

Meyler's Side Effects of Drugs

An Encyclopedia of
Adverse Reactions and Interactions

Tenth Edition

Editor:
M.N.G. DUKES

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Editor:

M.N.G. DUKES, M.D., M.A., LL.B.

Regional Officer for Pharmaceuticals and Drug Utilization,
The World Health Organization, Copenhagen

Co-Editors:

J.K. Aronson, D.PHIL., M.B., M.R.C.P., Oxford

B. Blackwell, M.D., Milwaukee, WI

J. Elis, M.D., D.SC., Prague

P.I. Folb, M.D., F.R.C.P., Cape Town

R. Hoigné, M.D., Berne

E.F. Hvidberg, M.D., Copenhagen

P.K.M. Lunde, M.D., Oslo

C.B.M. Tester-Dalderup, M.D., Edmonton

K.-W. von Eickstedt, M.D., Berlin

B. Westerholm, M.D., Stockholm



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1980	<i>Ninth edition</i>	Edited by M.N.G. Dukes

Complementary to this volume are the *Side Effects of Drugs Annuals*. These provide yearly surveys of new data and trends. *Annual 1* appeared in 1977, *Annual 8* in 1984.

Editor

M.N.G. DUKES, M.D., M.A., LL.B.
Regional Officer for Pharmaceuticals and
Drug Utilization
The World Health Organization
Scherfigsvej 8
DK-2100 Copenhagen Ø
Denmark

Co-editors

J.K. ARONSON, D.Phil., M.B., M.B.C.P.
Wellcome Lecturer and Honorary Consultant
in Clinical Pharmacology
MRC Unit and University Department of
Clinical Pharmacology
Radcliffe Infirmary
Woodstock Road
Oxford OX2 6HE
United Kingdom

B. BLACKWELL, M.D.
Professor and Chairman
Department of Psychiatry (Milwaukee)
University of Wisconsin Medical School
Mount Sinai Medical Center
950 North 12th Street
Milwaukee, WI 53233
U.S.A.

J. ELIS, M.D., D.Sc.
State Institute for Drug Control
Srobarova 48
100 41 Prague 10
Czechoslovakia

P.I. FOLB, M.D., F.R.C.P.
Professor of Pharmacology
University of Cape Town and Chief Physician
Groote Schuur Hospital
Observatory 7925
South Africa

Responsibility for Chapters:

Social drugs
Opioid analgesics and narcotic antagonists
General anesthetics and therapeutic gases
Neuromuscular blocking agents and skeletal
muscle relaxants
Drugs affecting autonomic functions or the
extrapyramidal system

Responsibility for Chapters:

Cardiac glycosides and drugs used in
dysrhythmias
Antianginal and β -adrenoceptor blocking
drugs
Drugs acting on the peripheral circulation
Antihypertensive drugs
Diuretic drugs

Central nervous system stimulants and
anorectic agents
Antidepressant drugs
Lithium
Hypnotics and sedatives
Neuroleptics and antipsychotics

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extrapyramidal system
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Drugs used in ocular treatment

R. HOIGNÉ, M.D.
Member of the Medical Faculty
University of Berne
and Head, Medical Division
Zieglerspital
Postfach 2600
CH-3001 Berne
Switzerland

E.F. HVIDBERG, M.D.
Department of Clinical Pharmacology
Rigshospitalet
University Hospital
9 Blegdamsvej
DK-2100 Copenhagen Ø
Denmark

P.K.M. LUNDE, M.D.
Chairman, Institute of Pharmacotherapeutics
and Consultant in Clinical Pharmacology at
Ullevål Hospital
University of Oslo
P.O. Box 1065 Blindern
Oslo 3
Norway

C.B.M. TESTER-DALDERUP, M.D.
Adviser, Netherlands Committee for the
Evaluation of Medicines
P.O. Box 11291
Edmonton, Alberta T5J 3K5
Canada

K.-W. VON EICKSTEDT, M.D.
Director and Professor
Arzt für Pharmakologie und Toxikologie
Institut für Arzneimittel des
Bundesgesundheitsamtes
Stauffenbergstrasse 13
Berlin 30

B. WESTERHOLM, M.D.
Associate Professor
Director General
National Board of Health and Welfare
S-106 30 Stockholm
Sweden

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Antihistamines (H₁-receptor antagonists)
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Gastrointestinal drugs

