

# KEY WORDS OF MODERN ANTIFUNGAL THERAPY

# CYTOCHROME P450 OR WHAT'S IN A NAME...

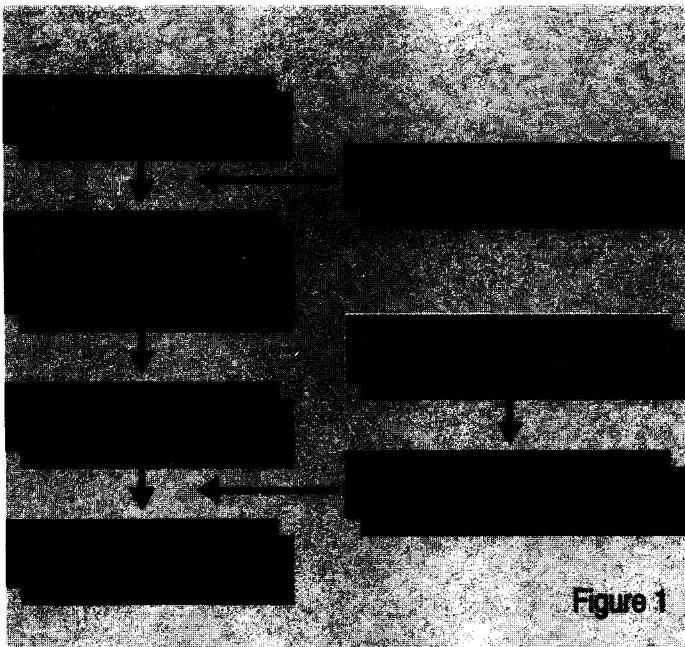


Figure 1

Figure 1 is a simplified illustration of one of the pathways for the enzymatic ergosterol synthesis in fungal cell membranes. (Ergosterol is essential for the structural cohesion of these membranes). Pharmacologically one can disrupt this process at two distinct points. The first is where squalene is made into an oxide. Alternatively, one can interfere where lanosterol is converted into ergosterol, by inactivating **cytochrome P450** — a chemical catalyst that performs a vital function in the enzymatic reaction. The broadest research experience to date has been gathered with the latter approach. Importantly, in view of the close similarities between the enzymatic processes in fungi and humans, either approach must be highly selective in disrupting the fungal enzyme systems only.

The metabolism of fungi is almost identical to that of other eukaryotic organisms, such as humans. Therefore, trying to design a systemic drug that kills fungi without harming their human host means searching for infinitesimal differences in metabolic pathways.

**Selective precision** for the metabolic pathways in fungi, as distinct from those in humans, remains the key determinant for any systemic antimycotic, regardless of its point of biochemical interaction. This precision has been achieved to an exceptional degree with itraconazole, alias Sporanox\*, because it selectively inactivates the fungal cytochrome P450 only.

## Sporanox® itraconazole

### SHORT AND SIMPLE ORAL THERAPY

standard dose in dermatomycoses: 1 capsule (100 mg) once daily for 15 days  
standard dose in vaginal candidosis: 2 x 2 capsules (400 mg) for 1 day only

\* Trademarks: SPORANOX, SEMPERA, SISTIZOL, TRISPORAL.

**Properties:** Sporanox (itraconazole), a triazole derivative, is orally active against infections with dermatophytes (*Trichophyton* spp., *Microsporum* spp., *Epidermophyton floccosum*), yeasts (*Candida* spp., *Pythrococcum* spp.), *Aspergillus* spp. and various other yeasts and fungi. **Indications:** Sporanox (itraconazole) is indicated for vulvovaginal candidosis, pityriasis versicolor, dermatophytoses, fungal keratitis and oral candidosis. **Dosage and administration:** Vulvovaginal candidosis: 2 capsules (200 mg) morning and evening for 1 day, Pi-

