

Hypochlorous Acid (HOCl): for traumatic wound care A 100 years later.....

Jeffrey F. Williams, Ph.D., B.V.sc
Medesol Global Inc

The Long History of HOCl and Wound Care

A HANDBOOK OF ANTISEPTICS

BY
HENRY DRYSDALE DAKIN, D.Sc., F.I.C., F.R.S.

AND
EDWARD KELLOGG DUNHAM, M.D.
EMERITUS PROFESSOR OF PATHOLOGY, UNIVERSITY AND
BELLEVUE HOSPITAL MEDICAL COLLEGE
MAJOR, MEDICAL OFFICERS RESERVE CORPS, U. S. ARMY

New York
THE MACMILLAN COMPANY
1918

All rights reserved

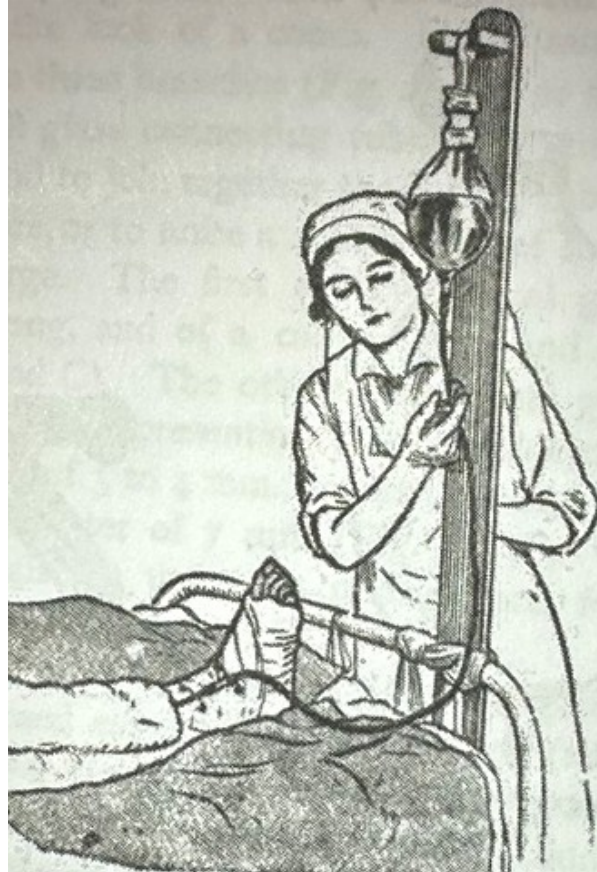
THE TREATMENT OF INFECTED WOUNDS

BY
A. CARREL AND G. DEHELLY

TRANSLATION BY
HERBERT CHILD
CAPT. B.A.M.C. (TY), FORMERLY SURGEON, FRENCH RED CROSS

WITH INTRODUCTION BY
SIR ANTHONY A. BOWLBY
K.C.M.G., K.C.V.O., F.R.C.S., SURGEON-GENERAL, ARMY MEDICAL SERVICE
ADVISING CONSULTING SURGEON TO THE BRITISH ARMY IN FRANCE

