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# Medicine: Ensol for Cancer

No fool in dealing with doctors, businessmen and sick people, Dr. Calvin Hendry Cameron Connell of Kingston, Ont., whom the Press widely but ignorantly last week saluted as the Conqueror of Cancer, had already taken care to incorporate the Hendry Connell Research Foundation, Ltd. (capital, $50,000) to keep benign control of his system of treatment. Previously he had patented the manufacture of the hypodermic solution he uses and taken a copyright on Ensol, his apt name for the solution.

The whole situation was a hot profes-sional chestnut for Dr. Connell to handle. An eye-ear-nose-&-throat specialist, he found that he could often dissolve cataracts by injecting them with a filtrate of a liquid produced by certain germs bred on cataracts extracted from blind persons. That nitrate contained enzymes similar to. although not related to, pepsin, which in the stomach dissolves every meal.

On the theory that germs which produce such disintegrating enzymes produced different kinds of enzymes according to the flesh on which they lived, Dr. Connell bred a strain called Bacillus histolyticus on cancers which he excised from the bodies of patients of Kingston's General Hospital, on whose staff he serves. He was cheered on by his father, Dr. James Cameron Connell, 72, who had also served on the hospital staff and was longtime dean of Queen's University Faculty of Medicine, Kingston. After due orthodox experiments on cancerous mice, young Dr. Connell began to inject the sterile nitrate of such dissolved cancers into the muscles and veins of dying Kingston cancer victims. One of the first was a prisoner of Ontario's dreadful Portsmouth Penitentiary, close to which the Drs. Connell have their homes.

Last June when the Canadian Medical Association met with the American Medi-cal Association at Atlantic City, word of Dr. Connell's cancer experi-ments got about. He received little attention. For one thing, he had only cancerous mice to talk about at that time. Also in the scales against Dr. Connell was Ontario's tolerance of Dr. Mahlon William Locke, who in a swivel chair at Williamsburg, Ont. with one hand grabs the $1 bills, with the other manipulates the feet of long lines of patients, many of whom are later advised to buy Locke-designed shoes.

On Dr. Connell's side of the scales of medical opinion, however, was the history of insulin, cure for diabetes, discovered by young Dr. Frederick Grant Banting and his student helper, Charles Herbert Best, at Toronto, 100 miles from Kingston, despite the impatience of their Uni-versity of Toronto superiors. Dr. Connell also had an assistant, Bertram J. Hols-grove, 31, whose initial job had been to wash test tubes and dishes. The pair regularly worked 14 to 16 hours daily. Dr. Connell abandoned his profitable eye-ear-nose-&-throat practice. Some apostolic members of Queen's Univer-sity medical faculty helped him. He spent $2,000 of his own cash. The University gave him $4,000, and the National Research Council $500.

All last summer the zealots worked. At any sign of progress, Dr. Connell, a strict but swearing Presbyterian who served with the Canadian Siberian Expeditionary Forces at Vladivostok, would exult: "Gee Crippen, this thing's just coming along dandy." When he had injected 29 patients dying of cancer, had found that the 25 who survived had lost the haggardness typical of cancer victims, and felt positive that a man and a woman had completely recovered from cancer, Dr. Connell decided that he had better describe his work in the Canadian Medical Association Journal to nail his claim of priority to the pillars of medical history.

Circumspectly he stated: "It is altogether too soon to assess the ultimate valuc of the method. Weeks to months must elapsc before we can determine if the cancer masses continue to show shrinkage and absorption till their complete disappearance. Clinical evidence so far leads us to think that such disappear-ance may occur. ... No supply of this solution will be made available until its valuc has been definitely proved. The manufacture and therapeutic use of this enzyme solution is comparatively simple, when thoroughly understood. We can be responsible for no results obtained by investigators who havc not had special training." Such circumspec-tion was invaluable to Dr. Connell. Immediately after publication of this report in the C. M. A. Journal came this snort from arch-cynic Dr. Francis Carter Wood, director of Manhattan's Institute of Cancer Research: "Nothing in Dr. Connell's results, as published, contains anything which could not havc occurred spontaneously. All of the things he described we see every day in the cancer wards. It is useless to speak of a cure for cancer on treatments running only over a few months. Five years is the established minimum time for a cure to be regarded as a cure.

"There are many instances of cancer coming back after eight or ten years. Medical men do not generally speak or write about positive results in cancer until the minimum of five years has elapsed." Nonetheless, last week the Kingston clinic of the Hendry Connell Research Foundation, Ltd. had 266 active customers, attended by seven doctors on the regular staff and three professors called into consultation from excited Queen's University. And students piling into the small city for the University's first semester had unexpected difficulty finding lodgings for themselves. ■

## Case studies from the files of Dr. Hendry Connell

**Case 20:** J.B., age 76, carcino-ma, stomach. Clinical diagnosis – First symptom, poor health for five or six years. Decline rapid in past five months. Blockage in stomach confirmed by X-ray. Admitted July 26, 1935 and treated with Ensol to Sept. 1 with very marked improvement. Appetite returned, took regular meals, gained weight. Discharged to report to outpatient department but did not do so. Died March 29, 1936.