tyriasis versicolor: 2 capsules (200 mg) once daily for 7 days. - Tinea corporis, tinea cruris, tinea pedis, tinea manus: 1 capsule (100 mg) daily for 15 days; highly keratinized regions, as in plantar tinea pedis and palmar tinea manus, require 1 capsule (100 mg) daily for 30 days. - Oral candidosis: 1 capsule (100 mg) daily for 15 days. - Fungal keratitis: 2 capsules (200 mg) once daily for 21 days. **Contra-indications:** Sporanox (itraconazole) is contra-indicated during pregnancy. **Warnings and precautions:** Although clinically Sporanox (itraconazole) has not been associated with hepatic dysfunction, it is advisable not to give this drug to patients with a known history of liver disease. **Nursing mothers:** It is recommended not to breast feed whilst taking Sporanox (itraconazole).

**Drug interactions:** Sporanox (itraconazole) should not be given concomitantly with rifampicin.

Full prescribing information is available on request.

# A selection of American College of Physicians books available now from the BMJ

## ACP

We are pleased to announce that books published by the American College of Physicians are now available from the *BMJ*, with the exception of North America and Mexico.

### Common Diagnostic Tests: Use and Interpretation—second edition

EDITED BY HAROLD C SOX, JR, MD, FACP

This second edition contains revised and updated chapters and completely new chapters on diagnostic reasoning, thyroid function tests, and glycemia tests. Among the tests covered are routine chest radiographs, blood cultures, carcinoembryonic antigen tests, and throat cultures and rapid tests for diagnosis of A streptococcal pharyngitis.

Paperback

ISBN 0 943126 15 0

400 pages

UK £19.00/Abroad £21.00 (BMA members £17.00 or £19.00)

### Guide for Adult Immunization—second edition

AMERICAN COLLEGE OF PHYSICIANS

This guide is an indispensable reference for those concerned with the immunisation needs of adults and adolescents. The second edition has an expanded section on travel, a completely revised chapter on immunocompromised adults (including those with HIV infection), and updated material on the efficacy of influenza and hepatitis B vaccines. The guide focuses on such factors as age, occupation, lifestyle, environmental risk, and compromised hosts, any one of which may call for special vaccines. With tables, appendixes, and an index, plus an expanded bibliography, the *Guide* is a convenient reference for the busy practitioner.

Approved by the American College of Physicians

Paperback

ISBN 0 943126 12 6

190 pages

UK £9.00/Abroad £11.00 (BMA members £8.50 or £10.50)

### Providing Quality Care: The Challenge to Clinicians

EDITED BY NORBERT GOLDFIELD, MD, DAVID B NASH, MD, MBA

Quality assurance has become a major issue in health care. Nine chapters by prominent medical experts critically discuss case-mix and quality-of-care measures, information systems as quality measures, and the relationships between quality assurance programmes and malpractice. Commentary reflecting the clinician's perspective follows each chapter.

Paperback

ISBN 0 943126 11 8

250 pages

UK £16.00/Abroad £18.50 (BMA members £15.50 or £17.50)

### Drug Prescribing in Renal Failure: Dosing Guidelines for Adults—second edition

WILLIAM M BENNETT, GEORGE R ARONOFF, THOMAS A GOLPER, GAIL MORRISON, IRWIN SINGER, D CRAIG BRATER

Biochemical and physiologic factors for determining drug dosage in patients with renal failure are presented in easy to read tables. Text and tables detail bioavailability distribution, metabolism, renal excretion, pharmacokinetics, dosimetry, therapeutic monitoring, and adverse reactions. The guidelines are organised by drug category. Major categories include: anti-microbial agents; antihypertensive and cardiovascular agents; sedatives, hypnotics, and drugs used in psychiatry and analgesics.

