



The patient had been forced to give up walking to work. β -adrenergic tablets helped, but the bronchitic wheeze persisted. A different therapeutic approach was needed.

Atrovent is a different kind of therapy, specially designed to help many of your patients breathe better than has so far seemed possible. Its radically different pharmacology and action gives Atrovent a different sort of therapeutic capability – one outside the scope of beta-adrenergics, xanthines, steroids and disodium cromoglycate. Atrovent has revitalized the use and appreciation of the great untapped potential of anticholinergic therapy in airways control. The anticholinergic action of Atrovent is important because it

counters excessive parasympathetic activity in the lungs – increasingly recognised as underlying the persistent bronchitic wheeze that troubles many patients, often despite some improvement from beta-adrenergics given continuously. Atrovent therapy offers the opportunity now to bring about a radical – and previously unexpected – improvement in their breathing. You should see – and hear about – the difference it can make to many a patient like this. For the difference it may make to lung function – and to everyday living – choose Atrovent.

Presentation Metered dose inhaler containing 200 doses, each delivering ipratropium bromide 0.02mg
Action and Indications Anticholinergic bronchodilator for chronic reversible airways obstruction, particularly in chronic bronchitis. **Contra-indications, Precautions and Warnings** Contra-indication: sensitivity to atropine. Caution in glaucoma, prostatic hypertrophy and first trimester of pregnancy. Do not spray into the eye. If a reduced response becomes apparent, the patient should seek medical advice. Anticholinergic side-effects are unlikely at therapeutic doses. **Dosage** Adults usually 1 or 2 puffs, 3 or 4 times daily, although some patients need up to 4 puffs at a time to obtain maximum benefit during early treatment. **Children** 6 – 12 years, usually 1 or 2 puffs 3 times daily. Under 6 years usually 1 puff 3 times daily. Under 6 years usually 1 puff 3 times daily. Pack size & basic NHS price (UK only) 10ml vial complete with mouthpiece £2.55. PL 0015/0043▼

IPRATROPIUM
BROMIDE
INHALER[®]

Atrovent[®]

a really radical addition
to breathing



Boehringer
Ingelheim

Chandlery? We've written the book.

There are chandlery catalogues and chandlery catalogues.

At Force 4 we feel we've put together the definitive one for sailors to browse through this winter. (It's the nearest thing to going round a chandlers' you'll find.)

You'll find everything in it from spars and engines to electronics and foul weather gear.

There are 50 jam-packed pages from our extensive stocks - all you could possibly need to fit out.

If you're already familiar with Force 4 you'll know how thoughtful expert advice can make your boat more fun to sail or, simply, go faster.

This same thought and care has gone into the Force 4 catalogue.

To secure it, cut out the coupon and

send it to us.

(The £1.00 purchase price will be automatically credited against your first purchase with a £1.00 rebate voucher. And with 50 pages of gear to choose from, that's as near as saying the catalogue is free.)



BMJ1

Force 4 Chandlery
30 Bressenden Place
Buckingham Palace Road
London SW1E 5DB Tel: 01-828 3900.

I would like your complete 50 page catalogue and am enclosing £1.00 (cheque/money order or card number).

Please send it to me (with my £1.00 rebate voucher) to the address below.

NAME

ADDRESS

ACCESS\BARCLAYCARD NO
Reg. No 2106796 Regd. in London

ANNALS OF CLINICAL RESEARCH

is a journal publishing—original papers—brief reports—review articles—letters to the editor—special issues on interesting topics on clinical and applied basic research

Editor-in-chief: M. H. FRICK (Helsinki)

Assistant editor: P. J. PENTIKÄINEN (Helsinki)

Managing editor: M. LEIRISALO (Helsinki)

International editorial board consists of 54 well-known scientists.

Editorial office:

Annals of Clinical Research
Runeberginkatu 47 A
00260 Helsinki 26
Finland

The journal is listed in Current Contents. We offer rapid editing procedures and high printing quality. Articles are published within six months of acceptance.

Are you a subscriber to Annals of Clinical Research?

If not, you may have missed the following items:

Special issues on

Rheumatoid arthritis and rheumatic diseases
Ann Clin Res 7, No 3, 1975

Hepatitis. Ann Clin Res 8, No 3, 1976

Shock. Ann Clin Res 9, No 3, 1977

The regulation of pituitary hormones and its clinical implications. Ann Clin Res 10, No 3, 1978

Original reports

L. RESNEKOV and H. LIPP: *Circulatory effects of acute myocardial infarction as a rational basis for therapy.*
Ann Clin Res 3:363, 1971

P. SOVERI and F. FYHRQUIST: *Plasma renin activity and angiotensin II during oral contraception.* Ann Clin Res 9:346, 1977

E.A. NIKKILÄ, J.K. HUTTUNEN and C. EHNHOLM: *Low post-heparin plasma hepatic lipase activity in familial type IIa hyperlipoproteinemia.* Ann Clin Res 8:63, 1976

The journal is published bimonthly by the Finnish Medical Society Duodecim. The annual subscription fee is US \$60. Order through your local subscription agency or directly from Annals of Clinical Research.



