

ABSTRACTS
SAMEVATTINGS

**SECOND ANNUAL CONGRESS
TWEEDE JAARLIKSE KONGRES**

The Academy of Pharmaceutical Sciences
Die Akademie van Farmaseutiese Wetenskappe



UNIVERSITY OF DURBAN-WESTVILLE
UNIVERSITEIT VAN DURBAN-WESTVILLE

THE EFFECT OF ADSORBENT AND ADSORBATE
CONCENTRATIONS ON PRESERVATIVE ACTIVITY IN
SOLID/LIQUID DISPERSIONS

J A. Myburgh & T.J. McCarthy*

**Obtained the degree B.Sc.(Pharm) (U.W.C.) 1971 and appointed to the staff of U.W.C. 1973. Completed the degrees B.Sc.(Pharm) Hons. (1974) and M.(Pharm) 1978 with Prof T.J. McCarthy and Dr H.S. Bean (University of London) acting as promotor for the latter degree. Currently Senior Lecturer in the Department of Pharmaceutics U.W.C. where Microbiological Research is being carried on in view of a D.(Pharm) degree. To date have been associated with six publications.*

Using the preservatives benzoic acid, methylparaben, methylbenzethonium chloride (Hyamine 10X) and 2-bromo - 2-nitropropane - 1,3-diol (Bronopol) it was ascertained that the activity of these depend on their concentration or on the particulate solid present.

Particulate solids bismuth carbonate, heavy magnesium carbonate, talc and calamine were used. Thus it was shown that the arbitrary choice of the concentration of a preservative is not advisable

TITLE

Reason for Saline-Iodine flush failures in C A P D

AUTHORS

J.D. Block, K.I. Furman

ADDRESS

University of the Witwatersrand, Johannesburg

ABSTRACT

Despite improvements in technique, training procedures and rigid patient selection for continuous ambulatory peritoneal dialysis (CAPD) the incidence of peritonitis remains unacceptably high in many centres. The ineffectiveness and dangers of long term prophylactic use of broad spectrum antibiotics are universally appreciated. Understandably the concept of adding an antiseptic to dialysis solutions has been under experimentation world-wide as an alternative method of combatting infection of the peritoneum. Iodine-saline flushes have been reported in clinical trials to have excellent results.

THE EFFICACY OF ANTIMICROBIAL PRESERVATIVES IN TOPICAL PREPARATIONS

Jeremy David Block & T J McCarthy

*Jeremy David Block, Lecturer in Pharmaceutics and Pharmaceutical Microbiology at the Witwatersrand Technikon Johannesburg. (5 yrs) Industrial Pharmacist (5 yrs) Past Managing Director of Natrodale Pharmaceuticals. (Pty) Ltd.
M.Sc. Pharmaceutics student (complete November 1981)*

Abstract

EFFICACY OF ANTIMICROBIAL PRESERVATIVES IN TOPICAL PREPARATIONS

A wide range of single, binary and tertiary antimicrobial preservative systems were tested in an aqueous based emulsion using Tefose 63 as the emulgent at two specific concentrations. The preservative system in the topical preparations were challenged with specific single challenge bacteria and fungi over an extended shelf life to meet specific criteria of microbial reduction and chemical sterilisation, as laid down by the British Department of Health and Social security (1979)
Similar microbial challenges were performed on a wide range of R.S.A. scheduled and O.T.C. topical preparations of various ages, covering pre-expiry close-to and post expiry dates.

PROGRAM VIR DIE KONGRES - PROGRAMME FOR THE CONGRESS

Vrydag 7 Mei/Friday 7 May

1. Verwelkoming - Prof. D.P. Veldsman
2. Official Opening - Mr D. Sutherland, President of the P.S.S.A.
3. Algemene Jaarvergadering van die Akademie
4. Poster Session

- P-Z* C. Ackermann - Percutaneous Absorption of Propranolol.
- P-J* P.J. Gilbert - A study of the interactions between phenytoin and adsorbents.
- P-G* G.S. van Zyl - Die effek van 'n aantal patente teensuurmiddels op die urinêre pH en die konsekwensies hiervan op die werkingsduur van sekere geneesmiddels wat daarmee saam gebruik mag word.
- P-S* S. Soneschans - Die *in vitro* - *in vivo* korrelasie van die vrystelling van hidrochloortiasied vanuit tablette.
- L. Nusca - The effects of a popular cold and flu preparation on heart rate and blood pressure in healthy volunteers.
- J.C. Pieters - Die effek van neusdruppels met simpatomimetika op hartsnelheid en bloeddruk by normotensiewe proefpersone.
- wits* J.D. Block - Efficacy of antimicrobial preservatives in topical applications - a closed cell approach.
- Rhodes* K. MacIntosh - *In vitro* - *in vivo* assessment of an analgesic/antihistamine dosage form.

Saterdag 8 Mei/Saterdag 8 Mei

- Session Chairman - Prof. T.J. McCarthy
- PE* 09h00-09h20 J.J. Zeelie - Antioxidants as preservatives in pharmaceutical systems.
- WC* 09h20-09h40 N. Butler - Effects of suspended powders in creams on the release of single and binary preservative systems.
- 09h40-10h15 A.P. Lötter - Vastetoestand eienskappe van generiese ekwivalente en die verband daarvan ten opsigte van dissolusie en moontlik biobeskikbaarheid.
- RL* 10h15-10h30 I. Kanfer - Drug analysis by HPLC utilizing photo-conductivity detection.
- 10h30-11h00 TEA/TEE



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Mr. J.D. Block
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18 May 1981

Dear Mr. Block,

Thank you very much for delivering a paper during the Academy Congress in Durban. Your paper was not only a valuable contribution to the success of the Congress but will also contribute to the advancement and interest in the Pharmaceutical Sciences.

Success with your future research.

Yours sincerely

Prof. H.A. Koeleman
Honn. Secretary

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