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Drugs affecting lipid metabolism
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Hormonal contraceptives
Sex hormones

Contributors

S. AGOSTON, M.D., Ph.D.
Institute of Anesthesiology and Intensive Care
State University of Groningen
Oostersingel 59
9713 EZ Groningen
The Netherlands

G. ANSELL, M.D., F.R.C.P., F.R.C.R.
Department of Radiology
Whiston Hospital, Prescot
Merseyside L35 5DR
United Kingdom

T.H. BEWLEY, M.D.
Drug Dependence Units
St. Thomas', St. George's and Tooting Bec
Hospitals
Tooting Bec Road
London SW17 8BL
United Kingdom

R. BOUILLON, M.D.
Laboratory for Experimental Medicine
Catholic University of Leuven
Rega Institute
Minderbroedersstraat 10
B-3000 Leuven
Belgium

A.W. BROEKMANS
Division of Hemostasis and Thrombosis
Research
Hematology Section
Department of Medicine
University Hospital
Rijnsburgerweg 10
2333 AA Leyden
The Netherlands

H. BUURMA, M.Pharm.
Faculty of Pharmacy
State University of Groningen
Antonius Deusinglaan 2
9713 AW Groningen
The Netherlands

G.A.B. DAVIES-JONES, M.D.
Department of Neurology
Royal Hallamshire Hospital
Glossop Road
Sheffield S10 2JF
United Kingdom

A.C. DE GROOT, M.D.
Department of Dermatology-Venereology
Carolus Hospital
Hervensebaan 4
5232 JL 's-Hertogenbosch
The Netherlands

J. DESCOTES, M.D., Pharm.D.
Laboratory of Pharmacology
Alexis Carrel Faculty of Medicine
Rue Guillaume Paradin
69008 Lyon
France

E. DOBRÝ, M.D., Ph.D.
Institute of Haematology and Blood
Transfusion
U nemocnice 1
128 20 Prague 2
Czechoslovakia

E.H. ELLINWOOD Jr, M.D.
Behavioral Neuropharmacology Section
Department of Psychiatry
P.O. Box 3870
Durham, NC 27710
U.S.A.

J.Cl. EVREUX, M.D.
Laboratory of Pharmacology
Alexis Carrel Faculty of Medicine
Rue Guillaume Paradin
69008 Lyon
France

Z. FASTNER, M.D.
Municipal Health Department
Korte Vleerstraat 140
2513 VK The Hague
The Netherlands

M. GAUTSCHI, M.D.
MetPath Laboratories
Division of Microbiology
Effingerstrasse 45
CH-3001 Berne
Switzerland

M. GLENDE, M.D.
Bereich Medizin (Charité) der
Humboldt-Universität zu Berlin
Institut für Klinische Pharmakologie
Clara-Zetkin-Strasse 94
1080 Berlin
German Democratic Republic

F. HACKENBERGER, M.D.
Institut für Arzneimittelwesen der DDR
Facharzt für Pharmakologie und Toxikologie
Facharzt für innere Medizin
Grosse Seestrasse 4
112 Berlin
German Democratic Republic

A.H. GHODSE
Drug Dependence Units
St. George's, St. Thomas' and Tooting Bec
Hospitals
Tooting Bec Road
London SW17 8BL
United Kingdom

D.W.G. HARRON, M.D.
Department of Therapeutics and
Pharmacology
The Queen's University of Belfast
The Whitla Medical Building
97 Lisburn Road
Belfast BT9 7BL
Northern Ireland

K.P. HELLRIEGEL, M.D.
Department of Internal Medicine II
Moabit Hospital
Turmstrasse 21
1000 Berlin 21

B. HOFMAN, M.D.
Rosariumlaan 24
3972 GJ Driebergen
The Netherlands

H. HÜLLER, M.D.
Bereich Medizin (Charité) der
Humboldt-Universität zu Berlin
Institut für Klinische Pharmakologie
Clara-Zetkin-Strasse 94
1080 Berlin
German Democratic Republic

I. HUZULÁKOVÁ, M.D., C.Sc.
Department of Pharmacology
Faculty of Medicine
Comenius University
Bratislava
Czechoslovakia

T. JERRAM, B.A., M.B., B.Ch., M.R.C.P.,
M.R.C.Psych.
High Royds Hospital
Menston, Ilkley
West Yorkshire LS29 6AQ
United Kingdom

