

# Coley's Toxins: The Sum of Our Hope

Sunday, 19 April 2009

Last Updated Thursday, 07 May 2009

Coley's toxins were-and are-among the most promising cancer treatments ever devised. They have existed in one form or another for over 100 years. But since the 1960s they have been effectively banned in the United States, although they are still available in several other countries (including Mexico and Germany).

What exactly are Coley's toxins (also called mixed bacterial vaccine)? They are a powerful stimulator of the immune system made up of the killed byproducts (or "toxins") of two potent bacteria. The first of these is *Streptococcus pyogenes*, which causes the skin disease erysipelas among other illnesses. The other is *Serratia marcescens* (formerly known as *Bacillus prodigiosus*), which potentiates the action of other bacteria and has independent anticancer activity.

After observing that the skin disease erysipelas sometimes triggers the "spontaneous" regression of tumors, William B. Coley, MD (chief of the bone cancer service at what is now Memorial Sloan-Kettering Cancer Center in New York) began to use a killed mixture of bacteria in the treatment of cancer. For many years, Coley's toxins were manufactured by the Parke-Davis Co. and were accepted by the American Medical Association (AMA). After Coley's death in 1936, his son, Bradley, inherited his practice and continued to use the toxins until the early 1960s. But after passage of strict new amendments to the Food and Drug Act, the FDA refused to "grandfather" Coley's treatment (i.e., accepted them as a long-established part of medicine, as they did, for instance, with aspirin) but banned it as a "new drug." This "new drug" was at that time almost 75 years old.

This brand new 100-page report, with its many illustrations and 285 footnotes, contains the full story of one of the greatest unsung heroes of modern medicine. William B. Coley devised what was arguably the first effective non-surgical treatment for cancer and used it on over 1,000 patients between 1892 and 1936. The outcomes in these cases were meticulously documented by his daughter, Helen Coley Nauts, in a series of 20 or so disease-specific monographs.

The Coley story is a human drama of the greatest importance in understanding the struggle between the conventional and alternative trends in cancer research. It is also a collective tragedy, since this promising treatment was effectively destroyed by a branch of the US government, the FDA, and is not widely known, researched or used today.

I first became aware of Coley's toxins in 1974 when I interviewed Kanematsu Sugiura, DSc, who had been Coley's colleague at Memorial Hospital in the 1920s. In the following year I interviewed Mrs. Nauts at her apartment on New York's Park Avenue. I wrote a chapter on William B. Coley in my first book, *The Cancer Industry* (1980). But since then a great deal of valuable new information has emerged about Coley's heroic struggle to establish this unusual treatment. In preparation for this new report I interviewed some of the world's experts on Coley's toxins and elicited their thoughts on the safety and effectiveness of this treatment. I believe that the basis now exists for reevaluating Coley's results and reviving what was best in his methods.

It is a great pleasure for me to publish a full account of Coley's toxins, which will undoubtedly come as a revelation to readers who suspect that there are more promising treatments available than the limited options that are usually offered by standard oncology.

## ADVANCE COMMENTS ON RALPH MOSS' COLEY'S TOXINS: THE SUM OF OUR HOPE

"I found Ralph Moss's report on the work of Dr. William B. Coley fascinating. I agree that Coley's procedure should be re-investigated, particularly in well controlled clinical trials, so that it can be appraised properly once and for all."

-Jacques Miller, MD, PhD, FRS, discoverer of the immunological function of the thymus and of the two major subsets of lymphocytes (T cells and B cells)

"This is a must-read for cancer patients, physicians and cancer researchers. As usual, Ralph Moss has done an excellent job explaining a complicated and tragic history that has for too long been ignored by those responsible for public health. In the treatment of cancer, there is nothing on the medical horizon more important than the work of Coley."

-Don MacAdam, chief executive officer, MBVax Bioscience, Inc.

"In Coley's Toxins, Ralph Moss completes the recuperative historical project begun in his classic book, The Cancer Industry. For the first time we have a comprehensive history of over a century of research on the bacterial vaccine therapy.... If enough people join with Ralph Moss in demanding that the undone science gets done, we may well find that a safe, affordable, and efficacious treatment for cancer has been available for over a hundred years."

-David J. Hess, PhD, Professor of Science and Technology Studies, Rensselaer Polytechnic Institute

"Despite my many years of research on Dr William B. Coley, Ralph Moss has revealed many new insights into who Coley was, the challenges he faced in establishing immunology as a new treatment for cancer, and what his work will mean in the future for patients with cancer."

-Stephen A. Hopton Cann, PhD, University of British Columbia

[CLICK HERE TO ORDER RALPH MOSS'S NEW REPORT ON COLEY'S TOXINS](#)