviewed all the scans and believed that the nodules had possibly calcified, as there was no advancement.

In February I had another scan and there was no change. The cancer had not spread, the pleural spaces were clear, and Dr. Holt once again upon review believed that he had entirely destroyed the cancer's energy field and that the nodules may be dead and had become calcified.

It is now August 2001, over 3 years since I first relapsed and a scan at the start of this year showed that there was no change and the cancer seems to be calcified. According to the scans three years ago, I technically shouldn't be here today, yet thanks to Dr. John Holt I am healthier than ever before and continue my life with a bright and optimistic future.

The only negative thing that I have to say regarding Dr. Holt's treatment is the whole controversy and politics surrounding this man's stunning medical career. Personally, I am appalled at the medical politics in society these days. We are involved in a pro-established political system, where we must follow conventional patterns or else we will be effectively silenced.

I saw this happen to me first hand, where medical staff chose to turn their back on me, as I was not abiding by the age old law. On the other hand, some chose not to and to this day see the wonders that Dr. John Holt performs. And the sad fact to all of this is that we are threatened by anything that is not conventional, and we do not follow the path beyond that until at times it is too late.

A large percentage of Dr. Holt's patients come to him after exhausting every conventional avenue. And then when they are given no chance or very little, they then decide that they have nothing to lose. I walked into that waiting room of Dr. John Holt's practice with 2 months to live, and walked out cured. In that same waiting room, I saw people from all over Australia and even the world sitting there on their last thread. People starting treatment sitting in wheelchairs, and at the end of their treatment, walking out pushing that very same wheelchair.

I was offered it all, every new magic chemotherapy potion, every avenue of surgery and I did my fair share of taking them all too. I have the scars to prove that, but what is more cutting is that I have the emotional scars of going through the conventional way and seeing my friends try one more potion and I saw their parents refuse to hear anything but the holy word of their oncologist.

I also saw 12 children die because of that potion and only 3 live. And yet if Dr. Holt

My Story

(continued)

lost one patient in every hundred he is labelled as ineffective. Could you imagine the statistics if people began to come to this gifted doctor at the beginning? Instead of arriving for treatment, pumped full of chemicals and holding on by a thread?

I am only 22, and I haven't lived much of a life, but unfortunately I saw so many things that I shouldn't have at such a young age. But the one thing that I find the most intolerable is the injustices in our medical system. Doctors who use people as experiments and toss them away as numbers, and those same doctors with their big opinions having the audacity to criticize and manipulate non-conventional treatments.

This is the society we live in and we take part in it every day by not having the strength to follow our own instincts and not the word of our doctors. I am proud that I did not follow the professional opinion of my oncologist because I know in my heart that I would not be here today telling my story. I am here today and I am healthy and alive and ready to live a bright and optimistic future - and I owe it all to Dr. John Holt. He is the man that saved my life and I will not stand down until finally some justice is done.

I have full confidence in Dr. Holt's treatment and have no hesitation in speaking with anyone interested or in need of options regarding treatment. I owe him my life, he is a wonderful man with a treatment that can and will continue to cure many people. ✥

Elvina Johnson

** This story is from the first Newsletter of Dr. John Holt Support Group, a group formed independently of Dr Holt, to support the work he is doing. For enquiries please phone Elvina on (03) 9799 6916, or write to 6 Bond St, Sth Yarra, VIC, 3141. For more information about the Microwave Therapy Centre, please phone the CSA reception on (08) 9384 3544.*

An Update...

the "Apple of Sodom"

Solbec Pharmaceuticals, a very promising biotechnology company, continues to make headway into the treatment of cancer. As previously discussed in …the "Apple of Sodom", an article featured in the August 2001 issue of Wellness News, one of the most interesting aspects of the company is the ability of its anticancer drug BEC, to effectively and uniquely target cancerous cells while largely leaving healthy cells unchanged. This apparent non-toxicity is of special interest to the CSA, considering the often-savage side effects of most chemotherapy treatments currently in use.

BEC is extracted from the fruit of the Devils Apple plant, one of the *Solanaecae* species and was discovered as an old stockman's treatment for skin cancers on horses and cattle. Unlike most other drugs that treat only one type of cancer, BEC studies to date have had excellent results on a wide range of cancers. BEC works by attaching itself to the cancer cell, penetrating and rupturing the cell wall and then by disintegrating it.

So far, there has not been a single type of cancer cell that has not shown to be susceptible to BEC (in vitro studies). A study (ex vivo) carried out in California by Rational Therapeutics Inc used fresh tumour specimens to review the activity against 23 tumours (including 8 gynaecological tumours, 6 gastric intestinal tumours, 2 non small cell lung carcinomas, 2 breast tumours and 2 sarcomas). BEC also showed activity against all these tumours.

The Solbec team appears very confident that it is yet to find a cancer in vitro which is not susceptible to BEC therapy. Hence it is aggressively continuing the development of BEC, particularly for the treatment of mesothelioma and metastatic melanoma of the lungs. The company has placed a specific research focus on lung related cancers, as currently there is no effective treatment for mesothelioma. This offers Solbec the opportunity to take BEC through the orphan drug program, providing a rapid path toward reaching the general population.

It is worth noting that as far as a preventative drug, BEC has also been injected in mice at the same time as an injection of mesothelioma, with not one case of mice developing tumours. All mice injected with the mesothelioma, but not BEC, had to be euthanized within 21 days.

To date Solbec have conducted 34 human trials on patients through the Special Access program, for diverse cancers of the brain, colon, liver, lungs, blood, skin, bladder and reproductive organs with very promising results. Currently Solbec is working with independent medical researchers to have these and future results released into the public domain via peer-reviewed journals. As part of this effort, they have already funded Murdoch University with *one million dollars* for testing the new drug.

In addition to this existing research, because of BEC's promising and unique mode of action, Solbec researchers are now also working on the development of diagnostic tests for both primary and secondary cancers, from either a blood sample or through an x-ray.

Solbec also is developing a second anti-cancer plant derivative drug (DPX-01), which although not as broad spectrum as BEC, has apparently shown incredible results so far on stomach cancer and mesothelioma in vitro. Further research on this drug is being actively pursued as well. *Keep watching this space!* ✥

Peter Daale
Chief Executive Officer

The Enigma of Cancer II: Radiosensitising Agents

by Dr John Holt

Dr. John. A. G. Holt MB, ChB, FRCS, FRCR, FRACR, DMRT, retired as medical director of the Institute of Radiotherapy and Oncology of WA, to pursue his own private therapy practice in I974. It has now been over 25 years of successful treatment of patients with cancer who have come to his practice from all over the nation. This is the second of a series of 4 articles on Microwave Therapy Dr Holt has prepared for the Wellness News.

Heat has been paraded since biblical times as an aid in the treatment of cancer. The modern term is hyperthermia. It is defined as artificially raising the temperature of the whole body by some method or other. Hot baths using water, oil, wax or hot air kept adequately saturated with water vapour have been favoured.

Since cancer is electrically conductive compared with normal tissues which are reasonably good to excellent insulators, then by definition heating using electrical methods is NOT "hyperthermia". Simple direct current or any frequency electric current or radiowaves will introduce irregular heating. The cancer will get much hotter whereas the rest of the tissues will remain cool. Infrared radiation will specifically heat the surface and rapidly fall off as depth increases.

Pettigrew and Henderson's Method

This was developed after Dr Henderson who was a urological surgeon in Scotland who used Dr Pettigrew as his anaesthetist decided to treat recurrent seaweed like bladder tumours with hot water infusions. They discovered the bladder would tolerate local heating up to 43° or even 44° Centigrade. At this temperature most of the tumours responded and many bladders were cleared. A 60-70% response without using surgery, x-ray therapy or any other method.

This prompted Dr Pettigrew to investigate whole body heating by anaesthetising the patient and then heating them by immersion in hot wax. The physiotherapists use wax at 50°C for peripheral joint manipulations and therapy and so this method was easily enlarged to encompass the whole body in a trough. Approximately 50 gallons of molten wax were poured around the patient who was shrouded in a plastic cocoon. Heated anaesthetic gases were used. It was soon

discovered that the maximum tolerable uniform temperature was 41.8°C. If the body was kept at 41.9°C or over then all patients developed permanent jaundice due to liver damage. Between 1968 and 1971 Dr Nelson and I treated 27 patients at 41.8°C. Each session was eight hours at that temperature and each patient was given three or four sessions over a month. Illustration 1 (page 11) shows a treatment.

Results of Hyperthermia to 41.8°C

Nobody survived. Two patients with multiple bone secondaries had excellent relief of pain lasting three to four months. Two patients who had had multiple courses of chemotherapy for superficial cancers died from ruptured arteries when the tissues over them gave way. These were all areas involved with the malignancy. Although the cancers ruptured causing death there was no laboratory evidence that the cancers had been killed. It was the reactions of the body that were failing at that temperature. Five patients died of a complication called disseminated intravascular coagulation. Since there was no evidence of any control of cancer the method was abandoned. A few patients were radiated at that temperature and it was shown that there was an approximate doubling of the cancer cell kill for each unit dose of x-ray therapy delivered compared with that given at normal temperatures.

Electrical Heating is Not Hyperthermia

With my knowledge of the increased electrical conductivity of cancer from historical records, as soon as it was brought to my notice that a German company claimed to be able to heat the body quickly and safely by high frequency radiowaves I was interested. In November 1973 a demonstration in Hamburg by an engineer who had used standard European frequency physiotherapeutic generators came to my notice. A German doctor, Dr.-Med Irmtraud Mueller was the only German physician using the standard European frequency in the treatment of paediatric cancer. She had discovered that cyclophosphamide, a cytotoxic chemotherapeutic drug of German origin, could be more effective when combined with these radiowave emissions.

In Hamburg that day we discussed the effect. She said that it was obviously hyperthermia and I could not convince her that whilst the cancer temperature was raised the body temperature did not rise appreciably. Two types of equipment were on display. A single physiotherapeutic generator mounted on a small moving trolley, with its antenna mounted on a flexible arm interested me. I switched on the equipment and with the antenna beaming 434 MHz Ultra High Frequency radiowaves into the sky the output meter registered 200 watts. I adjusted the antenna to shine horizontally and as I approached from two metres to direct contact with the plastic cover of the antenna the output of the equipment fell to approximately 180-185 watts. This intrigued me. I talked to Dr Irmtraud who said she never looked at the output of the meter as she assumed that that was set automatically. She always turned the power up to full which was approximately 220 watts and left it there during treatment. So I asked her if I could borrow her two patients for a few minutes.

One was a patient with a large abdominal tumour and she agreed to stand where I had been standing with the machine operative. The irradiation into space was at 200 watts. When this patient had her abdomen directly in front of the plastic cover the power output increased to 235 watts approximately. It went back to 200 as soon as she stepped back a few paces. This was repeated with another younger patient with a leukaemia. An identical response. So I showed these two patients how my body was different to theirs by stepping into the antenna again. The output fell as before.

As a youth having spent much time repairing radios I knew instantaneously that cancer would tune the antenna whereas the normal body would not do so at this frequency. 434 MHz is the frequency that was set aside immediately after the war by a decision between the Germans and the French for medical purposes. Throughout the European union today which includes southern Ireland but not Scandinavia and the UK there are no regulations requiring screening of equipment generating ultra high frequency radiowaves at this frequency.