Paperback

ISBN 0 943126 16 9

150 pages

UK £10.95/Abroad £12.95 (BMA members £9.95 or £11.95)

### Hospital Clinical Privileges: Guidelines for Procedures in Gastroenterology and Nephrology

AMERICAN COLLEGE OF PHYSICIANS

First in a series of guidelines on clinical competence in specific medical procedures, this book defines the "minimum criteria" for competent performance of eight procedures, four each in gastroenterology and nephrology. An essential aid for anyone faced with the task of granting hospital clinical privileges, the guidelines were first published as separate articles in *Annals of Internal Medicine* in 1987 and 1988. Written by the Clinical Privileges Project Steering Committee of the American College of Physicians, each article discusses a specific procedure and defines training requirements and the level of competence needed to perform the procedure. Recommendations for when procedures should and should not be used as well as technical and cognitive criteria are given in tabular form.

Approved by the American College of Physicians

Paperback

ISBN 0 943126 09 6

80 pages

UK £10.95/Abroad £12.95 (BMA members £9.95 or £11.95)



### ORDER FORM

British Medical Journal, PO Box 295, London WC1H 9JR.

Please send me the following American College of Physicians books:

Qty

Common Diagnostic Tests

Guide for Adult Immunization

Providing Quality Care

NAME \_\_\_\_\_  
(print clearly)

ADDRESS \_\_\_\_\_

Qty

Drug Prescribing in Renal Failure

Hospital Clinical Privileges

*Prices include postage, by air abroad*

Membership No \_\_\_\_\_

Cheque enclosed (made payable to British Medical Journal) £ \_\_\_\_\_

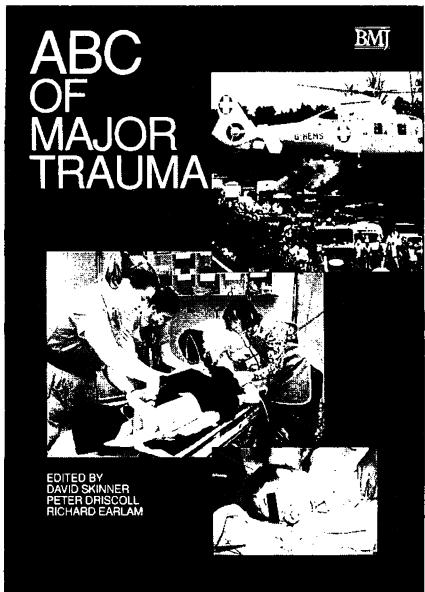
Debit my AMERICAN EXPRESS/VISA/MASTERCARD

Card No. \_\_\_\_\_ Exp. \_\_\_\_\_

Signature \_\_\_\_\_

ACP books are also available from the BMJ bookshop in BMA House.

Please send me a BMJ book catalogue



## ***Suddenly it happens: can you cope?***

Injury is an enormous problem in Western society. It is the commonest cause of death among those aged under 35, and about 100 people die each week in road traffic accidents in Britain. Hospital staff have to manage about 500,000 patients with injury who are admitted each year, often with multiple injuries requiring urgent treatment.

The *ABC of Major Trauma* is a comprehensive guide to the early management of the multiply injured patient. All immediately life threatening problems are dealt with, the chapters being written by experts in all of the relevant specialties and by doctors who have day to day experience of treating patients with major injuries in the accident and emergency department. Also covered are the handling of accident victims and their transport to hospital and how to deal with major accidents. Practical guidance is clear and dogmatic to avoid delay in urgent treatment and is relevant to all medical, paramedical, and nursing staff who are concerned with the management of patients from the moment of injury to eventual discharge.

March 1991

UK £12.95; Abroad £15.00 (BMA members £11.95 or £14.00)

The second edition of the *ABC of Resuscitation* incorporates the latest standards and guidelines for cardiopulmonary resuscitation issued by the Resuscitation Council (UK) in 1989. There are three new chapters—one on trauma, one on resuscitation in late pregnancy, and one on avoiding HIV infection—and throughout, recommendations have been updated where necessary and other revisions have been made in view of current theory and practice. Written by members of the Resuscitation Council (UK) and other invited experts, the new edition of *ABC of Resuscitation* offers the most up to date information and advice on this vital aspect of health care.