H. KELLER, M.D.
Medical Division
Tiefenauspital
CH-3004 Berne
Switzerland

H.M.J. KRANS, M.D.
Department of Endocrinology and Metabolic
Diseases
University Hospital
Rijnsburgerweg 10
2333 AA Leyden
The Netherlands

M.J.S. LANGMAN, M.D.
Department of Therapeutics
Floor C, South Block
University Hospital
Nottingham NG7 2UH
United Kingdom

H.P. LANSBERG, M.D.
Rembrandtlaan 47
3723 BG Bilthoven
The Netherlands

E.A. LOELIGER, M.D.
Division of Hemostasis and Thrombosis
Research
Hematology Section
Department of Medicine
University Hospital
Rijnsburgerweg 10
2333 AA Leyden
The Netherlands

P. LÜBBERS, M.D.
Formerly Head of the Medical Division
City Hospital
Norwegenstrasse 7
D-2407 Lübeck-Travemünde
Federal Republic of Germany

D.G. McDEVITT, D.Sc., M.D., F.R.C.P.,
F.R.C.P.I.
Department of Pharmacology and Clinical
Pharmacology
University of Dundee
Ninewells Hospital
Dundee DD1 9SY
United Kingdom

R.H.B. MEYBOOM, M.D.
Netherlands Center for Monitoring of Adverse
Reactions to Drugs
Ministry of Welfare, Public Health and
Culture
P.O. Box 439
2260 AK Leidschendam
The Netherlands

H. MEYER, M.D.
Höhenklinik Sanitas and
Alpine Kinderklinik Pro Juventute
CH-7270 Davos Platz
Switzerland

J.P. NATER, M.D.
Department of Dermatology
University Hospital
Oostersingel 59
9713 EZ Groningen
The Netherlands

L. OFFERHAUS, M.D.
Netherlands Center for Monitoring of Adverse
Reactions to Drugs
Ministry of Welfare, Public Health and
Culture
P.O. Box 439
2260 AK Leidschendam
The Netherlands

J.W. PATERSON, M.D.
Department of Pharmacology
The Queen Elizabeth II Medical Centre
The University of Western Australia
Nedlands, WA 6009
Australia

E.H. PI, M.D.
Adult Outpatient Clinic
Medical College of Pennsylvania
Eastern Pennsylvania Psychiatric Institute
3200 Henry Avenue
Philadelphia, PA 19129
U.S.A.

B.C.P. POLAK
Department of Ophthalmology
Erasmus University
Eye Hospital
Schiedamse Vest 180
3011 BH Rotterdam
The Netherlands

C. REINICKE, M.D.
Clinical-Pharmacological Laboratory
Department of Internal Medicine
Friedrich Schiller University
Karl Marx Allee 101
6902 Jena-Lobeda
German Democratic Republic

F.J. RICHARDSON, M.D.
Institute of Anesthesiology and Intensive Care
State University of Groningen
Oostersingel 59
9713 EZ Groningen
The Netherlands

W.J.K. ROCKWELL, M.D.
Behavioral Neuropharmacology Section
Department of Psychiatry
Duke University Medical Center
P.O. Box 3870
Durham, NC 27710
U.S.A.

M. SCHOU, M.D.
Psychopharmacology Research Unit
Department of Psychiatry
Aarhus University
Psychiatric Hospital
DK-8240 Risskov
Denmark

G.M. SIMPSON, M.D.
Clinical Psychopharmacology
Department of Psychiatry
The Medical College of Pennsylvania
Eastern Pennsylvania Psychiatric Institute
3200 Henry Avenue
Philadelphia, PA 19129
U.S.A.

D.H. SMITH, F.R.C.P.
Department of Tropical Medicine
Liverpool School of Tropical Medicine
Pembroke Place
Liverpool L3 5QA
United Kingdom

R. SONNTAG, M.D.
Division of Oncology
Inselspital
University Hospital
CH-3010 Berne
Switzerland

J.S. SRAMEK Jr, Pharm.D.
Psychopharmacology Service
Metropolitan State Hospital
114-00 Norwalk
Norwalk, CA 90650
U.S.A.