Standard Frequency for European Medical Purposes

I made some inquiries and soon learnt that Siemens, Philips, Erbe, Huettinger and at least 20 other manufacturing firms throughout Europe were producing this equipment for physiotherapeutic purposes. Approximately 200,000 small generators had been sold for this purpose since 1952. Several million people must have been irradiated and when I questioned Herr Guettner, the designer of the equipment in which I was interested he said "there are no reports that I can discover of any side effects from this frequency treatment. In Australia and the USA it is a frequency set aside for amateur television, radio communications between taxicabs etc and therefore here we must use it in a screened room, called a Faraday cage.

From the meter readings I instantaneously knew (the only person there who appeared to understand this) that the cancer's electrical conductivity was such that at this frequency the antenna was tuned better and would radiate more power when it was coupled to cancer than coupled to my normal abdomen and liver. It only took me a few seconds to realise that here we had the second half of the enigma of cancer. From my knowledge of the x-ray target/ionising radiation absorption effects (the first half) I knew that we could somehow find out the chemical reaction causing cancer.

The Tronado Machine

Herr Guettner had mounted 12 200 watt generators in a barrel shaped configuration that a patient could stand inside. Infrared thermometers measured the skin temperature, the radiated power could be monitored and the reflected power at a remote antenna approximately 10 metres away could be monitored. Electrocardiographic, pulse, oxygen saturation of the tissues and other monitoring was included. I bought one on the spot for our private practice because Dr Nelson and I had agreed that if there was any value now that we could prove hyperthermia useless we should buy it. This was installed shortly afterwards in 13 McCourt Street, Leederville. This was the house we leased immediately opposite our radiotherapy practice at 21 McCourt Street, which was on the grounds of St John of God Hospital in Subiaco.

We immediately started to treat patients who alerted by local newspaper articles realised there was a new cancer tool in the city. Many patients had had multiple courses of chemotherapy and the results in these were extremely disappointing. Our physicist carried out some measurements of electrical conductivity and some time later showed that people who had had chemotherapy sometimes were more electrically conductive than normal. I believe this is the explanation of the poor results in such patients. There is often very little difference of conductivity between the normal cells and the cancer cells after chemotherapeutic damage.

UHF Radiowaves Combined with X-ray Therapy

Many patients with recurrent cancers were suitable for further x-ray treatment. Dr Nelson and I became the guinea pigs to establish the heating rates in the machine. It would take about an hour for a normal patient to reach 40°C. A cancer patient reached that temperature in approximately a fifth of the time. We knew that cancer would be selectively "heated" and we knew from our wax bath experience that giving x-ray therapy combined with 41.8°C hyperthemia was twice as good only when the target was hot. Therefore there was no argument as to which sequence was used. The effectiveness of x-rays had to be tested whilst whatever influence the UHF had created was still present in the cell. The converse was stupid.

The first patient treated with 10 minutes of UHF radiation followed immediately by a moderate dose of x-ray therapy had a large cancer of his lip which had recurred after two attempts at surgical excision. He now presented with his recurrence plus several large secondary deposits in the lymph nodes of his neck. Conventional radiotherapy would probably have helped his primary lip recurrence but would not cure the secondary glands in the neck. We knew this from many years experience of trying to achieve such a result.

Within the first 10 days of treatment the disappearance of the malignancy in both sites was the most magical experience that I have ever been privileged to observe. A month later his lip was healed, the neck nodes had gone. 15 years later he was still alive and well. Every patient that we treated thereafter responded dramatically compared to our experiences of simply irradiating them with x-rays. It was a young girl of 13, Joy, whose widowed mother had brought her from Melbourne that provided me with the opportunity to work out the mathematics of the improvement that this frequency radiowave could produce in response to conventional x-ray therapy. The photographs on the following page details the history (see Illustration 2). On the left hand side is recorded the total lack of any response from 4600 rads of x-ray therapy delivered by the Peter MacCallum Clinic in Victoria. Three months later her pain was worse, the mass was bigger and I re-treated it using 434 MHz before low dose x-ray therapy. Three days after the end of treatment (total dose 3,300 rads of x-ray therapy) the tumour had disappeared and the pain had gone and Joy appeared her old self.

The response can be calculated quite easily and shows that the 434 MHz had increased the cell kill by at least 100 and probably 150 times more with lower doses of x-ray therapy than the full doses given beforehand. I calculated the number of targets to be 23 initially and these have been coloured so that the reason for this improvement is obvious. 4,600 rads in the Peter MacCallum Clinic killed six targets and UHF plus 3,300 rads killed 17 targets.

Another Typical Example of an Ulcerated Cancer

Illustration 3 shows Mrs CH. The three thermograms were taken with telephoto infrared AGA equipment and the calibrations of 0.1 with each colour refer to degrees

continued on following page...

centigrade. Biopsies on the first day before and after the UHF therapy on the first day of treatment show how this particular frequency raises the mitotic rate (percentage of actively dividing cells) of a cancer from 2% or 3% in this lady's case to 100%. Since the target of x-ray therapy is also the chemical reaction creating growth of cancer from this observation we know that 2-3% of the cancers had active targets before the UHF was applied and that 100% of them had active targets after the UHF was applied. This is the basis of its radiosensitising effects and 434 MHz UHF is unquestionably the best radiosensitisor ever discovered. It will make every x-ray target in a cancer cell active for about 20 minutes. The x-ray therapy must be applied immediately after the UHF has been given. Her ulcer healed and when I last reviewed her several years later she was well and fit without evidence of disease.

Reflected Spectra of 434 MHz UHF

There are three photographic tracings obtained from this lady (Illustration 3). The upper one shows the spectrum of reflected radiowaves from her breast cancer after the UHF had been applied and before the x-rays were delivered. The one beneath shows how the reflections to the left of the vertical line labelled 435 MHz have almost disappeared, halfway through her therapy. The bottom one of the cured lesion shows that there are no reflections (no fluorescence) above this frequency. The cancer will take this frequency and with its energy cause it to reradiate at a higher frequency. This is the phenomenon of fluorescence. To the right of the central line the waves are the resonance aspect of the cancer and these also decrease but never disappear even though the cancer may be cured.

Without expert help (which has been unobtainable) to evaluate these findings it is my opinion that these features of fluorescence and resonance are arising from activity of the x-ray target where the phosphorous doubles with each cycle and the glutathione target which resonates whilst it is forced into rapid cycling activity.

Ear, Nose & Throat Cancer

A trial of this method was requested in August 1975. The Board of the Institute of Radiotherapy supported by the Cancer Council completely refused Dr Nelson's and my request for a clinical trial. We immediately started a pilot study in our private practice. A summary of the results is on Illustration 4. Most of these patients were reviewed with us by Professor William Caldwell who was then the Professor of Radiotherapy in the Department of Human Oncology at the University of Madison, Wisconsin, USA. ✦

Next month: The Enigma of Cancer III: Logic and Brewing Provide the Answers.

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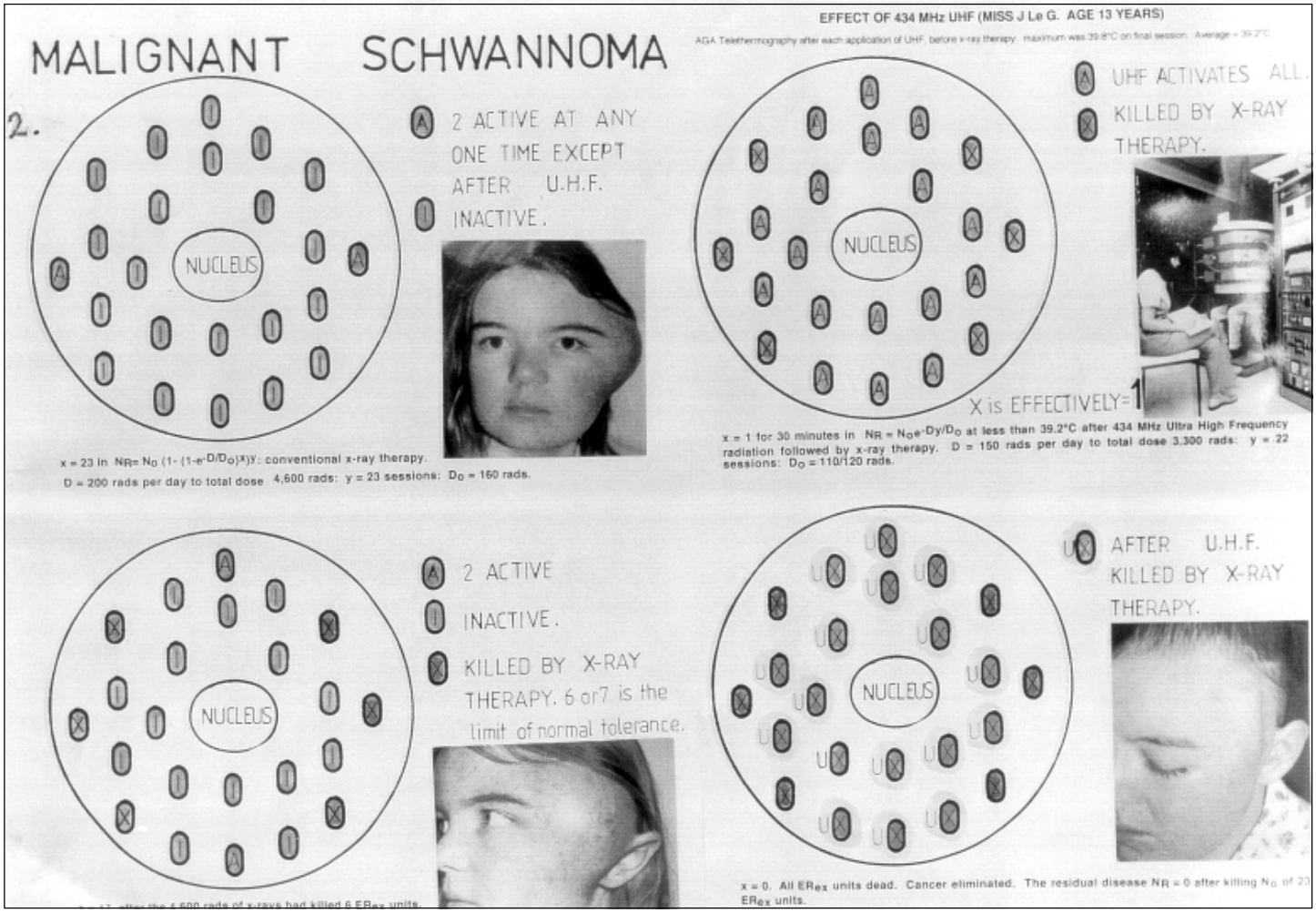
Illustration 2