### *Review of the first edition*

"This book represents a major achievement on the part of the Resuscitation Council and the *British Medical Journal* and must be essential reading for every practising doctor, and especially those in the 'front-line' of pre-hospital care." *Basics, Journal of the Association for Immediate Care*

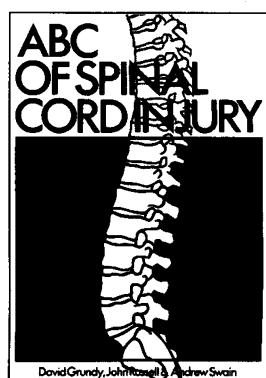
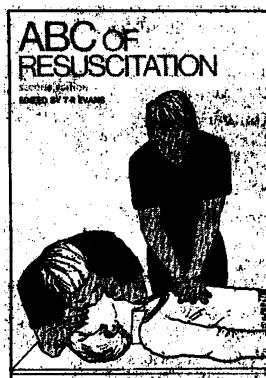
Second edition 1990

UK £6.95; Abroad £9.00 (BMA members £6.45 or £8.50)

In spinal cord injury correct management from the outset is vital to prevent further damage. But what is the correct management? The *ABC of Spinal Cord Injury* sets it out step by step: how the injured patient should be moved from the scene of the accident; the assessment of his injuries; transfer to a spinal treatment centre; immediate medical problems and later complications; and the specialised nursing, physiotherapy, and occupational therapy that are essential in helping the patient and his family adjust to what may be a lifetime of disability. A valuable introduction to a topic that non-specialists need to know more about.

Third impression 1990

UK £7.95; Abroad £9.00 (BMA members £7.45 or £8.50)



BRITISH MEDICAL JOURNAL, PO Box 295, London WC1H 9TE, any leading bookseller, or the BMJ/BMA bookshop.

Please send me copy/ies of the following BMJ books

Membership no. \_\_\_\_\_

I enclose a cheque for \_\_\_\_\_ made payable to **British Medical Journal**. Debit my credit card (please tick box)

