Perspective

THE ORGONE ENERGY ACCUMULATOR IN THE TREATMENT OF CANCER IN MICE

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ABSTRACT

In the 20th Century Wilhelm Reich described experiments of both a biophysical and physical nature that leant credence to his conclusion that there existed in living and non-living nature a primary force or "mass-free energy", "orgone energy" that was the fundamental force for all growth and development. Reich and his students also found that through a device, the orgone energy accumulator (ORAC), that this energy could accelerate healing in a variety of pathological conditions.

Reich and his students reported many anecdotal healings using the ORAC in a variety of pathological conditions in humans. The only controlled studies were of the treatment of mammary cancer in mice. Of these four studies there was statistically significant prolongation of life in three of the studies and near significant prolongation of life in one of the studies. In the single study where autopsy was obtained the internal organs of the treated mice were found to be remarkably "clean" and intact compared to the degenerated state of the organs of untreated mice.

Keywords: orgone, orgone accumulator, cancer

In the 20th Century Wilhelm Reich described experiments of both a biophysical and physical nature that leant credence to his conclusion that there existed in living and non-living nature a primary force or *energy*, "orgone energy" that was the fundamental force for all growth and development.¹ Reich and his students also found that through a device, the orgone energy accumulator, that this energy could accelerate healing in a variety of pathological conditions.

REICH'S DISCOVERY OF ORGONE ENERGY

In 1942 Reich first reported his experiments on the treatment of mice with spontaneous mammary tumors with an "orgone energy accumulator" (ORAC). The ORAC was, at the time, one of the results of investigations first begun by Reich years earlier into the nature of what he called the "cancer biopathy".2 Through clinical investigation Reich had found that cancer was far more than the mass of aberrantly growing cells known as a tumor, but was a generalized process involving the entire organism: the tumor was but the most prominent physical manifestation of the cancer process.³ Reich saw that common to all cancer patients, often at a very deep psychological level, was a process of many prior years of emotional "resignation", that is, a giving up on living life fully in the naturally aggressive and sexual way it was meant to be lived. Emotional resignation as a function in the psyche has as its counterpart biophysical changes, chronic contraction of the "bio-energy" system of the organism. This is sustained through chronic hypersympatheticotonia and a general lowering of bioenergy levels. When suffered for many years, often decades, this results in what Reich called "organismic biopathic shrinking." On a cellular level it is characterized by oxygen deprivation and shifts in nuclear/plasm ratios of critical ions. As Reich described it, "Biopathic shrinking is the continuation, in the realm of cell functioning, of chronic characterological resignation".4

In pursuing the riddle of cancer to the cellular level Reich found changes in cellular structure not heretofore described. Although cancer tissue had been exhaustively examined and described by light microscopy by the early 1940s, such examinations were made almost exclusively with tissue that had been fixed and stained. This permitted finer examination of details, but invariably produced distortions in structure and, most important, blocked perception of the living process. In his search for the energetic basis of emotions, Reich examined simple heated foodstuffs in boiling water utilizing the finest apochromatic, highpowered lenses available at that time. He found that all food products, no matter what their biochemical makeup, when cooked, rapidly disintegrated into microscopic, bluish glimmering, pulsatile vesicles, which he called "bions". Grass left to decompose in water in the presence of sunlight also went through the same process, but in addition, the bions reorganized into protozoal forms.⁵ In a similar manner, proteinacious tissue that had been deprived of oxygen, nutrients, and bioenergy through chronic bio-emotional contraction went through a process of degeneration characterized by chronic inflammation then, ultimately, "bionous disintegration", and reorganization into (sometimes motile) protozoal-like forms.⁶ Reich also observed and cultured from cancer tissue extremely small, rapidly motile microorganisms of the order of 0.2 -0.5 microns in length, which he named "t-bacilli". When injected into mice t-bacilli caused cancerous tumors at the site of injection.⁷

