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"ZUCCALA LYTIC TEST"
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#### INTRODUCTION:

George Crile, an eminent American physician, once published a memorable paper announcing his belief in pre-cancer stage, and giving the results of his study of the blood of cancer subjects. Crile and Bashford stated that the experimental production at will, of the lesion of carcinoma and sarcoma, has today become a mere matter of laboratory routine. With the lapse of time, the material accumulated from many theories or postulations, demonstration of the chemical and physical changes which take place in the human body become more familiar to modern medicine as we learn more about body sera.

It is estimated that at least 80,000 unsuspecting people in the United States alone. apparently WELL at this very moment, will be afflicted with incurable cancer in from six months to one year from now. This figure was mentioned by Crile in 1914. On October 2nd, 1953, Dr. J. R. Heller, Director of the National Cancer Institute stated that, "Of the present population, fifty million will acquire cancer and twenty-five million will die from that disease. These are figures given by good authorities, from such men as Crile and Heller, who had a vision of the future, and predicted it in 1914 to 1953". It was Crile who made these inquiries. It would be important to establish some recognized factor to detect cancer before it actually manifests its presence, and if we recognize the factor of the component and subcomponent we may prevent cancer by immunology or cure it by means of chemotherapy, and not X-ray, Radium or Cobalts when we know so little about the effect which these may have on the human body sera. Serum is one fluid in the human body which circulates through the entire body including the brain cells, therefore any changes in the human body may be traced through the serum. Since we have very little knowledge about body serum and complement and the true reactions of antibodies, it is worth further investigation of certain serological reactions in connection with cancer and radiation. In 1914 Crile mentioned "Hemolytic Activity" in the human body sera in connection with

cancer. Craig, Ewing and others were quite interested in furthering this thought, but since the tide of research was focussed toward bacteriology, virology and pathology, little or no attention was given to the field of serology in connection with cancer or radiation.

### MODERN INVESTIGATION

In 1925, George S. Zuccala, while working with the New York State Department of Health as a Serologist and technical research assistant, made several attempts to produce a blood test for cancer, but the percentage of accuracy was very small and he was unable to get any cooperation from his superiors or even from outside sources. It was not until 1950 that Zuccala obtained moral and material help from the National Cancer Institute and the American Cancer Society, who furnished Zuccala with needed material free of any charge. In 1954, Professor Girone and Dr. Melella of Bari, University Medical School in Italy published an article "Hemolytic Amboceptor in The Human Body Sera" which was concerned with Zuccala's work based on the idea of Crile's "Hemolytic Activity" or the "Zuccala Lytic Test". In 1956 the National Cancer Institute of Bethesda, Md., U.S.A., ran a few hundred tests, based on "Zuccala Lytic Test" reported that 62% of cancer patients tested, mostly terminal cases gave a positive "Lytic Reaction". This gave us the idea that there must be some relationship between cancer and blood sera as Crile and Savidge mentioned in 1914. Here we have good examples of men of the past who had a vision, but whose theories did not find wide-spread acceptance. Zuccala becomes more effective in understanding serology in connection with cancer neoplasia, and radiation. He presents us with an entirely new concept in the possible new approach to cancer thearpy and a cancer diagnostic test.

# REASONING:

If we accept that cancer is a neoplasia, then we must face the fact that Crile was right and confirmed by Zuccala, that cancer produces humoral and collogen disturbances causing a substance akin to an amboceptor, and can be detected by means of serology if we know how. If Zuccala's serological test can be perfected, we will

be able to detect cancer in the human body as early as one year before cancer actually manifests its presence. Let us make this comparison. Texts for the early detection of pregnancy "Neoplasia" are possible because of the phy callor chemical changes that occur almost immediately after conception. In forty-eight hours the "Chorionic Gonadotropic" hormones are present in the body sera, if we perform the A-Z pregnancy test, by using the woman's serum, a positive reaction is present. A week to ten days later these hormones are in such large quantities that the urine used for the A-Z Friedman modification test for pregnancy gives a positive reaction. There are known facts and experimental evidence, by means of the tissue cultures, has verified the origin of these hormones in the placental tissues.

## PLEASE NOTE CAREFULLY:

Between the second and 3rd month of pregnancy this hormone in the pregnant woman reaches its peak in concentration and then drops very rapidly from then on. In the last few months these hormones are very low or not present at all, yet the baby is due to arrive soon. If we accept that certain types of cancer are neoplasia, then "Zuccala Lytic Test" may have a connection in revealing the presence of cancer growth in the human body as early as one year before the cancer actually manifests its presence.

Zuccala's theory, based on Crile and other original conceptions, is that as soon as certain body changes take place, such as cancer growth, radiation, or even artificial injectables, the body immediately produces a substance akin to an amboceptor, or component or subcomponent not yet fully understood by modern medicine. These substances are capable of sensitizing sheep cells, unlike any normal body sera, and according to titer, judgment can be passed upon if there is the presence of cancer or other malignant diseases or chemical or physical changes in the human body. The fact remains that the body produces a strange phenomenon unlike a normal body. It is now Zuccala's desire to further investigate this strange phenomenon, especially to make blood tests on well people as well as those in the very early stages of cancer in order to note the presence of this substance akin in reaction to an

antisheep amboceptor, "Lysin". It may be possibly that in the early cancer stages this reagin may be very high and as the cancer growth progresses toward a terminal stage, it is no longer present for us to diagnose. It may be that as in pregnancy, the further advanced the neoplasia is, the less hormone like substances are present. Let us look at another aspect of the "Zuccala Lytic Test" which may lead us to an entirely new avenue in the medical field and we may make medical history here in the United States.

