

Healing Cancer Naturally

Breast Cancer and Cancer Bacteria

Suppressed and forgotten cancer microbe research could hold the key to the cause and cure of this dread disease

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Despite a century of cancer research the cause of breast cancer remains unknown. Age, diet, stress, hormone factors, genetic predisposition, and cancer viruses are all suspected as possible causative factors, but totally ignored are infectious bacteria which have been implicated in breast cancer, as well as other forms of cancer.

Over the past century physicians such as James Young, John Nuzum, Virginia Livingston, and numerous other researchers have reported on the existence of a specific microbe associated with cancer. The microbe is a ubiquitous, pleomorphic organism with a complex life cycle. A review of this literature suggests that the cancer microbe plays an important role in the development of malignancy. Because the etiology of cancer remains unknown, this research deserves further examination and reappraisal.

William Russell (1852-1940) and "the parasite of cancer"

A century ago when major diseases like tuberculosis, leprosy, and syphilis were discovered to be bacterial (not viral) infections, many physicians suspected bacteria might also cause cancer. At the close of the nineteenth century (when the science of microbiology was in its infancy), many different microbes (variously called "cancer coccidia," "sporozoons" and "cancer parasites") were cultured from cancer. A few of these microbes produced cancer tumors when injected into animals, but many did not.

On December 3, 1890 William Russell, a pathologist in the School of Medicine at the Royal Infirmary in Edinburgh, gave an address to the Pathological Society of London in which he outlined his histopathologic findings of "a characteristic organism of cancer" that he observed microscopically in fuchsine-stained tissue sections from all forms of cancer that he examined, as well as in certain cases of tuberculosis, syphilis and skin infection (1).

The parasite was seen within the tissue cells (intracellular) and outside the cells (extracellular). The size of Russell's parasite ranged from barely visible, up to "half again as large as a red blood corpuscle." The large size of some of these bodies suggested a fungal or yeast-like parasite. Russell provisionally classified the parasite as a possible "blastomycete" (a type of fungus); and called the round forms "fuchsine bodies" because of their bluish-red staining qualities.

The idea of a cancer germ (especially one that could also be identified in TB and syphilis) was received cautiously. Nine years later in 1899, in another report on "The parasite of cancer" appearing in *The Lancet* (April 29), Russell admitted that finding cancer parasites in diseases other than cancer was indeed a "stumbling block." By this time a considerable number of scientists concluded that Russell bodies were merely the result of cellular degeneration of one kind or another. Furthermore, no consistent microbe was cultured from tumors; and the inoculation of these microbes into animals produced conflicting and often negative results (2).

Russell was trained as a pathologist, not as a microbiologist, and he avoided getting into the bacteriologic controversies regarding various microbes grown from cancer. He simply concluded, "It seems almost needless to add that there remains abundant work to be done in this important and attractive field."

After three years' work at the New York State Pathological Laboratory of the University of Buffalo, Harvey Gaylord confirmed Russell's research in a 36 page report titled "The protozoon of cancer", published in May, 1901, in the *American Journal of the Medical Sciences*. Gaylord found the smallest round forms, which were the size of ordinary staphylococci, as well as the larger spherical bodies which were the size of fungal spores (3). Russell's 1899 paper ended his writings of a cancer parasite, but his discovery quickly became known to pathologists as "Russell bodies." These bodies continue to fascinate researchers and physicians (like myself) up to the present time.

When Russell died at the age of 89 in 1940, the *British Medical Journal* published a large obituary noting that he was universally respected and had served at one time as President of the Royal College of Physicians. No mention was made of his "cancer parasites" or his "bodies", except to remark that "in his earlier years Russell devoted much time to the study of the cancer cell. (For further details, see "The Russell body: The forgotten clue to the bacterial cause of cancer" at www.rense.com/general44/russell)

The microbiology of cancer

The idea of a cancer parasite was finally dismissed in 1919 by noted American pathologist James Ewing. In his popular textbook, *Neoplastic Diseases*, he declared: "Few competent observers consider it (the parasitic theory) as a possible explanation in cancer." In Ewing's opinion, cancer did not act like an infection. Therefore, he concluded that microbes couldn't possibly cause it. He wrote: "The general facts of the genesis of tumors are strongly against the possibility of a parasitic origin." [4] Subsequently, few doctors dared to contradict Ewing by investigating bacteria in cancer.

Nevertheless, during the 1920s a few persistent physicians like pathologist John Nuzum of the University of Illinois College of Medicine; surgeon Michael Scott from Butte, Montana; and obstetrician James Young of Edinburgh, Scotland, continued to publish research showing that bacteria were implicated in breast cancer and other forms of cancer.

