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Optimistic Dangers: Views of Radium Therapy During the American Radium Craze

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1903 marked the beginning of intense and widespread popular interest in and curiosity about the newly-discovered element radium. This American radium craze was marked by an outpouring of media attention. Radium captured the public's attention because of its strange properties, which could not be fully explained by scientists: it remained warmer than its surroundings, it glowed in the dark, and it emitted energy from an unknown internal source. The radioactivity emitted by radium also had marked effects on the body. In this talk I will focus on views of these physiological effects of radium during the height of the American radium craze, 1903–1907. Physicians experimented with radium as a therapy, and newspapers reported on radium treatments of ailments ranging from acne to wife beating. When applied to superficial cancers, radium seemed to melt the tumor away, to be replaced by healthy tissue. Newspapers were quick to report that radium had cured cancer. At the same time, radium was also understood to be a dangerous substance: newspapers discussed the possibility of weaponizing its internal stores of energy, patients were often burned in the course of treatment, and it was speculated that radium in large amounts might blind, maim, or kill someone exposed to it. These dangers were well known but were never mentioned in the uniformly optimistic reports on the potentials of radium therapy. The modern expectation that beneficial applications of science may have a hidden darker side was not part of American culture at the beginning of the twentieth century. The early radium clinic was a unique site where non-scientists physically experienced a new scientific discovery, an element that was both familiar and unknown. At the height of the radium craze, the dangers of radium were optimistically set aside as physicians and physicists were trusted to tame the new element.