Reich found that inorganic substances also undergo bionous disintegration when subjected naturally to heat and/or pressure. But, presumably, because of the greater rigidity of their structures inorganic substances take far longer than organic substances to disintegrate in this way. The process, may however, be rapidly accelerated by subjecting the substance to high heat or pressure. This Reich was able to do in the laboratory subjecting soot, iron filings, and ocean sand to standard sources of heat and pressure. Iron filings, for example, can be heated to incandescence by a Bunson burner, then, utilizing sterile procedure, introduced into a standard liquid nutrient medium. When immediately viewed at high power under a microscope the filings will be noted to have changed in appearance from extremely angular and dense to, in some places, having softened, rounded edges, internal vesicles, and in the fluid medium, motile vesicles. Further observations over the next several days to weeks, utilizing sterile technique to transfer materials from nutrient medium to microscope slide, reveal a continuing softening of the edges of the filings and undulatory, organic-appearing, wave-like pulsations taking place at these edges. In time, still maintaining sterile technique, one can readily observe marked changes in the filings as they appear more and more organic to the observing eye.⁸

In the course of the bion experiments the serendipitous heating and subsequent culturing of ocean sand on gellike media yielded cultures that appeared to emit an intense radiation. According to Reich, sealed x-ray film fogged, metal equipment in the laboratory spontaneously developed a magnetic charge, skin exposed to the radiation became inflamed, and unusual luminations appeared in the darkened, basement laboratory. Reich consulted a radiation expert at the local Oslo hospital, but no known radiation could be found emanating from the bion cultures. The resolution of the nature of the radiation led Reich to the discovery of what he called "orgone energy" and the orgone energy accumulator.

A series of experiments involving the charging of an electroscope by contact with rubber that had been exposed to sunlight, bion cultures, or the skin revealed to Reich the identity of "sun energy", the radiation emitted by the cultures, and a postulated "life energy" emitted by the skin. Whatever the nature of this radiation it appeared to be present in the atmosphere where it could be absorbed and re-emitted by living things. Since the radiation was particularly absorbable by organic materials and Reich's research began with the clinical study of the function of the genital orgasm, he named it "orgone energy".

One striking quality of orgone energy was its capacity to spontaneously luminate. Reich reported that in the darkened laboratory he (and others) could see blue-gray vapors around organic materials and small, transient lightening-like "rays" in the atmosphere. In order to better visualize these phenomena Reich built an enclosure consisting of a glass front and walls of metal

backed by wood. The idea was that the metal surface would reflect the radiation from the enclosed bion cultures and the wood would absorb it, the result being a concentration of the radiation within the enclosure. Reich reported that he was, indeed, better able to see the luminations, but to his surprise they remained even after removing the cultures. Washing down, airing out, and even building a new enclosure without the organic backing did not eliminate the light phenomena. Observations over several months in all kinds of atmospheric conditions revealed only subtle differences in the intensity of the light phenomena. Further observations of the night sky where the same phenomena were seen forced Reich to conclude that the radiation was present "everywhere" and could be concentrated in metal enclosures backed by non-metallic materials. Reich called such an enclosure an "orgone energy accumulator" (ORAC) (Figure 1).¹⁰

Studies with electroscopic charging of a variety of non-metallic and metallic materials led Reich to the conclusion that the radiation is rapidly attracted to and then repelled by metals, while it is absorbed by non-metals. Furthermore, by increasing the number of layers of metallic and non-materials the "charge" within the ORAC, as determined by the electroscope could be

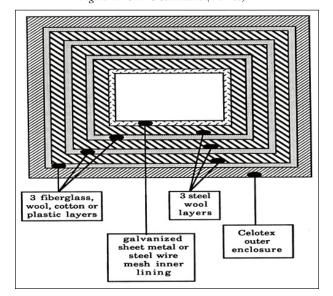


Figure 1. ORAC Schematic (DeMeo)11

increased. This finding was supported by investigations of temperatures within the accumulator compared to temperatures of the outside air or a suitable control. Reich found that the temperature within the ORAC and in a chamber slightly above the top of the ORAC was always warmer than the temperature of the air around the ORAC or within or above a suitable control enclosure. The nature of the materials was also a factor: for biological experiments galvanized iron and steel wool seemed best for the metal layers, while various plastics and wool seemed best for the non-metallic material. As far as can be ascertained to date the size and shape of the ORAC appear to make little difference with respect to its ability to concentrate orgone energy from the atmosphere.¹¹ In working with plants or animals, including humans, it is important that the ORAC be just a bit larger than the tested object, as, according to Reich, the ORAC functions by providing a state of mutual excitation between the organotic charge of the person or animal or plant and the already heightened organotic charge within the ORAC. There must be sufficient air through holes in the walls or doors and around the organism so that it is comfortable.