**Case 101:** Mrs. A. McC., age 69, carcinoma, breast, right. Biopsy proof. First symptom Sept. 1934, noticed tumour which was removed. Ensol used from Aug. 19 to Nov. 6, general improvement, felt well, appetite good, little pain. No report later.

**Case 311:** H.J.M., age 62, carci-noma, stomach. Diagnosis by X-ray. First symptoms summer of 1934. Complains of easy fatigue, food stays in stomach; vomiting, gas forms, cramping pains in legs and feet, constipated. First treat-ed with Ensol Oct. 16, 1935, improved slowly. Nov. 6, feels fair-ly well. Dec. 6, condition unchanged. Feb. 8, 1936, feels very well. March 28, not much change. June 12, nothing palpa-ble over the epigastric region. July 19, home, feeling very well. Home with Ensol. Sept. 28, reported back in fair condition, weight maintained, working. Oct. 23, 1936, no mass palpable in epi-gastrium, general condition fairly good, has been working all sum-mer. Home again with Ensol.

**Case 362:** Mrs. J.R., age 58, carci-noma, right ovary. Biopsy proof. Operation, partial resection Nov. 20, 1934. Menopause six years ago. Developed pain in right side of abdomen in Feb. 1934. Admitted Oct. 22, 1935. Abdomen not distended, no palpable mass-es, slight tenderness in lower quadrant, right, no evidence of recurrence in the wall. No bowel obstruction. Treated Oct. 22, 1935 to Oct. 1936. General condi-tion remained good. Jan. 3, 1936, nothing palpable in abdomen. Feb. 21 condition unchanged. April 3, same. June 5, very well. Sept. 5, treatment continued. Oct. 4, 1936, not so well.

## *Ensol Frees Robber*

### *Bandit Had Stomach Cancer—Gets Pardon—Recovering*

Kingston, Oct. 1.

EVEN though the discoverer of Ensol makes no claims of any kind for the new cancer treatment, it has indubitably achieved one thing—it has played a part in gain-ing liberty for a bank robber.

Convicted late last year, the man was just beginning his term in Kingston Penitentiary when stricken with stomach cancer. Given up by doctors and surgeons, he was transferred to the Kingston Gen-eral Hospital on the verge of death from starvation. There Dr. Hendry Connell saw him, and began Ensol treatments.

Meanwhile officialdom at Ot-tawa, convinced that the grim-nest scourge of nature had taken the case out of their hands, put through a pardon. The felon would die a free man at last.

But he didn't die. He isn't dead. And, although Dr. Connell's asso-ciates vigorously and emphatically refuse to say that he has made a full recovery, the man now has a good appetite, good color, and has gained thirty-two pounds. Only a few days ago he telephoned a cheery good-bye to Dr. Connell be-fore setting off to visit relatives in the Maritimes.

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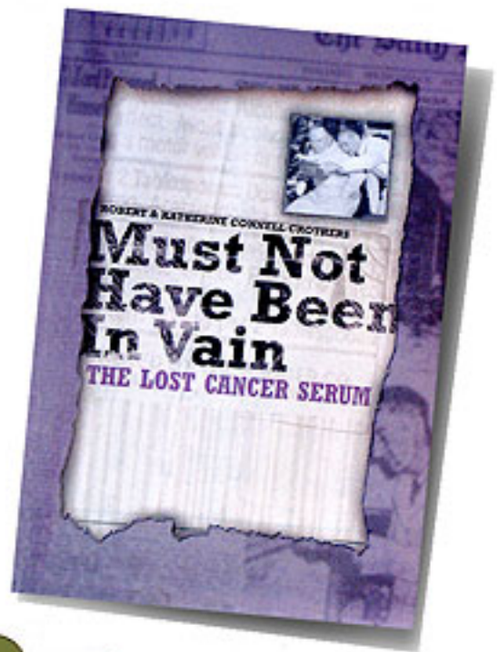
# Not In Vain: The Lost Cancer Serum




***In 1935 Dr. Hendry Connell's discovery of Ensol made headlines around the world... so how come hardly anyone has heard of him?***

Dr. Calvin Hendry Cameron Connell was a man improbable as his very name. His name does not appear in bold type in the history of modern medicine, at least not yet. Born in Canada in the nineteenth century, Connell was well known for his intelligence, energy and dedication to medical research. And yet, year after year, he would have to brave the opposition, even ridicule, of the most powerful figures in his profession. Eventually, he carried his research forward in total isolation… and this man may have come closer than any person or group of persons, before or since his time, to solve the cruel riddle of cancer.