NEW YORK
PAUL B. HOEBER
67-69 EAST 80TH STREET
1917

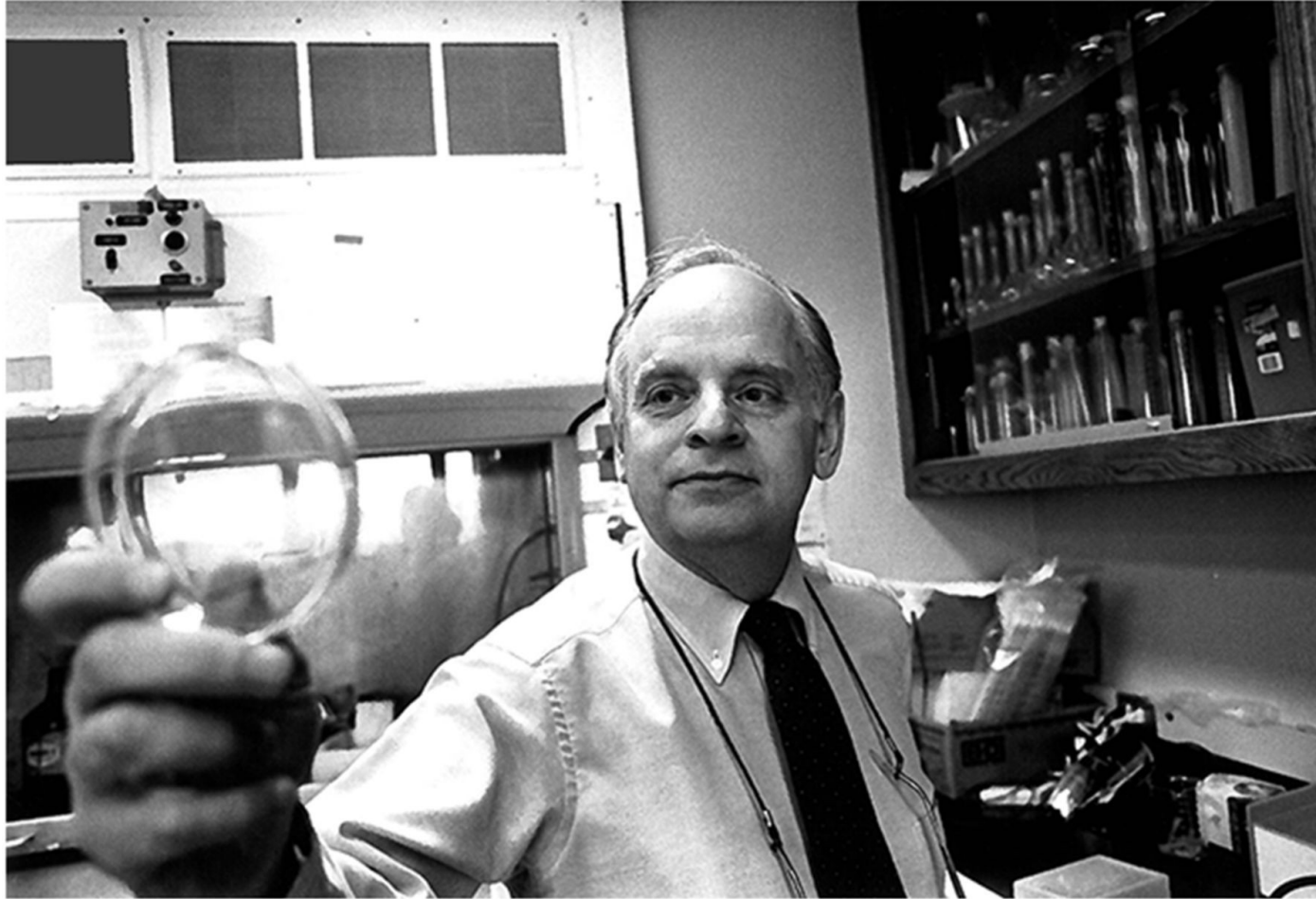


HYPOCHLOROUS SOLUTION ELECTRICALLY PRODUCED FROM HYPERTONIC SALINE AS A DISINFECTANT FOR SEPTIC WOUNDS, AND FOR THE THROAT IN DIPHTHERIA, SCARLET FEVER, ETC.

BY
J. M. BEATTIE, M.A., M.D.,
PROFESSOR OF BACTERIOLOGY, UNIVERSITY OF LIVERPOOL,
MAJOR R.A.M.C.T., 1ST WESTERN GENERAL HOSPITAL;
F. C. LEWIS, F.C.S.,
ASSISTANT LECTURER IN BACTERIOLOGICAL METHODS, UNIVERSITY
OF LIVERPOOL;

AND
G. W. GEE, L.R.C.P., D.P.H.,
ASSISTANT M.O.H. ST. HELENS.

50 years later! HOCl is Nature's First Responder



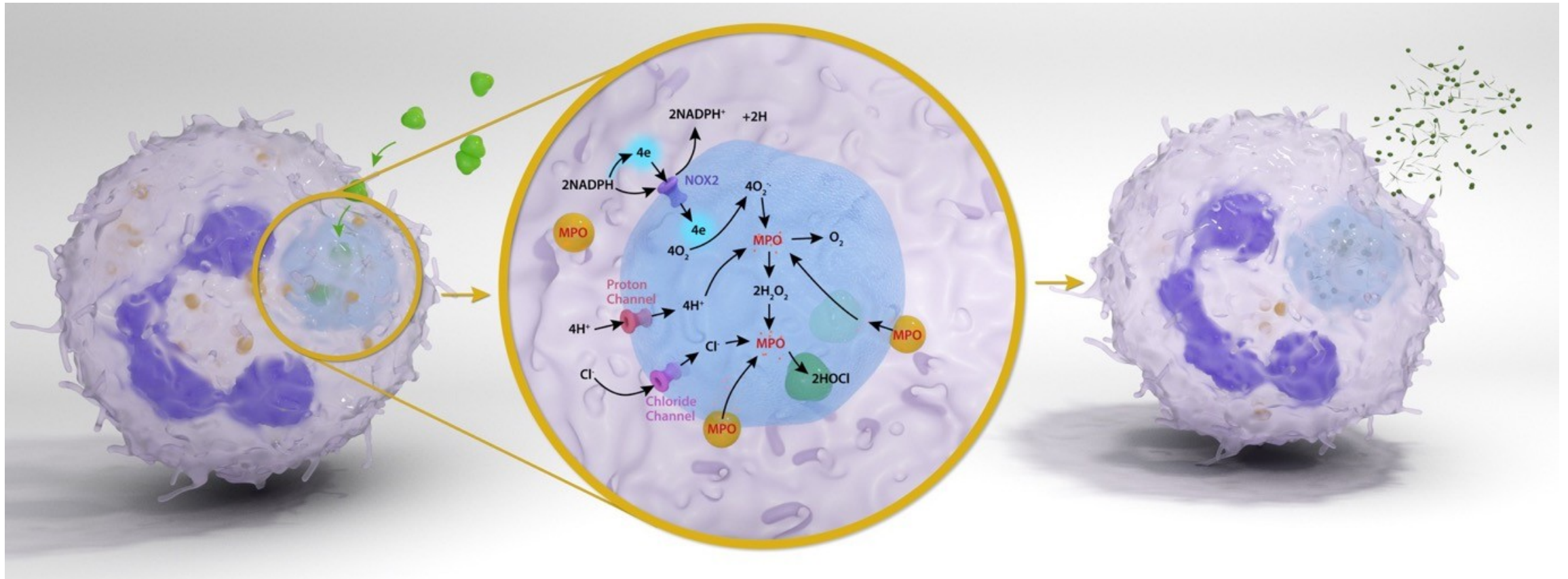
Formation of Singlet Oxygen by the Myeloperoxidase-mediated Antimicrobial System*