Working independently of one another, all three researchers cultured unusual bacteria from breast cancer, as well as from breast cancer tumors in mice. The peculiar growth of the "pleomorphic" cancer germ defied the established laws of microbiology by its ability to change shape and form, depending on

how it was cultured in the laboratory, as well as the amount of oxygen supplied for growth and the age of the culture.

At first, the germ was barely visible as tiny round coccal forms. Later, these cocci enlarged into rod-shaped bacteria, which could connect together to form chains resembling a fungus. Small cocci could also enlarge into larger yeast and fungal-like spore forms.

Nuzum grew his "micrococcus" from 38 of 41 early breast cancers, and from the cancerous lymph nodes and metastatic tumors resulting from spread of the cancer to other parts of the body.[5-6] During his 6 years of intensive bacteriological study, he learned the microbe could pass through a filter designed to hold back bacteria, indicating that some forms of the microbe were as small as the size of some viruses. With special stains he detected these small round coccoid forms within the breast cancer tumor cells. Although Nuzum couldn't produce cancer tumors in mice, he was able to induce breast cancer tumors in 2 of 5 dogs injected with the microbe.

In a dangerous human experiment he injected the groin of a 70-year-old man with the bacteria he cultured from breast cancer. After 62 injections over an 18-week period, a skin cancer formed in the man's groin. This experiment showed that breast cancer microbes were also capable of producing a different kind of cancer, such as skin cancer. [6]

Young found his microbe in 16 cases of breast cancer, and in two mice with breast cancer. He identified "spore forms" and clumped "spore balls" in microscopic sections prepared from the mouse tumors. [7-8]

Scott described three stages in the life cycle of his parasite: rod forms, spore or coccus-like forms, and large spore-sacs resembling a fungus. [9-10] He treated cancer patients with an effective antiserum against these microbes, and spent the rest of his life trying to alert his colleagues to the infectious cause of cancer. But the antagonism of the medical profession to Scott's cancer parasites and his antiserum was overwhelming, and he died a forgotten man.

Virginia Livingston and the cancer microbe

During the last half of the twentieth century cancer microbe research was barely kept alive by a quartet of women, now all deceased. The published research of Virginia Wuerthele-Caspe Livingston-Wheeler (a physician), Eleanor Alexander-Jackson (a microbiologist), Irene Diller (a cellular biologist) and Florence Seibert (a chemist) provides indisputable evidence that bacteria are implicated in cancer.

Livingston, who never let the male-dominated medical profession intimidate her, independently discovered the cancer microbe in the late 1940s and never stopped talking about it until her death in 1990, at the age of 84. Aided by Alexander-Jackson, who supplied the bacteriologic expertise, they became an unstoppable research team. [11-15]

The two women found a special stain (the acid-fast stain) that allowed the microbe to be recognized in culture and within the cancer tumor. Like the researchers back in the 1920s, they confirmed the microbe was filterable; and electron microscopic photos provided further proof that the filterable forms were

indeed viral-size. Livingston named the microbe "Progenitor cryptocides", which greatly angered cancer experts, microbiologists, and American Cancer Society spokespersons, all of whom insisted the cancer microbe did not exist!

In the 1950s Irene Diller of the Institute for Cancer Research at Fox Chase, Philadelphia, discovered fungus-like microbes in cancer cells. Joining forces with the Livingston team, Diller worked with specially bred mice with a proven cancer incidence. By injecting them with microbes cultured from breast cancer and other tumors, she was able to more than double the cancer incidence of the mice. [16]

She injected healthy animals with cancer bacteria. When cancer tumors developed she successfully cultured the microbe from the tumors—thus proving that these bacteria were implicated in the production of cancer. Utilizing Livingston's methods, Diller also grew the microbe from the blood of cancer patients.

Florence Seibert and cancer bacteria

In the early 1960s Florence Seibert became so impressed with Diller's research that she quit retirement to help prove that bacteria cause cancer. Back in the 1920s Seibert devised a method to make intravenous transfusions safe by eliminating contaminating ubiquitous bacteria. Later, as one of the foremost authorities investigating the chemistry and immunology of the acid-fast bacteria that cause tuberculosis, she perfected the skin test for tuberculosis that has been used worldwide ever since. In 1938, she was awarded the famed Trudeau Medal, the highest prize given to tuberculosis research.

