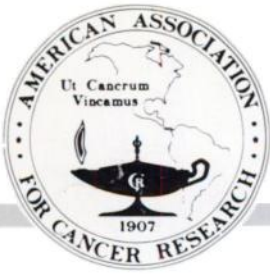


August 1, 1988

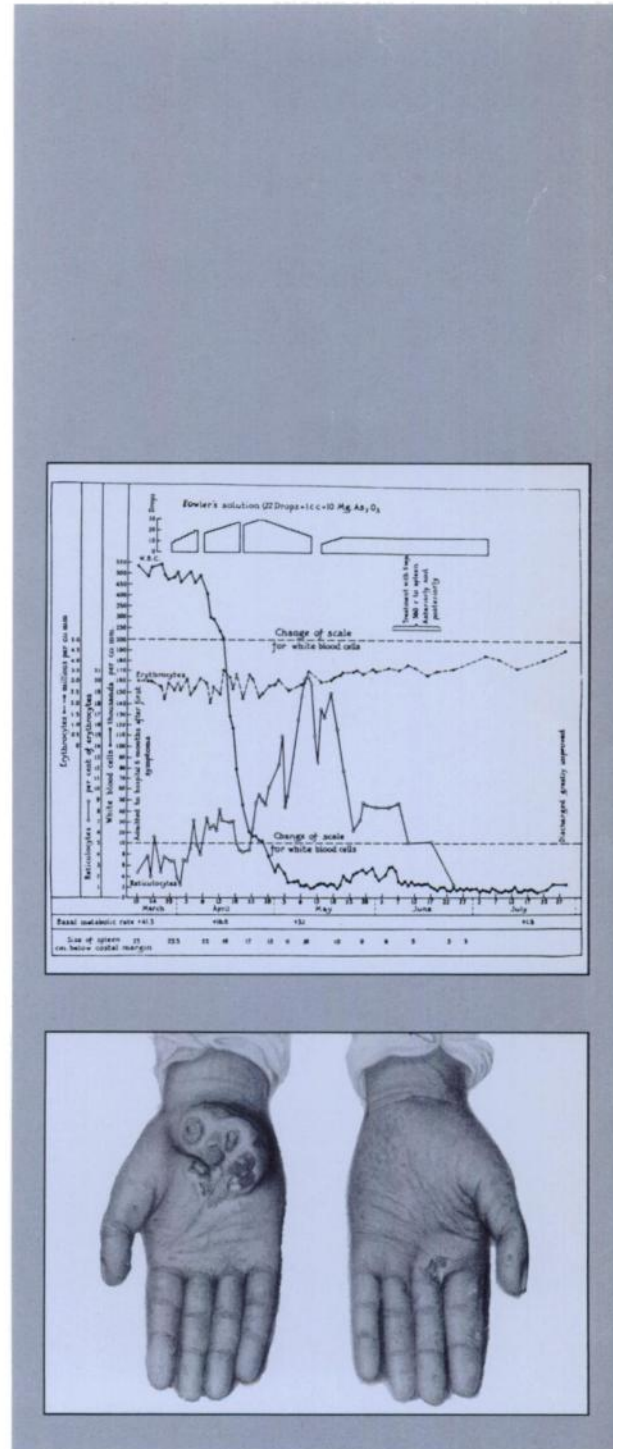


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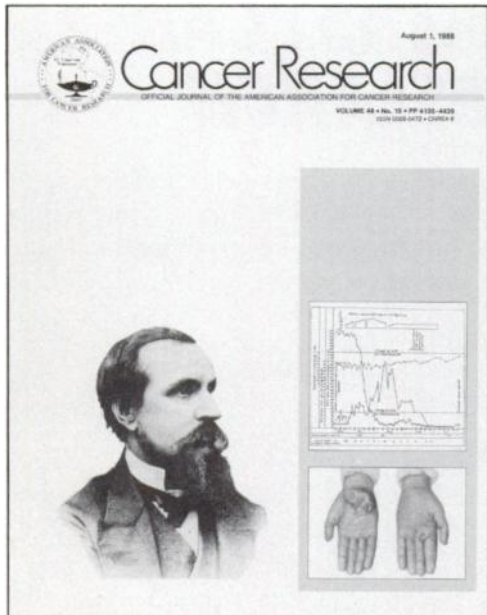
OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH

VOLUME 48 • No. 15 • PP 4135-4439

ISSN 0008-5472 • CNREA 8



COVER LEGEND



Although inorganic arsenic is well known to be carcinogenic to humans, it has yet to be shown to produce cancer in animals (O. Neuhauer, *Br. J. Cancer*, *1*: 192-251, 1947). It was perhaps the earliest described neoplastic agent to act distally to the point of contact.

In 1888, Sir Jonathan Hutchinson reported six cases of skin cancer among five patients with psoriasis and one with pemphigus who had taken Fowler's solution (10% potassium arsenite) for many years. The cancers were preceded by keratosis and developed in unusual places, such as the palms of the hands. Hutchinson proposed that "the nutrition of the skin may be seriously affected" by arsenic.

Fowler's solution was a universal tonic in the nineteenth century. Its use has been invoked as an explanation for the high content of arsenic in the hair of Napoleon's head and of the malaise of Darwin. In 1865, improvement in two cases of leukemia treated with Fowler's solution was reported by Lissauer (*Berliner Klin. Wochenschr.*, 2: 403-404, 1865). Potassium arsenite does indeed ameliorate chronic myelocytic leukemia, as demonstrated by Claude E. Forkner in 1938 (*Leukemia and Allied Disorders*, p. 228. New York: Macmillan, 1938).

Hutchinson (1823-1913) was a prominent professor of surgery at the Royal College of Surgeons and the London Hospital and is probably best known for his eponymic triad of congenital syphilis. He is pictured on the *left*; on the *right* are the hands of one of the cases reported by Hutchinson (*bottom*) and the clinical course of a patient with chronic myelocytic leukemia recorded by Forkner (*top*).

M. B. S.