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Dakin's Solution: "One of the most important and far-reaching contributions to the armamentarium of the surgeons"

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Abstract

Henry Drysdale Dakin is a notable person in the history of surgery, wound care, military medicine and infectious disease control. Dakin is an exemplar scientist who in the midst of war forged an international collaboration with scientists in multiple fields to create and universalize an antiseptic utopia, which saved thousands lives during World War I, remarkably diminished functional disabilities from wounds and continues to be a "far-reaching armamentarium" of the surgeons and wound care specialists around the globe. Dakin investigated over 200 different antiseptic substances to finally conclude that a 0.5% buffered sodium hypochlorite solution satisfies his criteria for an ideal antiseptic. The only potential limitation was that the germicidal property of the solution was short lived, which meant the solution had to be used continuously or repeatedly delivered into wounds. Dakin's solution, still in use by modern wound care specialists around the globe, has laid the foundation for wound care management as we know it today. Nevertheless, Dakin contributed more to science than just his solution. In this article, Dakin's life story, his unique scientific career and his contributions to surgical literature are explored. The article also illustrates how a wartime necessity resulted in a medical discovery that is still in use to date.

Keywords: Antiseptic; Burn; History; Military Medicine; Wound.

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