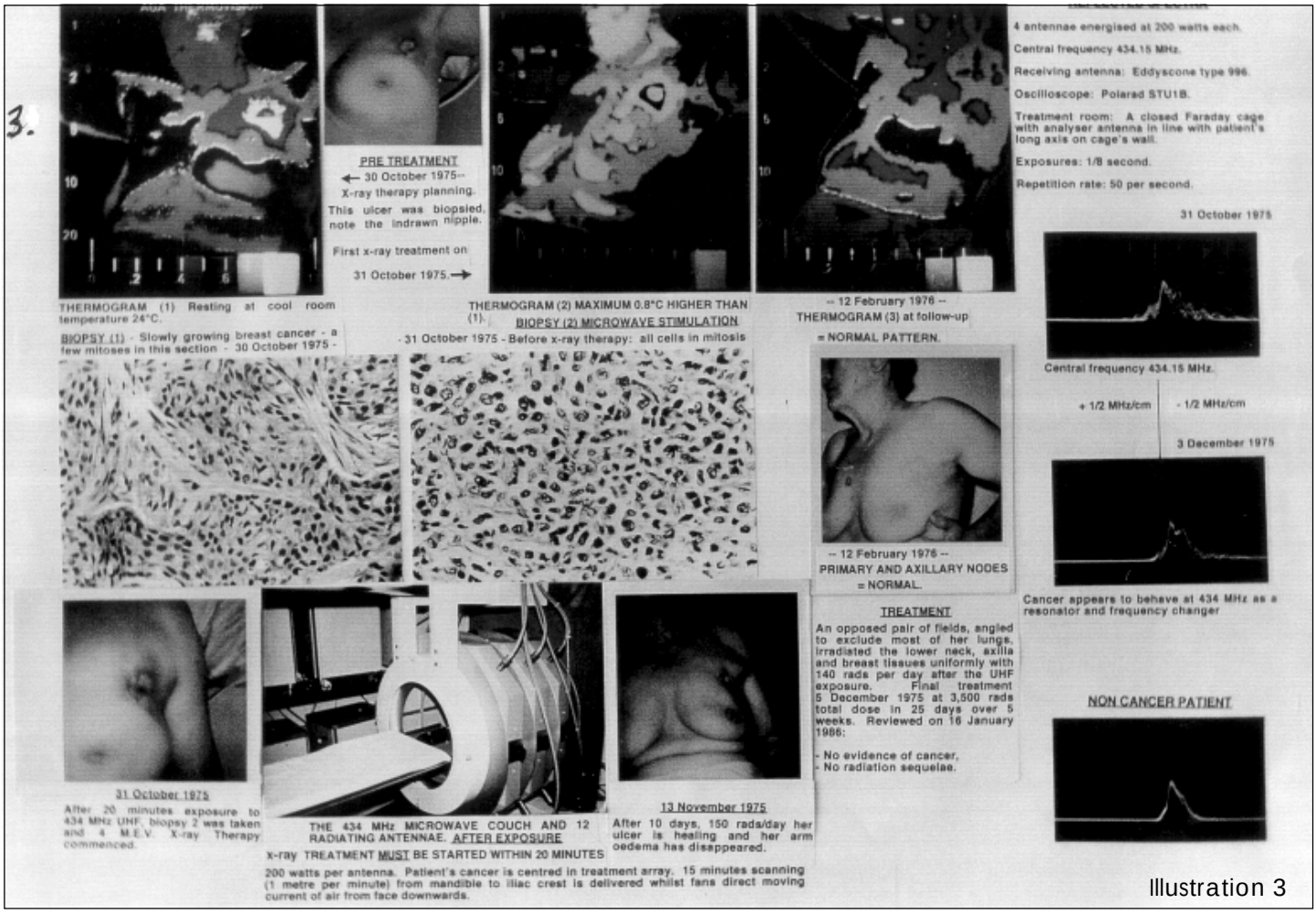
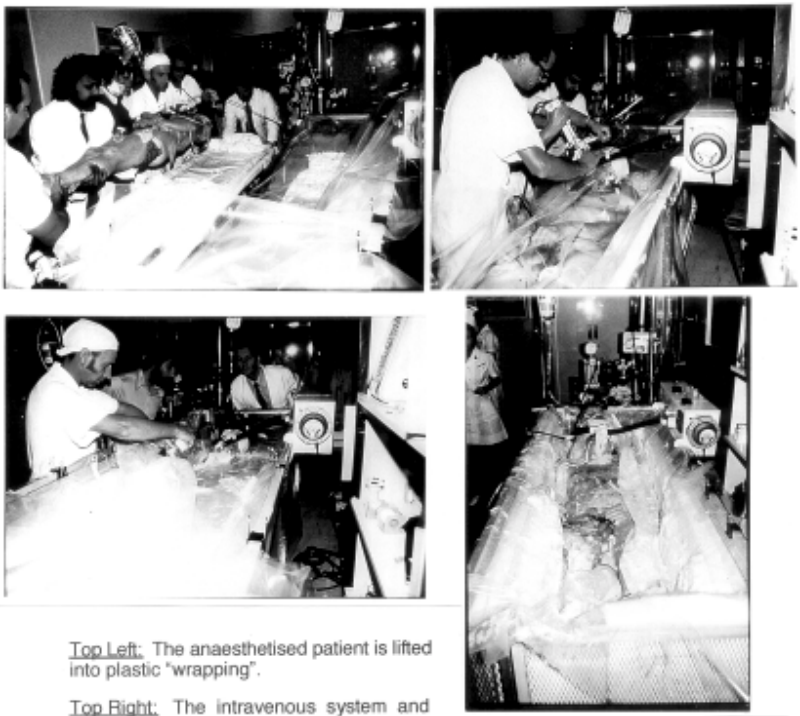


Illustration 3

1968-1971 27 patients treated at 41.8°C from non electrical heating - wax bath hyperthermia.



Top Left: The anaesthetised patient is lifted into plastic "wrapping".

Top Right: The intravenous system and catheter are inserted and the plastic sheath is sealed. Anaesthetic gases are heated in the square heat exchanger (right mid picture).

Bottom Left: 50 gallons of wax at 50°C submerge the patient.

Bottom Right: At 41.8°C the sheath is opened/closed to keep the temperature constant for 6 to 8 hours.

Illustration 1

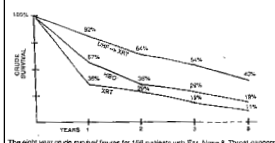
HEAD & NECK CANCER

1974-1975 Pilot Study:
156 Patients with Head and Neck Cancer:

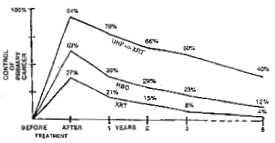
52 treated by 434 MHz UHF followed by x-ray therapy: Average age 71 years. Average x-ray dose 4,600 rads over 6 to 8 weeks. UHF

52 treated by hyperbaric oxygen and x-ray therapy: Average age 64 years. 600 rads, twice weekly to average total 3,600 rads HBO

52 treated by conventional normothermic x-ray therapy: Average age 69 years. 200 rads daily to average 6,000 rads total XRT



The eight year crude survival figures for 156 patients with Ear, Nose & Throat cancers.

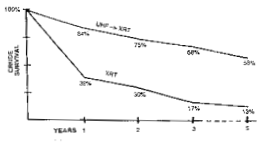


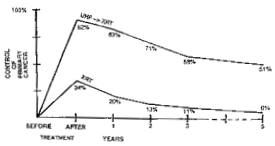
The improved immediate response using UHF
The patients accrued over 12 months at the three therapy centres.

1976-1980: 297 Head and Neck Cancer Patients.

79 treated by 434 MHz UHF followed by x-ray therapy: Average age 63 years.

218 treated by conventional normothermic x-ray therapy: dose as in Pilot Study. Average age 68 years.





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Holt JAG & Nelson AJM. Medical Journal of Australia 1978, 2:88-90 and 1965, 1:42:707-708.
Caldwell W L International Journal of Radiation Oncology, Biology and Physics 1979, 5:1919-1921.

Illustration 4

The Enigma of Cancer III: Logic & Brewing Provide the Answers

by Dr John Holt

Dr. John. A. G. Holt MB, ChB, FRCS, FRCR, FRACR, DMRT, retired as medical director of the Institute of Radiotherapy and Oncology of WA, to pursue his own private therapy practice in 1974. It has now been over 25 years of successful treatment of patients with cancer who have come to his practice from all over the nation. This is the third of a series of 4 articles on Microwave Therapy Dr Holt has prepared for the Wellness News.

Having read and understood parts one and two you can easily find the cause of cancer for yourself. Visit the library, ask for any text on carbohydrate metabolism, turn to the pages of glucose metabolism. Sugars have been proven for hundreds of years to power brewing and glucose, even though broken down to a simpler sugar, powers cancer.

We have to find an unique chemical reaction which obeys exponential growth. In the simplest terms somewhere hidden in the burning of glucose to provide energy is a system in which the energy system doubles with each completed reaction. 2 –> 4 –> 8 –> 16 –> 32 etc etc. This is an exponential series. Nothing difficult about that. Let me point you in the right direction. My edition of White Hander Smith entitled *Principles of Biochemistry*, third edition, was published in 1964 by McGraw Hill. Go to the pages on glucose metabolism. In burning glucose to provide energy the final sentence of one section is as follows: "since each glucose molecule yields two triose[1] fragments, each of which is converted to 3-phosphoglyceric acid in this manner, two molecules of ATP are thus generated per molecule of glucose! For the destruction of each molecule of glucose you have the production of two molecules of energy in the form of ATP." ATP is an energy rich phosphorus compound - Adenosine Tri-Phosphate. The next step is the crucial reaction of fermentation.

Fermentation - Oxygen Must be Excluded - THE EXPONENTIAL STEP

The normal cell has no oxygen present around its chromosomes in the nucleus. The cell about to divide by mitosis breaks its nuclear membrane and the whole cell becomes anaerobic (an = without: aerobic = oxygen) as proven by Stern and Timonen. The fermentation reaction will not proceed

in the presence of oxygen and is created by a common component of the yeast plant cells and of human cells called glutathione - pronounced glue-ta-thigh-own with the symbol GSH. S refers to thione meaning sulphur, H is the hydrogen atom and controls the state of this particular chemical. GSH is unique because it has another form without hydrogen called oxidised glutathione symbol GSSG. These two forms can interchange using hydrogen ions. The hydrogen atoms are electrically conductive in their ionic form (symbol H:- for hydride ion and H+ for the hydrogen ion) during active reactions. Two molecules of GSH are written as 2GSH, shorthand for G, G, S, S, H and H atoms. G stands for a combination of the amino acids glutamine and glycine. With oxygen freely available the H:- and H+ ions combine with it to form water or H_20 and GSSG: remove oxygen and it changes back to 2GSH. Kosower and Kosower's publication details several mechanisms of this 2GSH/GSSG interchange. Because each reaction is different when placed together they create an irreversible cycle. Illustration 5 (page 7) explains the system.

Exponential Naperian Growth

Starting with GSH in the upper left corner, this loses its two hydrogens (the centre of the circle) and combines with two molecules of phosphoric acid and two molecules of glyceraldehyde phosphate. This G-Sulphur complex then almost immediately breaks into two molecules of Diphosphoglyceric acid and oxidised glutathione (GSSG). This reaction doubles the phosphorous content by adding the two extra phosphorous atoms to the glyceraldehyde phosphate and producing two molecules of Diphosphoglyceric acid (di means two or twice the phosphorous content).

This reaction by doubling the output of energy in phosphorous atoms (2ATP) with each revolution MUST be the exponential Naperian growth system and automatically creates cancer. The diphosphoglyceric acid splits to form pyruvic acid and releases four atoms of phosphorous (4 ATP) containing energy. The GSSG continues around the cycle, is reunited with the hydrogen/hydride ions, becomes 2GSH and is ready to double the phosphorous energy manufacture with the next cycle.

There is a catch to this. Some of this energy in ATP (1 ATP) has been employed in converting the glucose to glycerose.[1] So if you start with glucose it appears that one molecule of glucose has not manufactured two molecules of ATP which then doubled by fermentation to 4 molecules of ATP because only three molecules of ATP remain. In other words this does not appear to be an exponential increase in energy.