Dr. Connell researched cancer during the 1930's, 40's and 50's in his Queen's University laboratory perhaps a half century ahead of his time. The enzyme solution *Ensol,* which he discovered in 1935 liquefied cancer cells, extended the lives of thousands, produced no ill side effects (which is the focus of today's research) and was in demand across Canada the States and as far away as Australia. Dr. Connell was very careful in stating that it was not a cure but that *"early treatment at home by the attending physician in addition to the use of surgery and radiation... ought to reduce the mortality of the disease"*. Only today are companies such as Aventis Pasteur with Dr. Neil Berinstein catching up with cancer research history. In fact, an article in the Globe and Mail dated May 21, 2001 Dr. Berinstein opined, *I believe that cancer vaccines will be an important part of every cancer patients treatment alongside surgery, chemotherapy and radiation".*

By 1936 more than 2,000 cancer patients across Canada and the U.S. were injected with Ensol and reported considerable improvement in their health. Demand grew so quickly for Connell's ground breaking treatment that the influx of cancer patients to Kingston made it difficult for Queen's students to find room and board.

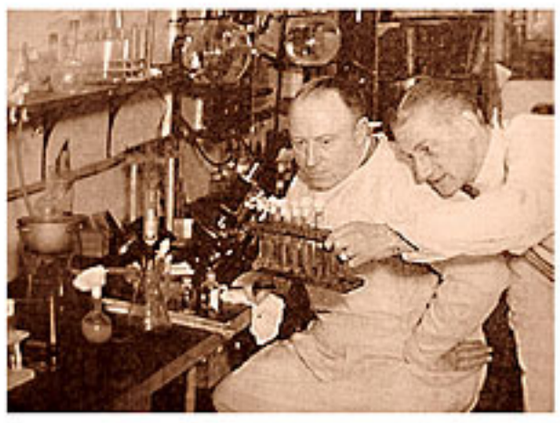
Between 1935 and 1938 the Hendry Connell Research Foundation was strongly supported by Queen's University, the University of Toronto, both Canadian federal and provincial governments, the Dupont family and their interest in the Biochemical Research Foundation arm of the prestigious Franklin Institute of Philadelphia, the Canadian Research Council, two Kingston hospitals and hundreds of doctors around the world. All these credible institutions supported Dr. Connell's discovery, that is… until March 30, 1938.

An excerpt from the book, Enzyme Solution, The Story of Ensol written by Dr. Connell's daughter Katherine Crothers tells of the only time she saw her father cry, *"He sat with his head in his hands at the breakfast table, his cheeks wet with tears. I couldn't believe that my wonderful father, who, wiped other people's tears solved their problems, including mine was crying".*

During the last few days of March 1938 ten patients died of lockjaw in Orlando, Florida after having received a contaminated batch of REX (Ensol was produced under the name REX by the subcontracted Franklin Institute). By the time the investigation, 2 days later, found that the serum came from Philadelphia and not the Kingston laboratory, it was too late… the media from around the world had named Dr. Connell's serum a deadly killer.

Dr. Connell never regained that incredible momentum after 1938, but neither did he give up. Over the next 26 years he struggled to supply his Ensol free of charge for the ever increasing demand of his cancer patients. Slowly but surely, funding from the university and governments dried up and with WWII pending, politicians certainly had other priorities. Other exterior factors beyond Dr. Connell's control did not make it any easier to research his cancer vaccine. For example, a 1942 foundation research film was clandestinely removed from his office, employees were stealing lab reports and pharmaceutical companies, no less than 6, were no longer interested in continuing his work. His personal life was not much easier, his father was dying, his wife was ill and he had a son who was confined to an institution due to a lobotomy during the war.

If the medical community of the 1930's and 40's had offered open-minded support, what breakthroughs might this man have made, and what massive reduction of suffering in this world. No reader will escape the irony, the sense of waste and injustice that is portrayed in Katherine Crothers book.


H.C. Connell and Bert Holsgrove in Queen's University laboratory, 1935

The chronicle is a sad reminder that all too often, perhaps out of pride and fear, we seek to silence our most original thinkers, those who stand to bring the greatest benefit to us all.

Over the years from the first production of Ensol, Dr. Connell had been the first to be inoculated with each new batch of the enzyme solution. He would inject several cc's to ensure its safety. Ironically, Dr. Hendry Connell died January 30, 1964, his body full of cancer. His physician regarded it as something as a miracle that *"No one should have had so little pain having that amount of cancerous disease... there must have been something in that Ensol after all".*

As of May 2001, the federal government is investing $70 million in a 10 year, $350 million program by the Canadian arm of the French drug giant Aventis Pasteur to develop a cancer vaccine. Thus, nearly 60 years after Hendry Connell first produced Ensol, his belief in the promise of enzyme therapy appears to be well on its way to being justified.