(Received for publication, January 21, 1977)

HENRY ROSEN† AND SEYMOUR J. KLEBANOFF

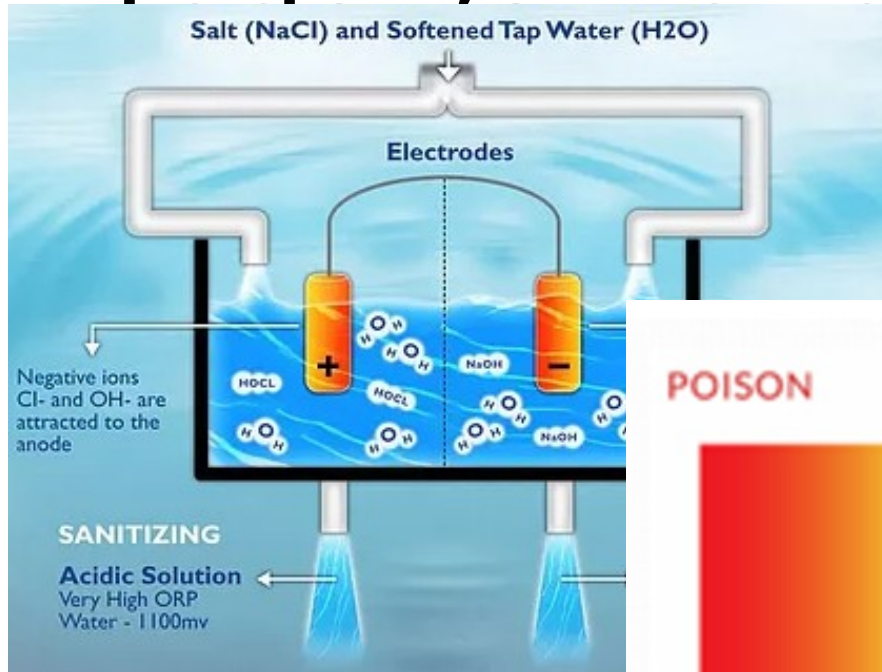
From the Department of Medicine, University of Washington School of Medicine, Seattle, Washington 98195

HOCl being made in a neutrophil
....in milliseconds
....and in macrophages, epithelial cells