This is how cancer shows to us that it is intelligent and crafty enough to cover its intelligence. We ingest our food for a meal. It has to be changed in form for it to be of nutritional value to us, hence our digestive system. The conversion of glycerose to pyruvic acid is intelligent enough to know that it has to use energy of 1 ATP to digest its only raw material, glucose, into glycerose before the process can start. From glycerose the production of energy is doubled.

Therefore the commencement of cancer, which is also the commencement of all life, is the conversion of glycerose to pyruvic acid plus energy together with proof of its own

[1] Glycerose contains three carbon atoms = a TRIose sugar

intelligence. Our brain's intelligence must be based upon this same reaction!

The Target of X-rays and 434 MHz UHF and X-rays is now obvious

434 MHz UHF stimulates the cycle in proportion to its intensity and duration of application. Glutathione appears the direct target of this frequency. Each revolution of the 2GSH-GSSG-2GSH cycle doubles the production of ATP. X-rays or any ionising radiation (eg radioactive phosphorus) directly targets the reaction 2 glyceraldehyde phosphate + 2 phosphoric acid –> 2 Diphosphoglyceric acid –> 4 ATP + pyruvic acid.

In brewing alcoholic liquors too much sugar causes the bottle to explode. In cancer Warburg established that cancer cells only feed on sugars and they too are irreversible and kill by explosive growth if left untreated. The intricacies of brewing are identical to cancer and the genius Louis Pasteur has explored most of its chemistry. Brewing and cancer cell division (called mitosis) can only commence with the two simplest possible sugars - glycerose and/or mannononose. Yeasts contain invertase enzymes which with oxygen can digest the complex fruit sugar. This is why one must first tread the grapes in air because some of this conversion to glycerose uses oxygen enzymes. The cancer system uses some of its energy to split the glucose (which is at a constant level in the bloodstream to keep your brain active) converting it directly to glycerose.

The Fate of Pyruvic Acid

The yeast plant contains pyruvic acid decarboxylase and alcohol dehydrogenase enzymes which convert it with the spare hydride and hydrogen ions directly to ethyl alcohol and carbon dioxide. Animals lack these enzymes and the pyruvic acid is simply converted to lactic acid which accumulates in the bloodstream of cancer victims.

This is a self perpetuating system which is irreversible and will either kill the patient, or as with excess sugar, blow up its bottle. It is autonomous until all the glucose/ glycerose is exhausted.

The transfer of the hydrogen atoms responsible for this cycle cannot occur in the presence of oxygen. Therefore this system is the creation of life before oxygen developed in the world's atmosphere. It must have been confined to single cell units of life (eg bacteria, fungi, viruses etc) and although evolution of individuals could occur, multicellular organisms in which individual cells had separate functions is impossible.

Pasteur's Reaction

The genius Louis Pasteur discovered before 1876 and published in his book Etudes sur la Biere the process we now call the Pasteur Reaction. Described simply it is "AEROBIC RESPIRATION CONTROLS ANAEROBIC FERMENTATION". In the presence of free oxygen the hydrogens are oxidised to water. The GSSG cannot reform 2GSH because this requires a reducing reaction and not an oxidising one (Illustration 6, page 7).

The oxygen control in the cell is carried out by the mitochondria in the cells. The mitochondria are small straw like tubes situated in the periphery of the cell, not in the nucleus, and undertake most of the sophisticated functions of the cell chemistry. The cells which contain the electrical reaction of exponentiality, which I have labelled ERex for simplicity, is carried out in close proximity to the mitochondria. The other difference in the fate of the pyruvic acid in the normal cell compared with the unicellular organism or cancer concerns its irreversible absorption into the mitochondria where it forms the "food" input to power the citric acid and the phosphogluconate cycles. These are evolutionary developments which increase in efficiency of energy production from carbohydrates. In addition to these super efficient energy production systems they also contain the mechanism which interprets the information available from such sources as hormones, chromosome and gene information. Cancer causes abnormal genes because the speed of ERex in the cancer creates asynchrony in their reproduction. Since genes do NOT self replicate they are forced by the cancer's energy system to divide abnormally.

The Cause of Cancer

This is damage to the oxygen based respiratory systems of the carbohydrate metabolic mitochondria. Cancer exists when the mitochondria cannot control or provide oxygen to keep GSSG in that form until cell division is required. When cell division is required for normal growth or to repair damage the mitochondria concerned withhold oxygen metabolism and the system of Pasteur's reaction in Illustration 6 becomes that in Illustration 5 until sufficient cell mitosis to achieve the object desired has been accomplished. Without this system multicellular organisms could not have

continued on following page...

...continued from previous page

developed and evolved. The control of the growth from a fertilised egg to adulthood by the central command system permits individual evolution to become say muscle cells or skin cells or liver cells yet combine together into a cohesive complex animal or plant.

Otto Warburg provided the best summary of Pasteur's work and the cause of cancer in the reference quoted. He was unaware of the vital reactions of glutathione. Needham and Lehmann in the 1930's were the first to prove that glutathione was essential for anaerobic glycolysis (glucose burning without oxygen).

Proof of Pasteur's Reaction

Zelma Baker in 1937 showed experimentally that Pasteur's reaction was correct and that every cancer cell exhibited anaerobic glycolysis which Warburg has christened fermentation. She also confirmed that cancer cells had variable use for oxygen which is not related to the fermentation and was termed respiration. She showed that chicken embryos started off using this anaerobic system only, identical to cancer and when the chicken hatches the aerobically controlled cell division is fully operative. She also confirmed Ashford and Holmes' work that some cells in the brain (glial cells only) used the cancer anaerobic system for normal processes.

434 MHz radiowaves stimulate the cancer's ERex units to increase the cancer cell's x-ray kill. They also stimulate the perfection of the repair once the cancer is killed. Illustration 7 shows a typical combination of these two processes. The healing is self limiting because the normal Pasteur reaction is NOT the direct target of x-rays. The Greenies should learn that X radiations are probably NOT the primary carcinogen which they shout about.

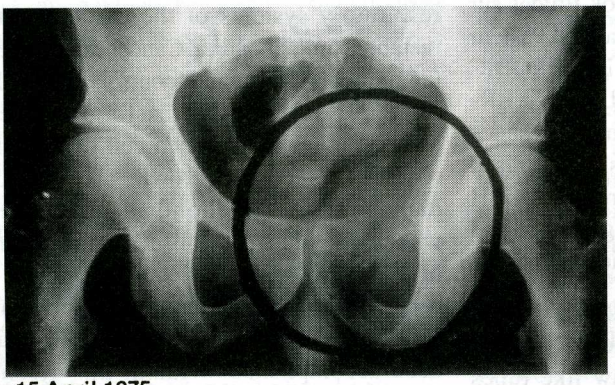
The Nervous System

Adult neurones (signal transfer cells) never become cancerous and cannot contain ERex because they only burn glucose with oxygen. Glial cells burn glucose anaerobically and aerobically. They contain ERex and must be the source of brain cancer and our intelligence.

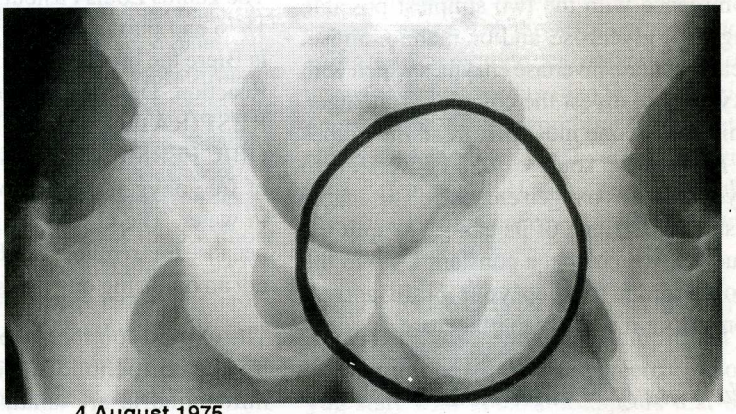
The glutathione functions were fully researched and published by the team of Nechama Kosower and Edward Kosower. Glutathione has multiple functions in the body but this is the one of most importance which creates life. Unicellular life is uncontrolled cancer and multicellular life is controlled cancer.

Thus cancer is merely the evil genie in a corked bottle. Take the cork out, let oxygen in and you have defeated the whole process. It will also ruin your brewing efforts. ✦

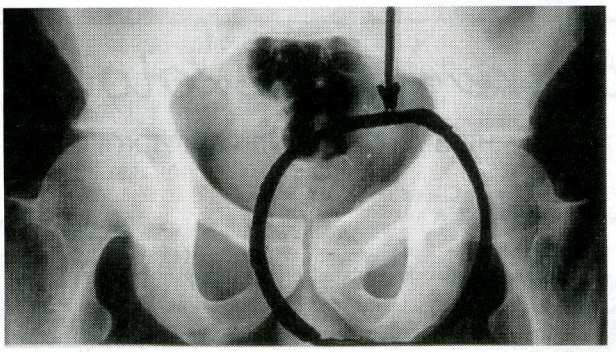
UHF WITH X-RAYS: NON-THERMAL KILL OF CANCER
ENHANCED SELF-LIMITING REPAIR OF DAMAGE



15 April 1975
A fractured superior pubic bone ramus from a deposit of multiple myeloma



4 August 1975
After UHF + 150 rads daily to whole pelvis the cancer dies and the whole cancer mass is visible.



19 March 1976
After cancer dies, normal repair mechanisms reactivate ERex, remain under genetic /nucleolar high control via mitochondrial aerobic systems and are self limiting: the explanation of recovery of normal.

PASTEUR'S REACTION.

MULTICELLULAR LIFE IS AEROBICALLY CONTROLLED CANCER

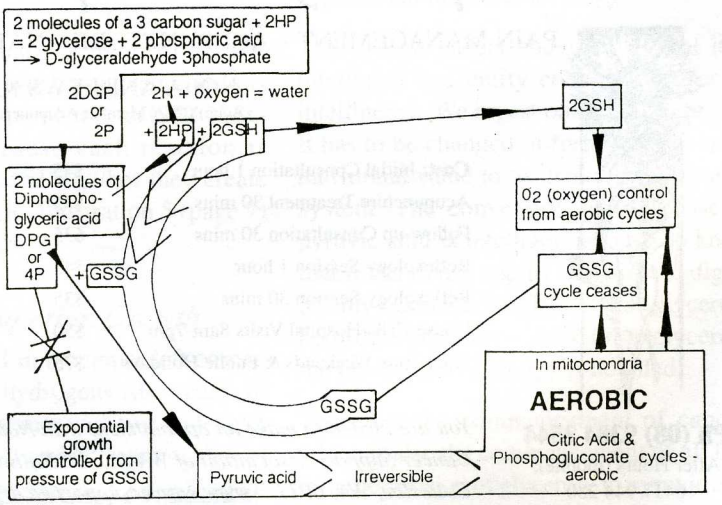
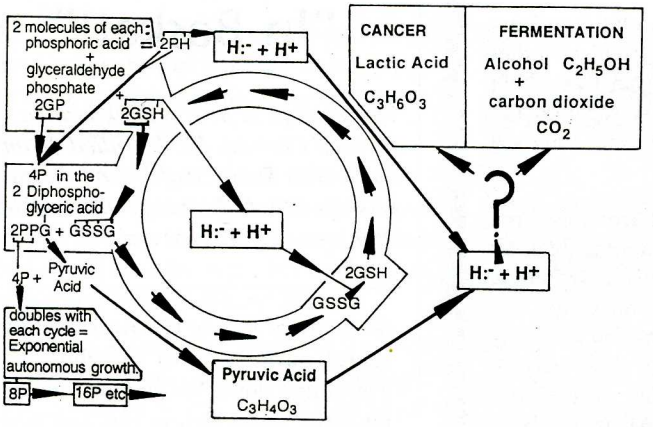