Experiments conducted by Seibert and her research team showed these acid-fast and TB-like cancer microbes were not contaminants because they were able to isolate bacteria from every piece of tumor (and every acute leukemic blood) they studied. [17]

In her autobiography, *Pebbles on the Hill of a Scientist*, published privately in 1968, she wrote: "One of the most interesting properties of these bacteria is their great pleomorphism. For example, they readily change their shape from round cocci, to elongated rods, and even to thread-like filaments depending upon what medium they grow on and how long they grow. This may be one of the reasons why they have been overlooked or considered to be heterogeneous contaminants...And even more interesting than this is the fact that these bacteria have a filterable form in their life cycle; that is, that they can become so small that they pass through bacterial filters which hold back bacteria. This is what viruses do, and is one of the main criteria of a virus, separating them from bacteria. But the viruses also will not live on artificial media like these bacteria do. They need body tissue to grow on. Our filterable form, however, can be recovered again on ordinary artificial bacterial media and will grow on these. This should interest the virus workers very much and should cause them to ask themselves how many of the viruses may not be filterable forms of our bacteria."

Seibert's provocative papers, some published by the prestigious *Annals of the New York Academy of Sciences*, should have caused a stir. But with the quartet slowly closing in on the infectious cause of cancer, funds from previous supporters (like the American Cancer Society) suddenly dried up. All cancer microbe researchers eventually discovered that studying cancer bacteria was the kiss of death as far as

funding was concerned. And without adequate funding, this type of cancer research was made more difficult.

But coming from thirty years of research into the acid-fast bacteria that cause tuberculosis, Seibert knew that the discovery of a pleomorphic and acid-fast microbe in cancer was tremendously important. She fervently believed that knowledge of this microbe would be instrumental in developing a possible vaccine and more effective antibiotic therapy against cancer. In *Pebbles* she confided: "It is very difficult to understand the lack of interest, instead of great enthusiasm, that should follow such results, a lack of certainty not in the tradition of good science. The contrast between the progress made in tuberculosis where we know the cause, where we have good general diagnostic tests, where we have a vaccine and effective antibiotic controls, and that made in cancer with the millions invested, is very striking. Some dedicated scientists should indeed find it rewarding to confirm or deny these painstaking and time-consuming experiments, for the sake of establishing the first necessary step in the important problem of the etiology of cancer."

Like the other women, Seibert observed the virus-like forms of the cancer microbe within the nucleus of the cancer cells. She theorized this infection could disrupt and transform nuclear genetic material that could lead to malignant change. Even though cancer microbes might appear to be simple and common microbes, their ability to infiltrate the nucleus of cells meant they were far from harmless.

In 1990, at the age of 92, Florence Seibert was inducted into the National Women's Hall of Fame, along with Barbara Jordan (Government), Billie Jean King (Athletics) and Margaret Bourke-White (Arts). When she died the following year her passage was noted in *Time* and *People* magazines, and in major newspapers like *The Los Angeles Times*. All the obituaries mentioned her contributions to the safety of intravenous fluids and her great achievement with the TB skin test. But not a word was written about her cancer microbe research, to which she devoted the last thirty years of her life.

Breast cancer and cancer-associated bacteria

Each year 190,000 American women are diagnosed with breast cancer. And the prognosis is still dismal for women whose breast cancer has spread to the lymph nodes and beyond. Yet the medical establishment remains adamantly and irrationally opposed to cancer microbe research. It is perhaps understandable from an economic viewpoint that the medical profession would not welcome a proposed infectious cause of cancer that would challenge the highly lucrative multibillion-dollar cancer industry.

Physicians confidently ignore cancer bacteria because they have been carefully taught in medical school that there are no significant bacteria detectable in cancer. They still believe that cancer microbes represent contaminant bacteria or bacteria of no significance. Thus, published reports of cancer microbe research are rarely cited and the subject remains virtually unknown.

The idea of a microbe with virus, bacteria, and fungal-like stages is also anathema to most doctors. However, over the past several decades the study of cell-wall deficient bacteria and "mycoplasma-like" bacteria (which are both bacterial and viral-like) indicates that microbes indeed have a complex life cycle.

In 1919, when Ewing offered his damning opinion of "cancer parasites", none of these microbiologic peculiarities was recognized!

In some instances, cancer microbe research appears to be deliberately suppressed. For example, the National Cancer Institute informs viewers about Virginia Livingston and states: "There is no scientific evidence to confirm her theories of cancer causation or to justify her treatments."

(bccancer.bc.ca/PPI/UnconventionalTherapies/LivingstonTherapy.htm)

Obviously, this official judgment is not accurate because, as we have noted, Livingston's discoveries have been confirmed by many competent scientists.

In addition, Livingston has written three books on the cancer microbe: *Cancer: A New Breakthrough* (1972), *The Microbiology of Cancer* (1977), and *The Conquest of Cancer* (1984). [18-20] More recent books on bacteria in cancer include Alan Cantwell's *The Cancer Microbe* (1990) [as well as his *Four Women Against Cancer: Bacteria, Cancer & the Origin of Life* published in 2005] and *Can Bacteria Cause Cancer?* (1997) by David J Hess. [21,22]