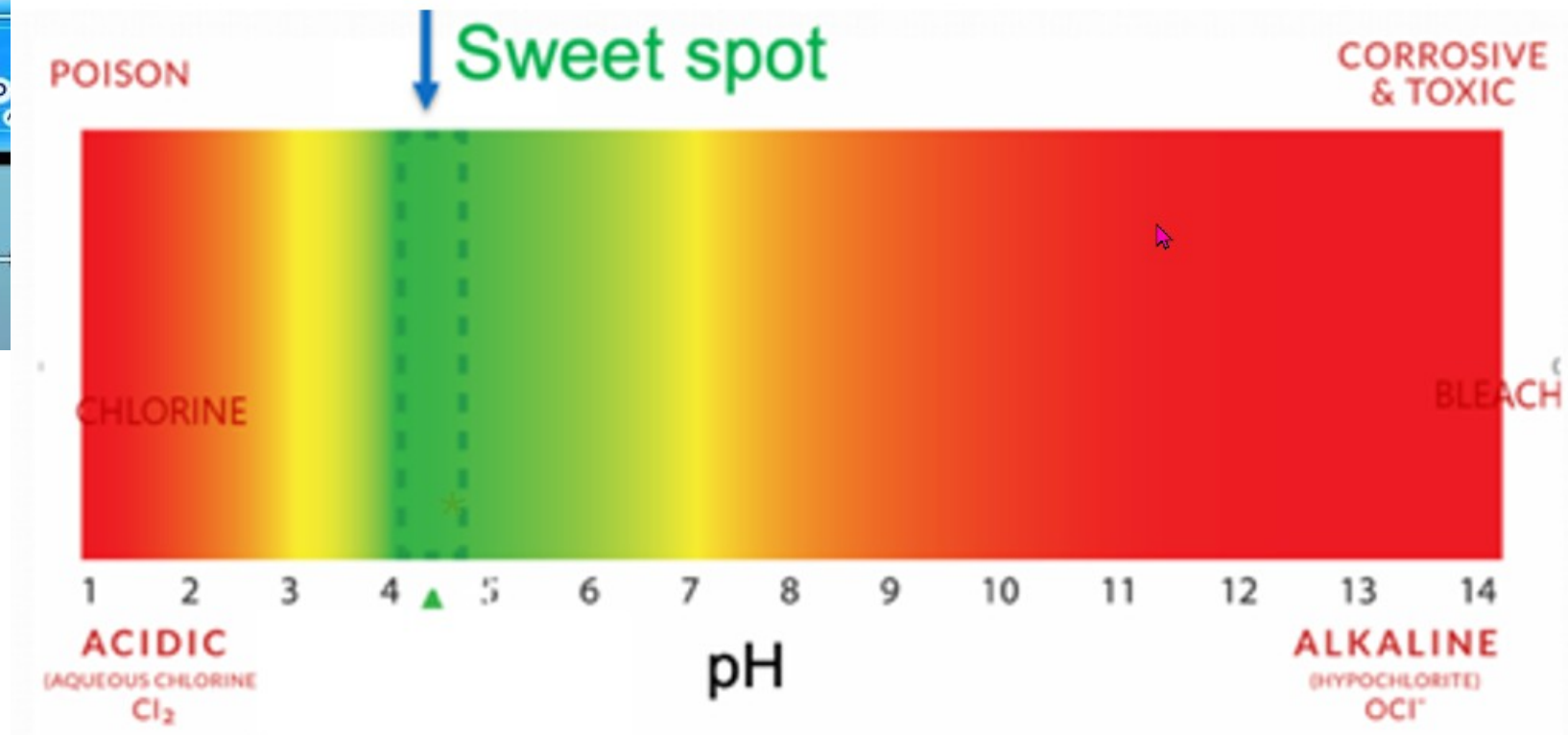


~50 million years worth of
evolutionary R&D

100 years later : HOCl—Pure,
stable, potent,RTU for
d care



PureCleanse is made



Safety and Potency of HOCl

Inhalation of Microaerosolized Hypochlorous Acid (HOCl):
Biochemical, Antimicrobial, and Pathological Assessment

Eric D Rasmussen^{1*}, Lori I Robins², Jeremy Stone R¹, Jeffrey F Williams¹



Microorganism	Contact Time (seconds)	Cl (ppm)	LRV
Salmonella choleraesuis (ATCC 51505)	20	94	6.9
Salmonella choleraesuis (ATCC 51505)	20	80	7.8
Bacillus subtilis spores (Raven Laboratories)	15	94	6.0
Bacillus subtilis spores* (Raven Laboratories)	15	240	6.1
Bacillus subtilis spores (Raven Laboratories)	15	80	3.9
Pseudomonas aeruginosa (ATCC 9027)	15	94	5.5
Pseudomonas aeruginosa (ATCC 9027)	20	80	7.6
Aspergillus niger spores (ATCC 16404)	60	94	6.5
Aspergillus			

Bacterial strain	HOCl MIC (mM)
<i>P. aeruginosa</i> PAO1	0.66
ATCC 9027	0.33
PA14	0.16
Mucoid	0.33
Non-mucoid	0.33
Mi162	0.66
AMT006	0.66
AMT0023-34	0.66
LES-400	0.66
MHRA-1	0.33
MHRA-2	0.33
ULS-1	0.33
ULS-2	0.33

The selection and use of essential medicines, 2025

WHO Model List of Essential Medicines

It's HOCl time, at last
...wound cleanser, antiseptic, healing enhancer

WHO Model List of Essential Medicines – 24th List (2025)

☐ chloroxylenol Therapeutic alternatives: - 4 th level ATC chemical subgroup (D08AE Phenol and derivatives)	Solution: 4.8%.
glutaral	Solution: 2%.
hypochlorous acid	Solution (aqueous): containing hypochlorous acid $\geq$ 150 parts per million.
16. DIURETICS	