Illustration 7

Illustration 5

THE ELECTRICAL REACTION OF EXPONENTIALITY: ERex WHICH CREATES LIFE AND CANCER



In cancer ER_{ex} uses each GSH/GSSG cycle to double the energy generated as a phosphous compound (P in the equations). 2 molecules of glyceraldehyde phosphate is 2GP and inorganic phosphate is PH for phosphoric acid. The cycle is continuously making Diphosphoglyceric acid - 2PPG which splits to 4P and pyruvic acid.

$$2GSH + 2GP + 2PH \text{ ----> } GSSG + 4H + 4P \text{ (in 2PPG molecules)}$$

$$\underset{\text{Pyruvic Acid}}{C_3H_4O_3} + GSSG + 4H \text{ ----> } 2GSH + \underset{\text{Lactic Acid}}{C_3H_6O_3} \text{ (or } 2GSH + C_2H_5OH + CO_2).$$

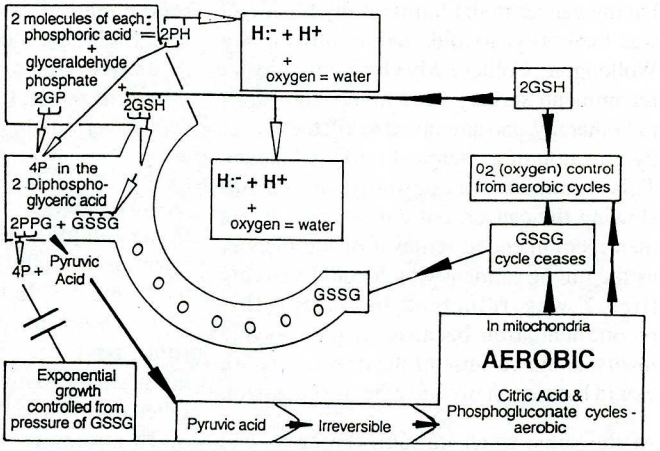
Irreversible because 2GSH --> GSSG and GSSG --> 2GSH are different processes.

Transfer of ionised information (H:⁻ H+) powers the autonomous and uniquely exponential growth system which is the direct target of ionising (x) radiations because they destroy by an uniquely opposing exponential kill which short-circuits the electrically conductive ionised information transfer. 434 MHz stimulates this information transfer by a resonance/fluorescence phenomenon which specifically targets the 2GSH --> GSSG --> 2GSH interchange to increase speed of rotation of the cycle.

Illustration 6

PASTEUR'S REACTION.

MULTICELLULAR LIFE IS AEROBICALLY CONTROLLED CANCER



The common control of all cancer and each cell in multicellular life is control of anaerobic glucose metabolism by the oxygen metabolic processes called respiration. These processes control the glutathione cycle which doubles the phosphate energy levels at each revolution. Any individual's personal cancer must be caused by damage to the chain of interconnected aerobic respiration reactions in each individual cell. When totally inactive as in this diagram ER_{ex} survives single x-ray doses exceeding 2,500 rads and total dosages exceeding 10,000 rads or more over two-three weeks.

1. Such damage to respiration is permanent.

2. Damage to respiration occurs from temporary oxygen deprivation. A continuous supply of oxygen to this system is essential to preserve it intact. Any oxygen deficiency during embryonic and early life destroys some or all of the citric acid, phosphogluconate etc pathways which create the energy to control fermentation.

3. Any respiratory poison is therefore a potential carcinogen. Examples are:

a. Arsenic, particularly arsenite compounds which poison respiration.

b. Hydrogen sulphide derivatives, such as thiourea, thioacetamide and allied compounds.

c. Urethane and derivatives, etc etc.

d. Any cause of chronic intermittent blood supply to any part of the body from chronic infections such as syphilis, physical pressure from clothing etc externally or stones forming internally. This includes the long term scarring from trauma.

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Microwave Therapy Success ...

In January of 1989 I was diagnosed as having cancer in the lining of my bladder. I was then 50 years old, and an official at a Wollongong Colliery. My Oncologist did not recommend surgery, recommended against radiotherapy, and attempted to kill the cancer by injection of a chemical into the bladder. This treatment was partially successful, slowing the cancer, but did not cure it. He then recommended removal of the bladder as the only treatment which could save my life. I was reluctant to accept this recommendation because of the dangers involved and because of the drastic effect it would have upon my lifestyle, if successful.

At the same time, through the press and through my daughter, a University of Wollongong employee, I heard of the case of John Steinke, then the Dean of Commerce at the University, who had been successfully treated for bladder cancer by John Holt. After discussing the details of his treatment with Mr. Steinke, and after discussion with my Urologist and Dr. Holt, I decided to go to Perth for treatment. I should say that I did so against the strenuous objections of my Oncologist, who was scathing in his denunciation of Dr. Holt.

I was under treatment by Dr. Holt for approximately 6 weeks. Treatment consisted of a total of 6,000 rads of radiotherapy administered on a daily basis and alternated every second day with treatment by microwave preceded by injections of a glucose analogue (a substance very similar to blood sugar but having no nutritive value). Although somewhat fatigued by the treatment I was nevertheless well enough to walk between Dr. Holt's clinic and my accomodation each day. I had no other noticeable side effects and in fact, about three quarters of the way through the treatment felt well enough to race my son up a tower in Kings Park.

Following my course of treatment my Urologist examined me, taking bladder tissue samples, at gradually lengthening intervals - initially 6 weeks, then 3 months, then 6 months. In 1991, two years after my initial treatment, pathology tests revealed some a-typical cells in my urine. After discussion with my Urologist, and Dr. Holt, I then returned to Perth for a further course of 18 microwave treatments. Three days after returning to Wollongong I was back at work.

I was fortunate, given the unwillingness of the government to meet the cost of microwave treatment through medicare, that I had private medical insurance, which covered most of my costs.

In the subsequent 11 years, I have had no further bladder difficulties, although I continue to have periodic examinations. My recovery from Cancer, and my treatment by Dr. Holt, I now see as something good in life that started from dismal beginnings.

I am now 63 and, despite having had some non cancer related physical problems, still in generally good health. In a few days I shall be off to do some digging at my Opal mine near Glengarrie in northwestern New South Wales.

Max Ralphs

Don't empty your "In Basket!"

This excerpt is from a book written by Richard Carlson, Ph. D. called "Don't Sweat The Small Stuff" - simple ways to keep 'the little things' from taking over your life. A great read!

So many of us live our lives as if the secret purpose is to somehow get everything done. We stay up late, get up early, avoid having fun, and keep our loved ones waiting. Sadly, I've seen many people who put off their loved ones so long that the loved ones lose interest in maintaining the relationship. I used to do this myself. Often, we convince ourselves that our obsession with our "to do" list is only temporary - that once we get through the list, we'll be calm, relaxed, and happy. But in reality, this rarely happens. As items are checked off, new ones simply replace them.

The nature of your "in basket" is that it's *meant* to have items to be completed in it - it's not meant to be empty. There will always be phone calls that need to be made, projects to complete, and work to be done. In fact, it can be argued that a full "in basket" is essential for success. It means your time is in demand! Regardless of who you are or what you do, however, remember that *nothing* is more important than your own sense of happiness and inner peace and that of your loved ones. If your obsessed with getting everything done, you'll never have a sense of well-being! In reality, almost everything can wait. Very little in our work lives truly falls into the "emergency" category. If you stay focused on your work all will get done in due time.

I find that if I remind myself (frequently) that the purpose of life *isn't* to get it all done but to enjoy each step along the way and live a life filled with love, it's far easier for me to control my obsession with completing my list of things to do. Remember, when you do die, there *will* still be unfinished business to take care of. And you know what? Someone else will do it for you!

The Enigma of Cancer IV: The Cure

by Dr John Holt

Dr. John. A. G. Holt MB, ChB, FRCS, FRCR, FRACR, DMRT, retired as medical director of the Institute of Radiotherapy and Oncology of WA, to pursue his own private therapy practice in 1974. It has now been over 25 years of successful treatment of patients with cancer who have come to his practice from all over the nation. This is the final article of a series of four on Microwave Therapy Dr Holt prepared for the Wellness News.

Definition of Cancer

1. It is irreversible.

2. Transfer of information from a life form to a non life form to perpetuate generations of life.

3. Exponential growth.

Every mother understands the first two essentials. The growth which follows Napier's exponential mathematics applies to any unicellular organism which has access to unlimited food, water, supplies and living space. Any restrictions will reduce the rate of exponential growth.

In multicellular organisms the fertilised ovum grows just as a colony of unicellular organisms until some of them have to grow more slowly to become specialised cells. Gradually each cell has become specialised into its specific programmed function. Differentiation is the technical term applied by pathologists to record this change from primitive to specialised adult cells.

Oxygen: The Control of Specialisation

Oxygen is essential to the citric acid and phosphogluconate cycles of carbohydrate mechanism so that they can interpret the information held on the chromosomes and in the nucleoli of the cell. Through their oxygen they can stop the cell dividing and develop its internal sophistication. Since this is only needed in multicellular organisms every unicellular organism is the equivalent of cancer and does not have the oxygen control designated as the Pasteur reaction.

In the fully adult body we therefore have cells which are replicating continuously (eg the testis in fertile men) at one extreme to the neurones which are the cells keeping the nerve tracts alive at the other extreme. These can never reproduce because both the Pasteur reaction process and the electrical

reaction of exponentiality have both disappeared from the cell. In the proof of this adult neurones never, ever become cancerous.

In between the testis and the neurone part of the body is made up of adult cells which also can never go cancerous but merely die away and are absorbed. The remainder are the stem cells from which every replacement of the body is manufactured. The stem cells contain the ER_{ex} system plus the Pasteur reaction keeping it in check and this is released for repair of normal tissues. (See Illustration 7, previous article). Any damage to the Pasteur reaction in the oxygenated "carbohydrate' mitochondria will allow ER_{ex} to become autonomous and create cancer. Cancer can only arise from a stem cell.

Growth Rates of Cancer

Driving an automatic car its acceleration (equals the cancer's growth rate) is governed by how hard you press the accelerator pedal. For certain road conditions one must reduce speed and therefore the brake has to be applied. The classic work of Anna Laird published in the British Journal of Cancer in 1964 proved that the full exponential growth with the car in its maximum accelerating rate complies with the reaction $W=W_0e^{AT}$[1] – an exponential growth. She describes how the multicellular organism also obeys this mathematical expression with the addition of alpha as the equivalent of the car's braking pedal. For all animals like you and me our growth rate starts off as truly exponential and slowly decreases to comply with the equation $W=W_0e^{A/(1-e)}$[2] – a Gompertzian exponential growth. Alpha ( ) is the deceleration rate of A the acceleration rate! These Gompertz "exponential" equations are a perfect fit for every kind of natural growth on earth.

After true exponential growth in embryo its slow deceleration becomes faster and faster so that shortly after puberty we attain a fixed stature and a constant body weight. A and alpha have balanced so that the growth rate of the stem cells is matched by the death rate of the adult non stem cells that they replace. A graph of our growth rises steeply at the beginning and the growth rate falls off and then assumes a horizontal line which is known as an asymptote.