## COMPARISON AND FACTS WHICH CANNOT BE DENIED:

It is a known fact that unless sheep cells are sensitized by means of an antisheep amboceptor, we cannot use them in the performances of a complement fixation test for syphilis. Sheep cells are an antigen or indicator. In order to sensitize sheep cells, we must produce an antisheep amboceptor or "Lysin". To produce such amboceptor or antibody like substance, we must inject sheep cells into mules or rabbits which in turn produce an antibody now termed antisheep amboceptor or Lysin. This Lysin in turn will sensitize sheep cells. AND SHEEP CELLS ONLY.

Now, if the human body sera is capable of sensitizing sheep cells, what are the facts concerning this strange phenomenon? We have not injected sheep cells into the human body, yet we obtain a phenomenal 12% positive reaction of the four thousand blood tests made from people of all walks of life and all ages. The condition is alarming from a public health viewpoint and is of national and international concern.

#### THE BIG QUESTION:

The question now is, does the "Zuccala Lytic Test" lead us to more facts about cancer, or radiation, heart disease, insanity, food intake with preservatives, strange atmospheric changes or a phenomenon not yet known or understood to mankind? This discovery and information is of vital importance and could cause mental distress and mass hysteria, therefore government officials and medical authorities must be well informed in order to further investigate this strange serological phenomenon in this atomic era.

## RESUME:

In 1914 Crile et al, mentioned "Hemolytic Activity" (H.A.) in human blood sera in connection with cancer.

In 1925, Zuccala reported that only one tenth percent of the 1000 blood samples tested gave positive Hemolytic Activity reaction. In 1937, Zuccala recorded 1.5% positive "H.A." In 1947 2% showed positive reaction. In 1950, 5% positive, and in 1958 12% positive "Lystic Reaction" with 5% agglutination reaction based on Zuccala's blood serum test. If this serological change is not due to cancer what is causing this strange phenomenon?

Lysin, antibodies are commonly known as Native heterophile antibodies, but have never been known to be capable of sensitizing sheep cells in the presente of complement causing hemolysis. It is a known fact that there has never been a thorough study or full investigation to determine how these antibodies arise, nor at what time of life or under what conditions they are developed.

## CONCLUSION AND SUGGESTIONS:

Zuccala, a well-disciplined American Scientist, proposed that this strange phenomenon be investigated by reputable medical centers and institutions to determine whether or not it may bear any true relationship to cancer neoplasia or radiation exposure, or disturbances to the Humoral and Collagen mechanisms of the human body.

## PROGRAM:

The suggested program is as follows:

To call on hospitals and laboratories (both public and private) to perform the "Lytic Test". These institutions should be in <u>different</u> locations <u>throughout</u> the country. After a few hundred tests have been run in each case, and it has been determined in what section of the country there are the greatest number of positive reactions, then that location will be chosen for further investigation as follows:

(A) A series of presumably normal adults, both male and female, who may be followed over a period of several years with specimen taken at yearly intervals. Preferably this would be done on healthy persons having annual medical check-ups. Here we must

interest the public by nationwide publicity for their own protection to have such yearly check-ups which could save their lives and prevent untold suffering.

- (B) A series of cancer patients, both male and female, representing various stages of cancer development from early detection cases to terminal ones, including as many varieties of neoplasia as possible, with or without metastasis.
- (C) Follow-up specimens at intervals on the above persons after therapeutic measures have been taken by our modern methods.
- (D) A series of pregnant women through pregnancy, tested at first month, 3rd month, 6th month and eighth month. This particular group will aid in determining the role of embryonic tissues in eliciting formation of the antibodies or the reaction of the chorionic gonadotropic hormone which are present in early pregnancy and negative at eight months.
- (E) A series of infants and children, both male and female, sufficient in number to determine whether or not these antibodies are present in infancy or developed before physical maturity.
- (F) A series of persons, both male and female, occupationally exposed to radiation though protected by the usual safeguards. This might include Roentgologists, Xray technicians, or persons exposed to the industrial application of radioactive materials.

After accumulation of data from the above sources, together with other data on individuals tested, (Medical, Environmental, etc.) analyze the data statistically to detect associations, correlations, and significance or lack of it. This work may become national and international in scope as we may be facing a public health menace without realizing it. Further investigation of this strange serological phenomenon is of great importance and, we repeat, it may open an entirely new avenue in the medical field, in cancer research or radiation, or even heart disease, who knows?

Through this strange phenomenon, never before recorded in medical history, we may come to a better understanding of the effects of radiation on the human body.

It is the belief that "Zuccala Lytic Test" and his work in allergies and cancer pursued from 1923 to date, may make medical history in this atomic energy era.

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