J.A. STEINER, M.B., B.S., D.Phil.,
F.R.A.C.P.
Clinical Pharmacology Unit
Searle Research & Development
G.D. Searle & Co. Ltd.
P.O. Box 53, Lane End Road
High Wycombe, Bucks. HP 12 4HL
United Kingdom

J. VANĚČEK, M.D., D.Sc.
Department of Pharmacology
School of Pediatrics
Charles University
Albertov 4
128 00 Prague
Czechoslovakia

M. VERSTRAETE, M.D.
Department of Medical Research
Catholic University of Leuven
Herestraat 49
B-3000 Leuven
Belgium

B. VRHOVAC, M.D., D.Sc.
Section of Clinical Pharmacology
Department of Medicine
University Hospital Medical School
12, Kišpatičeva
41000 Zagreb
Yugoslavia

A.G. VULTO, M.Pharm.
Rudolf Magnus Institute of Pharmacology
State University of Utrecht
Vondellaan 6
3521 GD Utrecht
The Netherlands

Preface

Twenty-seven years after its foundation by the late Professor Leo Meyler of Groningen, the *Side Effects of Drugs* series remains unique in the world. In the course of that period it has continuously attempted to attain the goal which he set for it, namely to provide the clinician and medical investigator with a reliable and critical overview of all that is known – and much that is merely suspected but unproven – with respect to the adverse reactions and interactions of drugs.

Several basic changes have been made in the series in the course of a generation in order to meet changing conditions. The enormous expansion in published data led to the creation of a team of editors and contributors many times larger than that engaged in the work during its early years. The group, originally based largely in The Netherlands and the United Kingdom, now includes experts from a wide range of countries on different continents; the book itself, originally conceived in Dutch, now appears in English, Japanese and Russian, with adapted editions in other languages. The most important change came however in 1977, when the newly created *Side Effects of Drugs Annual* took over the vast task of dealing critically and in detail with individual case reports, serving at the same time to provide a yearly update to the main volume.

The question has inevitably from time to time been debated how this material can best be presented to meet the goal which Leo Meyler originally and correctly set, namely that of serving the clinician and investigator. To that end, the essential structure which he chose has been retained, individual Chapters dealing primarily with therapeutically or pharmacologically related groups of drugs rather than with related adverse effects. As in the *Ninth Edition*, however, the data have been arranged in the form of monographs, each dealing with a drug group as a whole or one of its primary representatives, and supplemented by specific data on individual members of the group insofar as their adverse effects deviate from this general pattern.

Despite all that has been done in the last three decades to promote drug safety, the absolute number of drug injuries occurring annually has apparently gone on growing, largely because of the more intensive use of medicaments (over-consumption all too often having replaced under-consumption) and the multiplication of new compounds, as well as the commercialization of remedies derived from traditional medicine. At the same time, the proportion of adverse effects which actually get reported has increased severalfold. For such reasons, books such as '*Meyler*', even though they be only one of the channels of information in this field, continue to play a basic rôle in identifying those risks which exist, alerting the physician to the possibility of those which are uncertain, and eliminating from the record those older pieces of evidence which have remained unconfirmed or been frankly discredited.

I would like to express my sincere thanks to the many Contributors and the Co-editors who rendered possible the compilation of this tenth '*Meyler*', as well as to the editorial staff at Elsevier Science Publishers for their constant encouragement and support.

M.N.G. DUKES
The World Health Organization
Copenhagen
Denmark

May, 1984

How to use this book

THE SCOPE OF MEYLER'S SIDE EFFECTS OF DRUGS

This book is designed as a general reference work on the adverse reactions to (and interactions of) medicinal substances. It can be used independently or alongside the companion *Side Effects of Drugs Annual* which is published in January of each year and provides a critical survey of the latest developments in this field, with extensive references to the literature.

PRESENTATION OF DATA

The great majority of drugs used in medicine at the present day belong to well-defined families of substances with a close pharmacological and/or chemical relationship to one another, e.g. the phenothiazines, the cephalosporin antibiotics and the beta-blockers. In considering adverse reactions it is generally expedient to review such a group as a whole, since the undesired effects of one member of the group are likely to occur with others as well. Each Chapter therefore presents one or more '*Side effects monographs*'; a monograph may discuss a group of related drugs or the best-known representative of the group; it is followed by shorter accounts of the individual drugs, pointing to matters in which these differ from the general pattern. Monographs are presented according to a standard format so that information can be readily located without constant reference to the indexes. The format, as well as a list of the monographs to be found in this volume, will be found on page xix.