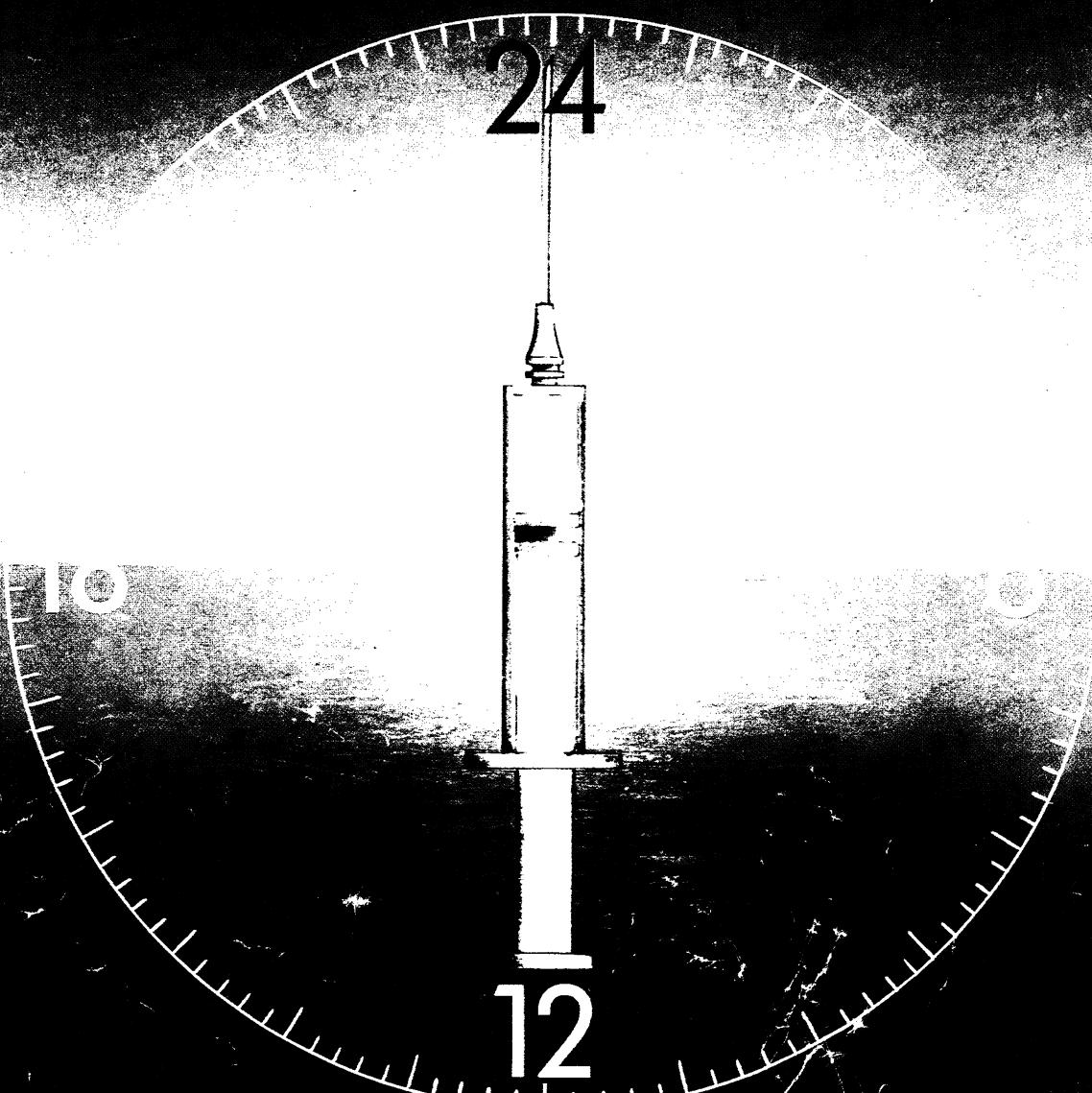
**NAME** \_\_\_\_\_

## ADDRESS

POSTCODE

**All prices include postage, by air abroad.**

**All prices include postage, by air abroad.**



24

12

# ROCEPHIN

ceftazidime  
24-HOUR BACTERICIDAL POWER

**Indications**

Sepsis; meningitis; abdominal infections; infections of the bones, joints, soft tissue, skin and of wounds; infections in patients with impaired defence mechanisms; renal and urinary tract infections; respiratory tract infections, particularly pneumonia, and ear, nose and throat infections; genital infections, including gonorrhoea. Perioperative prophylaxis of infections.

**Dosage**

Usual dosage for adults: 1-2 g once daily (every 24 hours). Further information on administration and special dosage recommendations are available on request.

**Contraindications**

Known hypersensitivity to cephalosporins.

**Precautions**

Pregnancy (particularly in the first trimester), unless absolutely necessary. Hypersensitivity to  $\beta$ -lactam antibiotics (possibility of allergic cross-reactions, anaphylactic shock).

**Side effects**

Gastrointestinal complaints. Hematological changes. Skin reactions.

Full details are available on request.

F. Hoffmann-La Roche Ltd, Basel, Switzerland



# gastric distress & oesophagitis

## hyperacidity or dysmotility?

Most complaints of gastric distress, as well as oesophagitis, are conventionally attributed to hyperacidity in the stomach. However, the contemporary view in gastroenterology holds that most upper G.I. problems, including heartburn, postprandial fullness, early satiety, abdominal distension and epigastric discomfort, are commonly motility related.<sup>1-3</sup> And this stands to reason. After all, proper peristalsis is a physiological necessity for our digestive process.

Prepulsid, the novel G.I. prokinetic, uniquely restores healthy peristalsis to efficiently clear the oesophagus and empty the stomach.<sup>4-6</sup>



# TRADEMARK **Prepulsid** CISAPRIDE

**restores upper G.I. motility like no other agent.**

**JANSSEN**  
PHARMACEUTICA  
B-2340 Beerse, Belgium

expertise in digestive motility