Reich published many articles and several books on the functioning of the ORAC and devices that permitted the objectification of orgone energy. Students of orgonomy have replicated many of his experiments and these have been published in Reich's Orgone Energy Bulletins, the American College of Orgonomy's *Journal of Orgonomy*, the Institute for Orgonomic Science's *Annals*, The Orgone Biophysical Research Laboratory's *Pulse of the Planet*, and other journals. ¹³⁻¹⁷

While Reich and others had found and anecdotally reported salutary effects experimentally treating a variety of illnesses with the ORAC the only controlled biomedical studies of the effects of the ORAC at that time were of the treatment of cancer in mice. 18-28

EXPERIMENTS WITH CANCER

Prior to beginning his investigations of the effects of the ORAC on cancer, Reich had studied the effects of injecting cultures of strongly radiating bions obtained from ocean sand (sand packet, "SAPA", bions) into

mice with mammary tumors. Some strikingly anomalous results were seen, such as rapid shrinkage of the tumor in some cases and an increase in life span of the treated animals. Invariably, however, all the mice died significantly more rapidly than control mice without cancer. Reich did find, however, that the therapeutically effective agent in the treatment was the blood of the mouse: the SAPA bions apparently charged the blood with life energy, which then attacked the cancer cells. A series of experiments involving the treatment of blood and serum with SAPA bions outside the animal, then injecting the treated solution into the mouse or rabbit showed a pronounced destructive effect on the tumor, but this method was not as effective as the direct injection of bions into the test animal. On the basis of observations of the liver tissue of the treated and untreated mice. Reich noted that the elimination of the breakdown products of the tumor was critical to their recovery. Of particular relevance to some of our own conclusions, below, was Reich's observation that the blood of cancer mice did not form specific antibodies against cancer cells. He explained this as due to the "orgone-weakness" of the blood in cancer.²⁹

With the discovery of the ORAC Reich then studied the effects of subjecting mice with spontaneous mammary tumors to the radiation within an accumulator. Accumulators in experimental use at that time consisted of an inner wall of galvanized iron and an outer layer(s) of rock wool and steel wool with a fiberboard material such as celotex as the outer structural support. The mice were of a "Rockford" strain that spontaneously developed mammary tumors. The ORAC was compartmentalized so that each compartment held one or two mice. From a photograph of the ORAC used in Reich's experiment it appears that it consisted of either an inner metal lining with a cover of fiberboard or celotex (single fold ORAC) or of the same construction, but with an additional middle layer of a mix of steel wool and rockwool. Treatment began one week after detection of the tumor and lasted 1/2 hour daily. Reich reports the day of death of treated and un-treated control mice. The results were striking. The treated mice lived significantly longer than the control mice. (Experiment 1, Table 1 & Figure 2).30

Ex.	Ss	Treat	Cont.	Р	ES
1	Mn	10.4	3.9	<.001	1.14
	SD	7.1	3.1		
	n	35	27		
2	Mn	12.5	7.8	<.03	1.78
	SD	3.8	1.2		
	n	4	5		
3	Mn	9.9	5.4	<.001	2.34
	SD	1.6	2.2		
	n	4	4		
4	Mn	8.7	4.0	<.100	.45
	SD	12.0	8.5		
	n	25	25		