Consistent accuracy in digitalisation

There is a Lanoxin tablet for every requirement—
Quarter strength: Lanoxin-PG Tablets (0.0625mg digoxin)
Half strength: Lanoxin-125 Tablets (0.125mg digoxin)
Full strength: Lanoxin Tablets (0.25mg digoxin)

Indications: Where digitalis therapy is required, e.g. congestive heart failure, atrial fibrillation. **Dosage:** Adults: Rapid oral digitalisation: 0.75-1.5 mg followed by 0.25 mg at six-hourly intervals until optimal therapeutic effect attained. Slow oral: 0.25-0.75 mg daily. Maintenance: All routes: 0.25-0.5 mg daily. Children under 10 years: All routes: 0.01-0.02 mg/kg bodyweight every six hours until therapeutic effect attained. Maintenance: 0.01-0.02 mg/kg bodyweight daily for a few days, then adjust dosage as necessary. **Precautions:** Digoxin requirements vary considerably between individuals and the dosages above are only a guide. The aged and those with renal disease are more susceptible to digoxin and therefore require less (except in an emergency). Combination therapy with diuretics may cause potassium loss: reduce dose until loss corrected. **Side-effects:** Principally associated with overdosage (symptoms include nausea, vomiting, fatigue, arrhythmias, bradycardia). **Presentations:** Lanoxin-PG* (Paediatric/Geriatric) Tablets (0.0625 mg, PL 3/0091) blue, coded 'Wellcome U3A'. Basic NHS cost: £0.29 for 100 tablets. Lanoxin-125* Tablets (0.125 mg, PL 3/0102) white, coded 'Wellcome Y3B'. Basic NHS cost: £0.29 for 100 tablets. Lanoxin* Tablets (0.25 mg, PL 3/0090) white, scored, coded 'Wellcome X3A'. Basic NHS cost: £0.31 for 100 tablets. Additional information is available on request. *Trade Mark.



RESEARCH IS OUR ONLY SHAREHOLDER

Wellcome Medical Division, The Wellcome Foundation Ltd., Crewe, Cheshire

Getting the protein intake right -what are the requirements of a 5-month old baby?

Protein is, of course, an essential element of a baby's daily food intake, but many mothers may not be too familiar with the daily requirement.

How much protein?

The U.S. National Research Council (1974) gives the following recommended protein intakes:

Age 0-6 months: 2.2 g per kg body weight daily
Age 6-12 months: 2.0 g per kg body weight daily

A can or jar of a Heinz Strained Main Meal variety provides at least a quarter of the recommended daily intake of protein for a five-month old infant weighing 7kg.

Here are a couple of examples:

MEAL		Protein g	Energy kcal	Iron mg	Calcium mg	Vit C mg
Str. Beef & Bone Broth	4½oz	5.7	94	2.92	19	—
Str. Choc. Pudding	4½oz	3.6	123	0.64	127	—
Fresh Orange Juice	1½oz	0.2	15	0.12	4	20
TOTAL INTAKE		9.5	232	3.68	150	20
% of Recommended Daily Intake*		60	30	60	25	135
Str. Country Lamb & Carrot	4½oz	4.2	86	3.18	51	—
Str. Fruit Dessert	4½oz	0.5	103	0.89	6	19
TOTAL INTAKE		4.7	189	4.07	57	19
% of Recommended Daily Intake*		30	25	65	10	125

*at 5 months, 7 kg body weight.

The diets recommended in the Heinz book "Milk to Mixed Diet" ensure a protein intake of at least 2.8 g/kg per body weight/day. These diets are designed to assist mothers to provide an adequate and balanced diet for their babies.

Heinz nutritionists ensure that across the range of Heinz Baby Foods a proper balance of protein, fats and carbohydrates is

maintained. Excessive amounts of protein are as undesirable as too much carbohydrate or fat.

Getting the balance right is important.

This is one of the many aspects of baby feeding covered in this series of nutritional guides from Heinz. If you

would like copies of the other guides in this series, or any other information about infant nutrition, please write to:



Department of Food and Nutrition Research, H. J. Heinz Co. Limited, Hayes Park, Hayes, Middx. UB4 8AL

ST. ANDREW'S HOSPITAL NORTHAMPTON

PRIVATE TREATMENT OF ALCOHOLISM

Our well-established alcoholism treatment unit offers intensive resident therapy in pleasant surroundings, first-class accommodation, a friendly, relaxed atmosphere and at a reasonable cost.

The programme includes group therapy, social skills training, educational films, videos and discussions, together with a comprehensive range of recreational facilities catering for men and women of all ages.