Intelligence

The electrical reaction of exponentiality which I have termed ER_{ex} can hide itself in the intricacies of carbohydrate metabolism. Kosower and Kosower showed that this reaction was superior to every other reaction in the universe because its two individual halves are each irreversible and therefore does not obey the universal laws of ordinary chemistry. Combining sodium and chlorine to form common salt the reaction is never 100% complete. It can be easily reversed by passing an electric current through salt solution. Again this never proceeds to 100%. Every non exponential reaction is limited by an equilibrium constant and therefore is never complete. By contrast the ER_{ex} system is either all or nothing. This makes it absolutely unique

1 W = **result** from W_0 after accelerating at rate A for time T.

2 W = result from W_0 decelerating at rate alpha and reducing rate A for time T.

compared with other simple chemical non exponential reactions.

If therefore you had a war between two armies one of whose reserves were based upon exponential mathematics and the other upon simple mathematics the exponential army replacements would always overwhelm the simple replacement forces and would be "superior". If intelligence is defined as the adaptation to environment then no better example can be found than ER_{ex}'s creation of glycerose from glucose so that it can remain "alive". This is not the forum to discuss intelligence but it must reside in some of the glial cells because they maintain adult anaerobic glycolysis which is absent from the neurones. The evolution of animals shows that from the most primitive invertebrates up to man there is a rising proportion of cystathionine in the brain. Cystathionine is manufactured from methionine.

Alzheimer's Disease

A reasonable theory would be that the anaerobic glycolysis powering life converts methionine (a simple amino acid next in size greater than cystine) in exponential quantities to cystathionine. Whatever use is made of the cystathionine is probably responsible for our intellectual faculties which are learnt but not inherited and controlled by a similar reaction to the way the Pasteur reaction controls cancer. Failure of this "Pasteur control" would result in Alzheimer's disease and a similar treatment using anti-methionine compounds may well solve the problem.

Exponentially Growing Diseases

Cancer is exponentially growing and will respond to the use of glycolytic blocking agents, which artificially restore Pasteur's reaction and 434 MHz Ultra High Frequency radiowaves.

As both exponential growth and exponential kill via x-ray therapy are both unique then automatically one targets the other. The discovery of a method which does not use x-ray therapy to control cancer could well be used for every other disease which grows exponentially and eventually leads to death. Before antibiotics x-ray therapy was used for many of these diseases with great advantage. Some of them such as scleroderma, multiple sclerosis, shingles infection (herpes viruses and other viruses affecting the lips, mouth, eye etc.), systemic lupus erythematosis, ankylosing spondylitis, gastric ulcers, tuberculosis, other infections etc are either caused by known infectious agents or under the common name of auto-immune diseases. As a student I knew that all these diseases were treatable using low dose x-ray therapy and I was taught the methods by the late Dr Flemming, the Director of Radiotherapy in the Rehabilitation and Chronic Diseases wing of the Royal United Hospital in Bath, England.

ER_{ex} – ? – The Basis of these Diseases ?

As exponential growth is the unique feature of living organisms then it would be rational to assume that all these diseases which progress by very slow Gompertzian exponential growth are caused by some form of a living organism, either bacterium, virus, fungus or something similar. The "auto-

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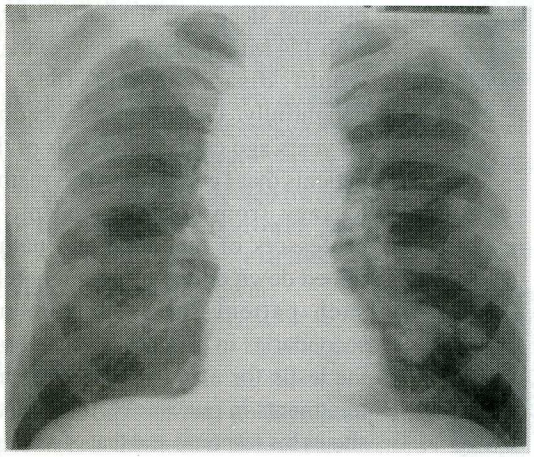
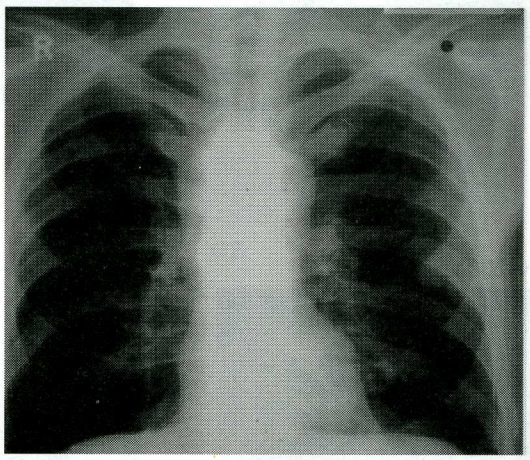
Illustration 8

INSULIN - AN ANTI-CANCER AGENT

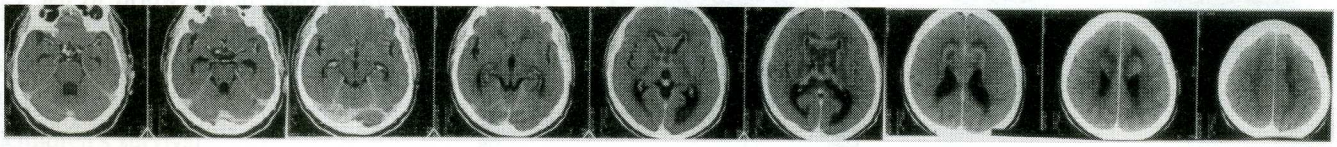
2,000 iu soluble insulin intravenously followed two hours later by 20 minutes UHF irradiation



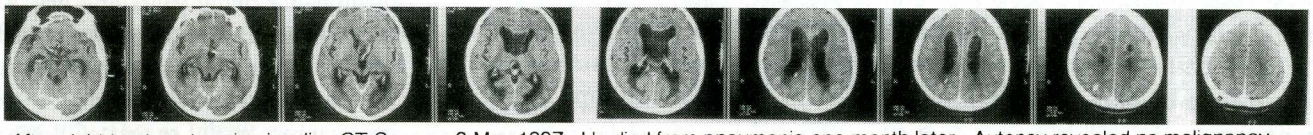
11.11.76 Before treatment for multiple secondary cancer from a Teratoma of Testis



1.12.76 After 3 treatments on 16, 18 and 20 November 1976. A 32 year old wheat farmer, well when last seen in 1979.



CT Scan grade IV Glioblastoma in a 61 year old male, biopsy only, on 8 April 1997.



After eight treatments using insulin: CT Scan on 8 May 1997. He died from pneumonia one month later. Autopsy revealed no malignancy.

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immune" title, I suggest indicates an infective process, like HIV/AIDS which NEVER produces full immunity in humans and therefore grows "autonomously" in a slow Gompertzian function. Modern medicine has decided that old fashioned radiotherapy for these diseases can be replaced by steroids. In the case of multiple sclerosis for instance this is the argument used for its treatment by steroids today. From my observations the results are not as good as using a course of 1,000 to 1,500 rads of x-ray therapy over two to three weeks. The target of this treatment must have been ER_{ex}. This is to be expected because these diseases grow exponentially to death. Having replaced x-ray therapy with the glycolytic blocking agents then obviously all of them have become potential candidates for treatment using the same regime as one would use on cancer.

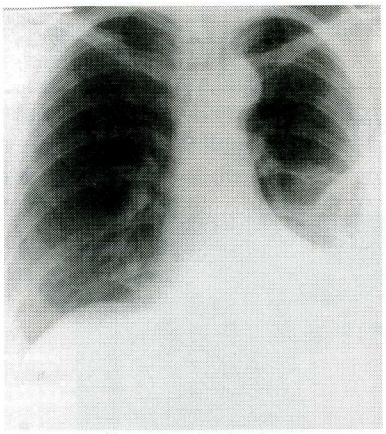
In the course of treatment of cancer with these agents examples of lupus erythematosis, scleroderma, muscular sclerosis, ankylosing spondylitis, herpes zoster (shingles infection) and some of the chronic eye infections have all responded, some permanently as a result of the treatment for cancer in other parts of the body. With the discovery by Dr Barry Marshall that gastric ulcers are probably caused by a specific bacteria then we can understand why x-ray therapy before the 1960 era was often a "curative" treatment for gastric and duodenal ulcers.

Illustration 9

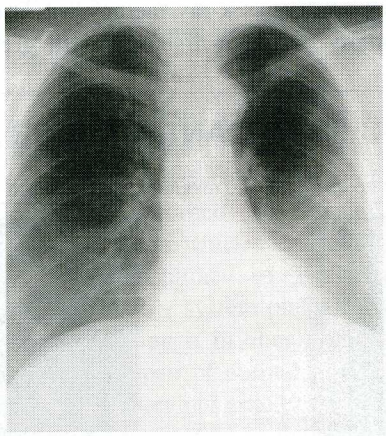
MESOTHELIOMA

Mrs EvH, Date of Birth 5/10/1942

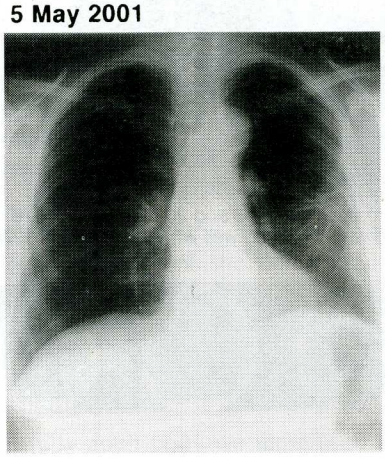
6 December 1990: Biopsy diagnosis

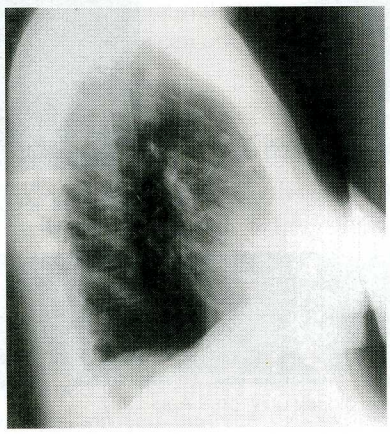


7 May 1993: After 5 x15 day courses of treatment



5 May 2001





In February 1994 a further course of treatment (15 days) was given for a locally recurrent malignant melanoma (chest skin). No recurrence by May 2001 of either melanoma or mesothelioma. A 10 year cure.

The Best Synthetic Glycolyic Blocker so far used is Oxidised Glutathione: the Best Natural one is Insulin

After intravenous injection of either, 434 MHz radiowaves must be given within 20-30 minutes. ER_{ex} is the conversion of oxidised glutathione to reduced glutathione and its reversal (2SH –> GSSG –> 2SH). It is quite common in nature. The classic example of a huge molecule made of chains of amino acid linked together by -S-S- disulphide couplings is insulin. This is probably the best single and least toxic anticancer drug discovered. Using it as a convulsant in psychiatry has cured cancer (Koroljow). I have used 434 MHz radiowaves to great effect in combination with insulin.