Table 1. Survival in Weeks: Treated vs. Control Mice

POST-REICH EXPERIMENTAL STUDIES OF THE EFFECT OF THE ORAC ON CANCER MICE

In 1973 in a controlled variation of the same experiment as Reich's, we, at the Oranur Research Laboratory in Ottsville, PA. transplanted nine three months old C3H/HeJ female mice with mammary adenocarcinoma (C3HBA) tumor cells. By random selection four mice were then treated for 30 minutes daily with individual five-fold ORACs, beginning the day after transplantation. The ORAC was constructed of a rectangular outer shell of wood with large holes in the tops and sides to permit the absorption of orgone energy from the atmosphere into the next immediate layer of wool. The inner box was made of galvanized iron with a large slit to permit the animals to have air. Between the inner and outer boxes were four alternating layers of steel wool and wool. The 5 control mice were housed in individual plastic boxes of the same dimensions as the metal interior of the ORAC during the time that the experimental mice were treated. In all other respects they were treated the same.³¹

The injected tumor cells, 'took' in all animals, although the initial appearance of the tumor in the treated mice was delayed compared to the initial appearance of the tumor in the control mice. The treated mice lived sig-

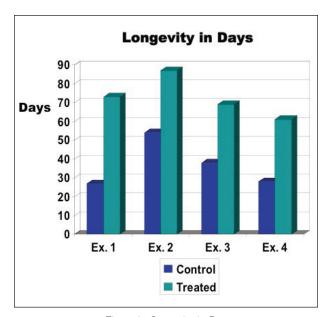


Figure 2. Longevity in Days

nificantly longer than the control mice after transplantation (Experiment 2, Table 1 & Figure 2). Autopsy of the mice immediately after death demonstrated marked differences between the two groups: In the control mice, the bowel and peritoneum had undergone extensive putrefaction and dissolution (Figure 3), in the treated mice these organs were remarkably clean and intact (Figure 4). The tumors of the treated mice were in all cases one and one-half to two times larger than those of the controls, presumably because they lived longer, although there may be other reasons unknown at present. These large tumors showed a marked inflammatory reaction characterized by a thick, white exudate in the central tumor mass. In one case, this took the form of a large sterile abscess. Some of the tumors of the control mice displayed central necrosis, but none showed the gross inflammatory reaction seen in the treated mice. Both treated and control mice had bleeding ulcerations of the skin over the tumor mass. In the treated mice, however, bleeding while the animal was in the ORAC was so severe that it was the immediate cause of death of all the mice in this group except for one mouse that died by accident.

In a further variation of Reich's original experiment, we treated 4 C3H/HeJ adult female mice with sponta-

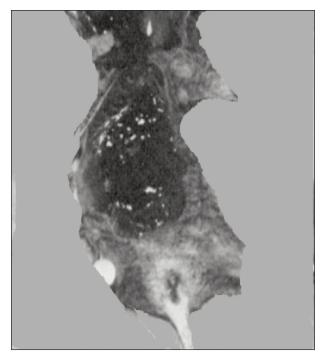


Figure 3. Untreated Mouse

neous mammary tumors for 45-60 minutes daily with the same type ORAC as in Experiment 2. Treatment began within one week of the time that the tumor was clearly palpable. The 4 tumorous control mice were placed in a plastic box as in our first study. Selection of mice for each group was simply determined by alternately placing the mouse in either the treated or control group when the mouse first showed tumor. Tumor size was determined by the product of the radii of the longest length times the longest width. It was measured weekly. The treated mice lived significantly longer than the control mice (Experiment 3, Table 1 & Figure 2) We found that for the three weeks prior to the death of the first animal, the mean increase in tumor size for the control mice was 212% (S.D. of 83.4) compared to 89% (S.D. of 51.9%) for the treated mice. A t-test revealed a p = 0.02., a significantly smaller growth rate of the tumors of the treated mice compared to that of the control mice.32

In two experiments, E.E. Trotta & E. Marer, in Brazil, treated 3 month old Swiss male mice with transplanted sarcoma 180 tumor. In the first study (Experiment



Figure 4. Treated Mouse

4a) the mice in the treated group were kept together in a 3-double layered ORAC for one hour per day, 6 days per week. In the second study (Experiment 4b) the treated mice were kept together in a single, double-layered ORAC with a cover of 5 double layers, 3 hours per day, six days a week. The untreated control mice were housed in identically dimensioned boxes of only non-metallic material during the same treatment time as the treated mice. There were a total of 25 mice in the combined treatment groups and an equal number of mice in the control group. Treatment began within 24 hours after transplantation. The animals were observed daily and, after death, the vital organs of mice in Study 4b were removed and submitted for histopathological examination.

