of Pharmacy of the St. Clara Hospital, Basel, Switzerland.

Dr. Surber obtained his PharmD degree (Switzerland) from the University of Basel and received his PhD degree in 1984 at the same University for investigations on local tissue tolerance of injectable drugs. Subsequently, he joined Hoffmann-La Roche Basel, for 4 years and then the University of California, San Francisco, Calif., for 3 years. His major areas of interest are skin pharmacology and skin pharmacokinetics. Dr. Surber is a member of the American Association of Pharmaceutical Scientist, Skin Pharmacology Society and the American, European and the Swiss Society of Hospital Pharmacists.

Drug Dosage

The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved.

No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher.

© Copyright 1992 by S. Karger AG, P.O. Box, CH- 4009 Basel (Switzerland) Printed in Switzerland on acid-free paper by Thür AG Offsetdruck, Pratteln

ISBN 3-8055-5332-3

Contents

Preface VIII

Historical Aspects
Pharmacological Aspects
Niedner, R. (Freiburg i.Br.): Animal Models 7
Niedner, R. (Freiburg i.Br.): Human Models 17
Stoughton, R.B. (La Jolla, Calif.): Vasoconstrictor Assay - Specific Applications 42
Stoughton, R.B. (La Jolla, Calif.): Generic Copies of Innovator Formulations of Topical Glucocorticoids 54
Smith, E.W.; Meyer, E.; Haigh, J.M. (Grahamstown): Accuracy and Reproducibility of the Multiple-Reading Skin Blanching Assay 65
Gibson, J.R. (Buffalo, N.Y.); Hough, J.E.; Marks, P.M. (London): Effect of Concentration on the Clinical Pharmacology of Corticosteroid Ointment Formulations 74
Wester, R.C.; Maibach, H.I. (San Francisco, Calif.): Percutaneous Absorption in Diseased Skin 128
Milioni, K. (San Francisco, Calif.): Topical Anti-Inflammatory Thiosteroids 142

Clinical Aspects
Cornell, R.C.; Maibach, H.I. (La Jolla, Calif.): Clinical Indications: Real and Assumed 154
Robertson, D.B.; Maibach, H.I. (Atlanta, Ga.): Adverse Systemic Effects of Topical Corticoids 163
Marks, R. (Cardiff): Adverse Side Effects from the Use of Topical Corticosteroids 170

Contents VI
Eisner, P. (Würzburg): Gynecology 184
Sillevis Smitt, J.H.; Winterberg, D.H. (Amsterdam): Topical Corticosteroids in Children: Local and Systemic Effects 196

Future Aspects
Surber, Ch. (Basel); Maibach, H.I. (San Francisco, Calif.): The Future 227

Topical Corticosteroids: Application
Tung, J.P. (San Francisco, Calif.): List of Generic and Brand Names of Corticosteroids 235
Topical corticosteroids are the most widely used preparations in dermatology. The introduction of topical hydrocortisone in the early 1950s represented a great advance on previously available therapies, but it was the first of the halogenated corticosteroids, triamcinolone acetonide, that...
began the revolution which cumulated in the appearance of the very potent agents now available. Enthusiasm for these highly effective agents was at its peak during the 1960s and 1970s and perhaps inevitably, the more potent corticosteroids were often used inappropriately and indiscriminately. Adverse effects became apparent and the subsequent backlash of opinion against topical corticosteroids has created confusion and prejudice against all steroid-containing preparations is today still of considerable concern.

Of recent years, much care has been taken to re-establish the image and certainly much effort has been taken to improve the understanding of pharmacological and clinical aspects of topical corticosteroids. This book is designed to provide the readers with comprehensive essays on Topical Corticosteroids written by experts who are scientifically active within the specific research fields. The chapters are divided into two main sections: The first section deals with pharmacological and clinical aspects of topical corticosteroids surrounded by two short chapters on historical and future aspects of these remedies. The second section, Topical Corticosteroids: Applications, includes a total of 18 chapters. It starts with a complete list of all generic and brand names of topical corticosteroids available. It follows a series of chapters dealing with specific properties of a selection of topical corticosteroids.

Preface VIII

The concept of Topical Corticosteroids is unique. It combines information on an unparalleled class of remedy which is published in a vast range of medical and pharmaceutical journals that can hardly be mastered by a single individual. Researchers with medical and/or pharmaceutical backgrounds have helped with their contributions to further improve the mutual understanding of clinical, experimental and laboratory issues of topical corticosteroids.

It is hoped that the book will be useful as a source of ideas, references and critical reviews to those engaged in the development and use of topical corticosteroids. We are thankful for the cooperation provided by the coauthors.

Howard I. Maibach, MD
Christian Surber, PhD