Next time you see the heroine in a Hollywood movie dying of cancer being carefully injected with 10 or 20 units of insulin and she dies gloriously, that is the time for the audience to laugh hysterically. The dose of insulin which is tolerable is directly proportional to the amount of cancer present. If you are near death you require at least 4,000 or 5,000 units of soluble insulin intravenously in a single quick dose to have the slightest chance of bumping you off. All that happens is that some have a pleasant sleep and if you irradiated them with 434 MHz probably most of their cancer would disappear and they recover delightfully. One of my publications some 20 years ago contained details of the many patients that I cured using this method. The barrage from conventional physicians, professors of medicine and pathologists rained down on me like atom bombs! One such patient survived from multiple secondaries in his chest from a teratoma of the testis for many years having had three treatments in one week! Illustration 8 also shows his response and that of a brain cancer.

I am probably the last surviving medical practitioner in the world to use Coley's toxins when the Professor of Surgery, Dr A. Rendle Short in Bristol, in 1945 treated a patient with Coley's toxins. Coley's daughter, Dr Helen Coley Nauts, PhD, directed the New York Cancer Research Institute for many years and was a great friend of mine. I could never persuade her that her father's method was not a vaccine. She remained convinced that it was an immune response. I suggested it was more akin to insulin therapy.

Coley's "Vaccine"

This was eventually analysed by Shear and the bacterial product responsible for the lethal effect on cancer was identified as a polysaccharide (this is a complex sugar) which has 48% carbon, 7% hydrogen, 4% nitrogen, 2% sulphur and various other derivatives acetyl and inorganic molecules etc. On breaking down this phospholipid saccharide it yields various sugars joined by sulphur atoms in the -S-S- disulphide or oxidised form.

Conclusion: Coley's toxin is a long chain complex sugar molecule with the links created by disulphide junctions (like insulin). We now know exactly why and how it succeeds in destroying cancer. As with oxidised glutathione it must be given intravenously, in Coley's case he also did it intra-tumorally. What a pity he did not have 434 MHz UHF radiowaves to make all his targets active. If he had it would have saved wasting all that time and money developing x-ray therapy equipment and useless cytotoxic chemotherapy.

The first production commercially was to Buxton's type VI formula and made in 1901.

Human Activities

Anna Laird's paper must be read in detail to understand why her prognostications about the fate of the world and the demise of all living things on the world will eventually occur. Every human activity is based upon exponential growth. Our treasurers insist that money loses its value by a percentage every year which they call inflation. This is no different from the "cancer' created by usury charged by the lender to the borrower. Such practice automatically creates a Gompertzian exponential growth.

The Asymptote

As Laird points out to create an asymptote which preserves the world for posterity requires we control every human activity to a Gompertz function. How else can we preserve the forests, animals, birds etc? The philosophy of Politicians, Big Businesses and Treasurers is the cancer of our society. It needs a "Pasteur reaction" to permit our grandchildren's survival.

Our bodies are the living proof that nature itself recognises that its creation of an exponentially growing system called life is self destructing unless there is a natural curb of its growth. This is inbuilt as far as our physical characteristics are concerned. With intelligence directly dependent upon the production of an exponential increase in cystathionine in our glial cells without the equivalent of a Pasteur reaction either to control its perfection or its quantity then our brains are not restricted to an asymptote. We must control our human behaviour. It is therefore completely inevitable that unless we force Gompertzian changes, life in the only habitable place in the universe will disappear. The Green movement is correct in this attitude and its real place is to attack the exponential monetary system that every elected politician and business uses.

Having read this account, which I hope is reasonably simple in a complex subject, I earnestly ask you all to read Anna Kane Laird's brilliant paper and understand it. I will be delighted to provide a copy free. The price I exact for this is for you to write on the back of a postcard the equation which tells a patient the extension of life that a surgeon has given him or her when only half the cancer has been removed. As a guide one half equals the number epsilon or "e" raised to the power minus 0.69315. Epsilon has the value 2.71828. Assume that the rate of growth of the cancer is to double every 30 days. 1/2 = 2.71828-0.69315.

Conclusion

In my opinion the entire practice of medicine is revolutionised by the establishment of the exponential increase in energy in the form

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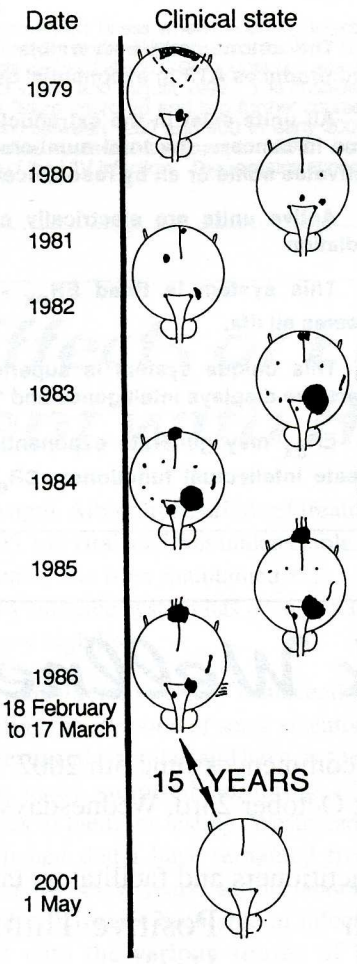
Illustration 10

BLADDER CANCER - J.S.

MALE DOB - 20/3/1931



This patient had a partial cystectomy in 1979 for a grade 2 (moderately rapidly growing) cancer of the bladder. A recurrence was present in 1980, 1981 and 1982 and required five transurethral resections during that interval. In 1983 intravenous oral and intravesical (directly into the bladder) cytotoxics were given without any improvement and in 1984 6,200 rads of x-ray therapy in 35 doses was delivered. In 1985 there is no appreciable improvement and treatment was given as indicated on the chart between 18 February and 17 March 1986. The bladder remains clear on 1 May 2001. This is 15 years after treatment when every other conventional method had failed.

of adenosine triphosphate during the metabolism of glucose. At the price of proving the world is atheist, which might be the ultimate antidote to war, medicine for the first time has an almost universal tool for a series of illnesses which currently are "treatable" but rarely curable. The final few illustrations contain results which may be of interest. ✦

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3 Nauts H. *Bibliography of Reports Concerning the Clinical or Experimental Use of Coley's Toxins 1893-1934 (Streptococcus Pyogenes and Serratia Marcescens).* Published: Cancer Research Institute, 1225 Park Avenue, New York, NY 101 28, USA. 1984.

4 Shear M J. *Chemical Treat of Tumours V. Isolation of the Haemorrhage Producing Fraction from Serratia Marxescens Cultuaaaaare Filtrate.* Journal of the National Cancer Institute, Vol 4, pp 81-97. 1943.

5 Buxton B H. *Type VI Coley's Toxin Formula.* Letter to Research Director, PARK DAVIS & Co Laboratories, December 1900. Personal communication to me from Dr H Coley Nauts.

6 Holt J A G. *The Extra Nuclear control of Mitosis and Cell Function. A Theory of Cellular Organisation.* Medical Hypotheses, Vol 6, pp 145-192. 1980.

Diagram 12

POSSIBLE CELLULAR SITES OF AUTONOMOUS GLYCOLYSIS (CANCER)

Site	ER_{ex}	Genes	Nucleoli	Mitochondrial Activity	Possible Cancer Precursors
Testis, Sperm precursors	Yes	1/2 set	none	Intermittent	Yes & sperm count effects
Sperm	Yes	1/2 set	none	Intermittent	Possible
Ovum	No	1/2 set	2,000 +	Intermittent	No
Foetal Cells (Anoxic)	Yes	Full	Yes	Continuous	Yes
Foetal Cells (Stem)	Yes	Full	Yes	Continuous	Yes
Foetal Cells (adult type)	No	Full	Variable numbers	None	No
Adult (Stem)	Yes	Full	Yes	Intermittent	Yes
Adult (Non Stem - eg neurones)	No	Full	Variable numbers	None	No
Any age, Stem and Non Stem, brain glial cells	Yes	Full	Yes	Continuous	Yes & intelligence defects and Alzheimer's "cancer

Illustration 18

All mitochondrial bodies use electron transport systems and are therefore specific recipients of EMF energy. The only vital system which controls cancer is the aerobic destruction of pyruvic acid in the citric acid and phosphogluconate cycles. ER_{ex} is "intelligent". Alzheimer's disease is the exponential growth of "amyloid" peptides when ER_{ex} converts methionine to cystathionine in exponential quantities. This reaction is labelled CR_{ex} and when uncontrolled is chemical brain "cancer".

SUMMARY

1. The autonomous irreversible "cancer" energy cycle is driven by glutathione and produces ATP in exponential quantities.

2. All units exist in the extranuclear cell contents: only 2 are active at any one time in cancer: the total numbers range from 2 to at least 30 per cell. 434 MHz activates some or all by resonance/fluorescence.

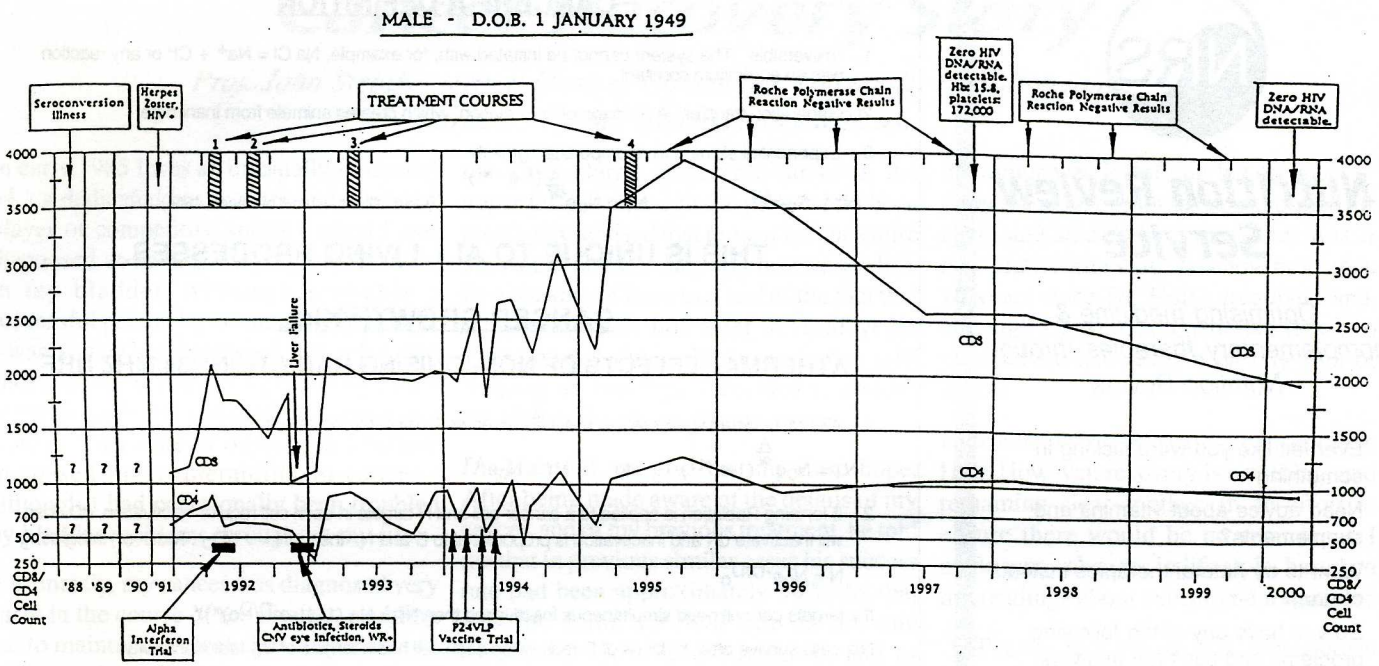
3. Active units are electrically conductive and uniformly sensitive to ionising radiation.