The investigators observed that the treated mice in both studies exhibited a state of hyperexcitability marked by increased spontaneous motor activity, exploratory behavior, feeding, and social interactions, especially during the first two to three hours after treatment. This behavior was not seen in the control mice. Tumor development was similar in all groups

during the first 21 days after transplantation. After this time it was noted that the treated animals lived longer than the controls (Experiment 4, Table 1 & Figure 2). The tumors of the treated mice developed a slowly developing hemorrhagic necrosis, disintegrating gradually but completely from their center to the periphery, leaving in their place an open wound. This took place 2-5 weeks before the death of the animal. Histopathological examination revealed hepatic vasculitis and diffuse glomerulonephritis in all animals although the reaction was much more evident in the treated mice. No signs of metastases were found in any animals.³³

DISCUSSION

The data from the four experiments indicate that a container structured like an ORAC can significantly prolong the life of inbred mice with spontaneous and transplanted tumors. Since this effect is completely unexpected in terms of contemporary biophysics it behooves us to search for possible alternative mechanisms of action to obtain such a result.

According to Reich the structure of the ORAC permits a gradient of orgone energy in the atmosphere to be established from outside the ORAC to its interior. Reich found by experimentation that orgone energy is absorbed by the non-metallic surface of the ORAC, is then attracted and repelled from the adjacent metal, absorbed by the next inner layer of non-metal, and so on until it reaches the metal interior of the ORAC. Here the concentration of orgone is higher than that of the outside air.³⁴ This understanding is supported by controlled experimental evidence of the anomalously higher temperature within and immediately above an ORAC as compared to ambient temperature or the temperature within a suitable control enclosure and by the anomalously slower rates of electroscopic discharge within an ORAC as compared to discharge in the outside air.35,36

According to Reich the presence of a living organism within the ORAC creates a state of mutual excitation between the energy field of the organism and the heightened energetic charge within the ORAC. The result is an energetic charging of the organism, espe-

cially of the blood erythrocytes. "The organize charging of the erythrocytes has, simultaneously, two most important effects; expansion of the organism and development of the organism's own defense reactions against the T-bacilli (a specific infectious agent in cancer found by Reich-RAB) intoxication." ³⁷

This reaction was seen in our own studies and that of Trotta & Marer. In our first study, above, we saw the much larger size of the tumors (due, in part, to increased vascularization), their tendency to readily bleed, and the markedly enhanced inflammatory reaction at the tumor site in the treated mice compared to the control mice. Trotta and Marer remark upon the unexpected sequestration of the entire tumor mass due to an intense immune system reaction and the release of tumor necrotizing factor. It is interesting that this kind of intense immune system reaction was seen so unequivocally in treated mice bearing transplanted tumors, but far less vigorously in mice with spontaneous tumors. It is possible that mice with transplanted tumors are, at least initially, capable of recognizing the transplant as a foreign organism and that the organistic charging of the treated mice intensified the rejecting immune response. This interpretation is plausible in light of results obtained in a series of experiments we conducted treating mice with transplanted tumors in which we waited 9 days after transplantation before treatment was begun. This permitted the establishment of a tumor growth rate with which we could compare tumor growth and longevity between the treated and untreated mice. In this instance, however, the tumors of the treated mice grew much more rapidly than did those of the control mice, but there was no difference in longevity. This indicates that by the time ORAC treatment had begun the mice had accepted the tumor material as part of their organism. We hypothesize that supplying energy to the mice via the ORAC only adds to the amount of energy available to tumors unrecognized by the host as foreign elements, which are notorious for "sucking up" all energy available from the organism.

CONCLUSION

Experimental evidence indicates that an orgone energy accumulator can prolong the lifespan of inbred mice

with transplanted and spontaneous cancerous mammary tumors. The effect supports Reich's finding that the accumulator works by "charging" the blood system, which secondarily heightens an immune system response to sequester the tumor material.

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