SPECIAL CHAPTERS

In a small number of Chapters, particularly those where large numbers of substances are in use (e.g. 'Dermatological drugs and cosmetics'), the material has been differently presented, extensive use being made of tables.

CLASSIFICATION

Drugs are classified according to their main field of application or to the properties for which they are most generally recognized. In borderline cases, however, some supplementary discussion has been included in other Chapters relating to secondary fields of application. Fixed combinations of drugs are dealt with according to their most characteristic compound.

DRUG NAMES

Drug products are in general dealt with in the text under their most usual non-proprietary name; where these are not available, chemical names have been used; fixed combinations usually do not have a non-proprietary connotation and here trade names have been used as necessary.

SYSTEM OF REFERENCES

References in the text are coded as follows:

- R: In the original paper, the point is *reviewed* in some detail with reference to other literature.
- r: The original paper *refers* only briefly to the point, on the basis of evidence adduced by other writers.
- C: The original paper presents *detailed original clinical evidence* on this point.
- c: The original paper provides *clinical evidence*, but only *briefly*.

The code has not been applied to animal pharmacological papers. The various editions of *Meyler's Side Effects of Drugs* are cited in the text as SED-8, SED-9 etc.; *SED Annuals* 1-8 are cited as SEDA-1, SEDA-2 etc.

It is not feasible to provide references to original data for every statement in this book. For facts which are well established, references are omitted; the selected references at the end of each

Chapter are supplemented by cross-references to the *Side Effects of Drugs Annuals*. For certain questions which have been well-documented in the more distant past, the reader will find cross-references to the *Eighth and Ninth Editions* of *Meyler's Side Effects of Drugs* and occasionally (where drugs are obsolescent, e.g. triparanol) to earlier volumes in this series.

Readers anxious to trace all references on a particular topic, including those which duplicate earlier work, are advised to consult *Adverse Reactions Titles*, a monthly bibliography of titles from leading biomedical journals published throughout the world, compiled by the Excerpta Medica International Medical Abstracting Service. *Adverse Reactions Titles*, now in its twentieth year, is available in most medical libraries throughout the world.

INDEXES

Index of Drugs: This index provides a complete listing of all references to a drug.

Index of Side Effects: This index is necessarily selective, since a particular side effect may be caused by very large numbers of compounds; the index is therefore mainly directed to those side effects which are acute or life-threatening or are discussed in special detail. Before assuming that a given drug does not have a particular side effect, one should consult the relevant Chapters.

Adverse reactions are listed as specifically as possible, e.g. under 'Special senses' there are separate sections for oculotoxicity and ototoxicity; other adverse effects involving the special senses will be found under the subsection 'Other'.

For *interactions*, the reader should refer to the Index of Drugs where all interactions are listed under the drugs concerned, irrespective of the Chapter in which they appear.

It should be borne in mind that American spelling has been used throughout, e.g. anemia, estrogen etc. (instead of anaemia, oestrogen etc.).

The indexes have been compiled by Dr. H. Kettner, Middelburg, The Netherlands.

Side effects monographs

Monographs are presented according to the standard format given below so that information can be readily located without constant reference to the indexes.

Drug

ADVERSE REACTION PATTERN

A summary of the principal characteristics with special reference to:

- General and toxic reactions
- Hypersensitivity reactions
- Tumor-inducing effects

EFFECTS ON ORGANS AND SYSTEMS

- Cardiovascular
- Respiratory
- Nervous system
- Endocrine, metabolic
- Mineral and fluid balance
- Hematological
- Liver
- Gastrointestinal
- Urinary system
- Skin and appendages
- Special senses
- Genital system

Other organs and systems

Risk situations An outline of situations in which use of the drug involves special risks and may be contraindicated

Withdrawal effects

Second-generation effects

- Use in pregnancy
- Use in lactation
- Effects on fertility
- Genetic effects

Overdosage

Interactions

Interference with diagnostic routines

Where there is no information on particular topics, the section in question is omitted; if adverse reactions have been proven to be absent, this will be stated.

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