4. This system is titled ER_{ex} - the electrical reaction of exponentiality and creates all life.

5. This unique system is superior to all conventional chemical reactions and therefore displays intelligence and "pushes" Lamarckian evolution.

6. ER_{ex} may generate exponential quantities of cystathionine in glial cells to create intellectual functions: CR_{ex} or the Chemical Reaction of exponentiality.

Illustration 11



This patient was referred almost four years after his seroconversion illness when becoming infected with the HIV virus. In late 1991-early 1992 he developed herpes zoster, cytomegalo virus infections of his eyes and multiple chest infections and it was in the early phases of the AIDS terminal phase of his existence. The first treatment produced an increase in CD4 and CD8 counts but was combined with an alpha interferon trial which lead to severe side effects and he was retreated three months later in July and August 1992. The antibiotics were failing, steroids were administered and he developed liver failure. With change of antibiotics his liver failure improved and two further courses of treatment in 1993 and 1995 were given. His CD4 slowly approached the 1,000 level and have remained between 1250 and 900 in early 2001. He is clinically completely normal. His Roche Polymerase Chain Reaction has been negative since the final course of treatment in 1995. As would be expected after recovering from another serious viral disease such as small pox he retains evidence of the HIV infection. The remains appear completely inactive as they would do after a small-pox infection had been cured.

The Effects of EMR. on a Patient with HIV/AIDS

I was diagnosed HIV positive in December, 1991.

I became interested in Dr. Holt's EMR. Therapy as a result of a programme presented by Channel Nine which highlighted the successful treatments of some advanced cancers, and because of certain common features in the growth of cancer and the proliferation of viruses.

Armed with a referral from my Sydney G.P. I presented for the EMR treatment of Dr. John Holt in April, 1992. By this time I was suffering the first stages of AIDS, and was in a poor state of health.

My physical condition improved markedly in a few weeks from commencement of treatment, and tests showed my immune system was gaining in strength. After three periods of treatment to 1995, my viral load was undetectable, and that status has been maintained ever since, and my immune system has been sustained at a very high level.

After considerable effort I succeeded in attracting the attention of some scientists at the Westmead Hospital, and have, in the last seven years supplied numerous blood samples to them for testing. Westmead has established that I have remained free of disease for seven years, and in laboratory tests they have not been able to infect my blood with the various strains of HIV Viruses.

But the scientists have been able to establish many new highly effective mechanisms of anti-viral control. They are only partially convinced that my condition has been brought about by EMR Therapy and have not been prepared to declare I am cured. However my G.P. and Dr. Holt have no such reservations.

Why am I writing this article? Firstly, because I, like my G.P., strongly feel that I am cured - probably the first recorded case in the world - and I am entitled to that health status.

Secondly, so others will have the opportunity of knowing of my experience; and thirdly, that my experience and present condition may be a starting point for a wider interest and effort in the world of medicine which leads to a complete understanding of the disease and development of methods for prevention and/or cure of AIDS. ✦

Peter Hickson

After Hours Telephone Care-line

Don't forget the CSA has an after hours telephone care-line. If you would like to talk with someone after hours please ring:

9385 3357

Illustration 13

CANCER: A DEFINITION

1. Irreversible. The system cannot be initiated with, for example, Na Cl = $Na^+ + Cl^-$ or any reaction with an equilibrium constant.
2. Generation transfer. A passage of "information" which creates animate from inanimate.
3. Exponential slowing to Gompertzian growth.

$N_T = N_o e^{AT}$ $N_T = N_o e^{\frac{A}{\alpha}(1-e^{-\alpha T})}$ (Laird: British Journal of Cancer 1964)

THIS IS UNIQUE TO ALL LIVING PROCESSES.

CANCER GROWTH/KILL

ATHERMAL EFFECTS OF NON-IONISING RADIATION/434 MHZ UHF

1. 434 MHz Ultra High Frequency (UHF) reverses Growth temporarily from:

$N_T = N_o e^{\frac{A}{\alpha}(1-e^{-\alpha T})}$ to $N_T = N_o e^{AT}$

2. If Ionising Radiation is applied to a cancer cell and N targets in each cell require inactivation, dD dose will inactivate dN and inactivation is proportional to D and N: then $dN = -1/D_o . N.dD$ or integrating $N = N_o e^{-D/D_o}$.

If x targets per cell need simultaneous inactivation then $N_R = N_o (1- (1-e^{-D/D_o})^x)^y$

N_R cells survive after Y doses of D rads when each cell has x targets of D_o radiosensitivity.

3. 434 MHz increases x-ray kill from $N_R = N_o (1- (1-e^{-D/D_o})^x)^y$ to $N_R = N_o e^{-Dy/D_o}$
4. 434 MHz $\pm$ 5 MHz uniquely increase ionising radiation kill without destroying its exponentiality.
5. Therefore, both 434 MHz UHF and ionising radiation directly target the exponential function of 2GSH/GSSG, symbol x.
6. 434 MHz is NOT a biological cancer killer unless either:

A. It is used BEFORE x-ray therapy, or B. It is used AFTER chemically injuring ER_{ex}.

(Johns, H E, in: Physics of Radiology 2nd Edit., Pub. CC Thomas, Illinois, USA, pp 660-668. 1964.)

Ionising Radiation: the only biological killer of cancer:

$N_R = N_o (1- (1-e^{-D/D_o})^x)^y$ is the negative exponential "kill" of a daily dose D for y days.

D_o = radiosensitivity constant; the dose to kill 1/e of the targets x. x lies between 2 and 30 or more per cell 1/e = 37% kill rate per exposure).

Of 8, 12, 27, 375, 434, 915 and 2450 MHz ONLY 434 immediately before ionising radiation changes the kill to:

$N_R = N_o e^{-Dy/D_o}$ at less than 39.2°C when all the x targets are simultaneously activated.

A Place of Refuge

Perhaps the most important thing we bring to another person is the silence in us. Not the sort of silence that is filled with unspoken criticism or hard withdrawal. The sort of silence that is a place of refuge, of rest, of acceptance of someone as they are. We are all hungry for this other silence. It is hard to find. In its presence we can remember something beyond the moment, a strength on which to build a life. Silence is a place of great power and healing. Silence is God's lap...

Taking refuge does not mean hiding from life. It means finding a place of strength, the capacity to live the life we have been given with greater courage and sometimes even with gratitude.

From *My Grandfather's Blessings: Stories of Strength, Refuge and Belonging* by Rachel Naomi Remen, M.D.

Cancer Recovery Story

Prof. John Steinke, retired Dean of Commerce, University of Wollongong, shares his cancer success story with us.

In early 1985 I was an unusually fit man of 54 - a dedicated bushwalker and a regular player of competitive sports - when I was diagnosed as having a high grade 2 tumor in my bladder. Although probably a successful person by community standards I was somewhat depressed that what had once seemed an endlessly promising career seemed to have reached a permanent plateau. This state of depression I believe increased my vulnerability to cancer - although I had occasionally been troubled by bladder problems throughout my life.

Fortunately, my cancer was diagnosed very early in the course of the disease, enabling me to maintain a reasonably good standard of fitness throughout the coming months of treatment.

My initial treatment was completely orthodox (repeated surgery, chemotherapy (2 massive doses of cis-platinum) and 6,000 rads of radiotherapy). My doctors were the best available in Wollongong and Sydney, with my Wollongong Urologist particularly impressive. Nonetheless, they were unable to destroy my cancer – which gradually became increasingly aggressive. In late 1985 I was advised that the whole of the lining of my bladder was becoming unstable - and that removal of the bladder was the only course of action with a reasonable prospect of saving my life.

However, for a number of reasons I was reluctant to accept this advice. I was aware that removal of the bladder would probably terminate my active way of life - that it would certainly and immediately make me sexually impotent - and that at that time the five year survival rate after the operation was only 50%.

I now began an intensive and extensive program of reading about cancer and its causes. As a result of this reading I became aware that those who take an active role in their own treatment tend to fare better than those who don't. Realising that I was now down to the last roll of the dice, I decided to take an active role in the decision making on my future treatment rather than simply following the medical advice I was receiving.

Fortunately, I was aware of Dr. John Holt and his microwave therapy. Dr. Holt had successfully treated my secretary's husband for a very large inoperable tumor in the upper thigh - although the patient had been previously advised that removal of the entire leg would be necessary to preserve his life. Being aware of this case, and of the fact that the patient had not after several years experienced any relapse and was still walking on two legs, I decided to contact Dr. Holt and seek his advice.

Dr. Holt did not give me any false hope. After being made aware of the details of my cancer, and of my previous treatment, he told me that in previous similar cases his success rate had been approximately 50%. As that was the same survival rate as the one associated with bladder removal, and as successful treatment by Dr. Holt would leave me physically intact, I instantly decided to arrange treatment by Dr. Holt.

My Urologist agreed, at my request, to refer me to Dr. Holt. Although it was clear to me that he didn't agree with my decision, he didn't attempt to dissuade me – possibly because he realised that my mind was already made up, and possibly out of respect for the right of an adult of sound mind to take their own life and death decisions. The only medical person I spoke to who supported my decision was my local GP. However, prominent members of the medical profession, in both Wollongong and Sydney, contacted me and made strenuous efforts to persuade me to change my mind. A senior AMA figure was particularly vehement, effectively denouncing Dr. Holt as a charlatan.

My treatment by Dr. Holt was twice daily, five days a week, for three weeks. Treatment consisted of injection with a glucose blocking agent followed by two applications of microwave radiation for periods of perhaps 5 minutes, at intervals of 20 minutes. The treatment caused me no pain, although my skin would start to smart by the end of a period of exposure. I suffered no noticeable side effects from the treatment.

After conclusion of Dr. Holt's treatment I returned to Wollongong and, after approximately a month, was examined internally by my Urologist. When I awoke, still groggy from my anaesthetic, he said "I don't know what your man in Perth has, but he certainly has something. When you went away you had a thriving tumor - now where the tumor was is nothing but an abcess." After a couple of months he examined me again and said "where the tumor was is now just a white scar." It is now more than 16 years since Dr. Holt's treatment and, although I have examinations every two years, there has never been any sign of cancer.

I attribute my recovery from cancer to Dr. Holt. However, recovery is one thing, and remaining clear another. In an effort to ensure there would be no recurrence I made many changes in life style, based on my readings about cancer and its causes:

1 Prolonged emotional depression lowers resistance to cancer, and therefore one should try to live positively, avoiding situations that give no satisfaction or cause negative feelings. I immediately resigned from several government advisory boards and, on recovery, applied for the newly created position of Dean of Commerce. I was appointed and served seven very satisfying and, I believe, successful years until my retirement.

2 There are some correlations between diet and cancer - in the case of bladder cancer correlations with beer, coffee and fat consumption. I immediately and permanently gave up drinking coffee and beer, and greatly reduced my fat consumption.

3 Regular meditation can sometimes be effective in fighting cancer. I immediately learned to meditate and have continued to do so regularly since - initially for an hour a day, after return to work for a half hour per day.

4 Consumption of megadoses of vitamin C assists some cancer victims particularly those suffering from bladder cancer. I immediately began taking 10 grams of vitamin C per day, in liquid form, and continue to do so.

I am now 71 years of age and, aside from the niggling ailments of old age, in good health. I might still die of cancer but, should I do so, it won't be the same one. And, be assured, should I again contract cancer - I shall immediately be off for treatment with Dr. Holt! ✦