Staffed by a Consultant Psychiatrist, Psychologist, and specially trained Nursing Staff, the unit is readily accessible from all parts of England and Wales. Regular follow-up groups take place in London and the Midlands.

GROUP PSYCHOTHERAPY UNIT

The Group Psychotherapy Unit is amongst an increasing range of specialised facilities offered by St. Andrew's Hospital. It is run by two Consultant Psychiatrists, assisted by a Nurse Therapist and an Occupational Therapist, and has now been open for a year.

We have found that with an intensive approach of daily interpretative groups, social skills training and art and drama therapy, encouraging results can be obtained in ten to twelve weeks' in-patient or out-patient treatment. This is helped by the friendly, non-institutionalised atmosphere of the hospital.

Further details may be obtained from the

Medical Director · St. Andrew's Hospital · Northampton NN1 5DG
Telephone Northampton (0604) 21311

Our prescription. Take one with every new car.

Doctors can benefit significantly from the new Car Leasing Plan developed for British Medical Finance. The Plan takes account of current legislation and reduces the cost of running a new motor car.

For further details of how you could have a better car for a lower outlay, telephone Alan Emerson at 01-262 1272 or clip the coupon on the right.



Please send me details of your
New Car Leasing Plan

Name _____

Address _____

Tel. _____

British Medical Finance
199/201 Old Marylebone Road,
London, NW1 5QR.

A3

Caved-S®

Deglycyrrhizinated Liquorice, Bism.Subnit.
Alum.Hydrox.,Mag.Carb.,Sod.Bic.,Frangula.

heals peptic ulcers

EFFECTIVELY

AND

ECONOMICALLY

Full prescribing information on request from
TILLOTTS LABORATORIES, Henlow Trading Estate, Henlow, Beds.

79004

The combination of
simple language and straightforward
line drawings has made the

ABC OF OPHTHALMOLOGY

one of the most popular series
of articles in the Medical Practice
section of the
British Medical Journal.

All the common problems
are covered—visual defects,
squints, glaucoma and
cataracts—together with detailed
instruction on examination,
diagnosis and management.

Available Soon

Price: Inland £2.50; Overseas US\$6.25

(For BMA members: Inland £2.00; Overseas US\$5.00)

Order your copy now

From: The Publisher, British Medical Journal,
BMA House, Tavistock Square, London WC1H 9JR
or any leading bookseller

Alcohol Treatment Unit

This private unit has been established in
the grounds of Ticehurst House to provide
comprehensive and enlightened treatment for
those with drinking problems. Treatment is
structured to individual needs and is undertaken
by doctors, nurses and therapists with wide
experience in this specialty.

*Subscribers to the main Private
Contributory Schemes may claim benefits
within the terms of these schemes.*

Further information is available from the Medical Director,

The Newington Unit

Ticehurst House, Ticehurst, Wadhurst, Sussex.
Telephone: Ticehurst (0580) 200391.



Isle of Barra

This attractive hotel has 41 bedrooms all with
private bath. Situated overlooking Tangusdale beach
and one of the island's fine hill lochs,
the Isle of Barra Hotel offers a quiet relaxing holiday on
one of the most beautiful
of the Outer
Hebridean isles.

Isle of Barra Hotel, Tangusdale, Isle of Barra.
Outer Hebrides PA80 5XW
Tel: 08714 383

ADVERTISEMENTS

PHARMACEUTICAL PRODUCTS

Readers are reminded that prescribers'
literature and clinical information are
always available from advertisers on
request.

Reduced Subscription Rates to BMA Specialist Journals for Junior Hospital Doctors Residents and Interns...

BMA Specialist Journals are now available to junior doctors in all parts of the world for a maximum of four consecutive years at REDUCED Annual Subscription Rates. Thereafter, or when reaching consultant status, this special offer will no longer apply.

The following subscription rates apply for 1979:

	REDUCED RATE		Full Rate	
	Inland £	Abroad US\$	Inland £	Abroad US\$
<i>Published Monthly</i>				
Archives of Disease in Childhood.....	17.00	40.00	28.00	65.50
British Heart Journal.....				
British Journal of Ophthalmology.....				
Gut.....				
Journal of Neurology, Neurosurgery and Psychiatry.....				
Cardiovascular Research.....	18.00	36.00	30.00	60.00
Journal of Clinical Pathology.....	18.00	42.00	30.00	70.50
<i>Published six times a year</i>				
Annals of the Rheumatic Diseases.....	13.00	30.00	21.00	49.00
British Journal of Venereal Diseases.....				
Journal of Medical Genetics.....				
Thorax.....				
<i>Published Quarterly</i>				
British Journal of Industrial Medicine.....	9.00	19.00	14.00	32.00
Epidemiology and Community Health.....				

ORDER FORM

To: BMA Publications, BMA House, Tavistock Square,
London WC1H 9JR

Please enter my subscription to:

at the REDUCED RATE of: Inland £..... Abroad US\$.....

My remittance for is enclosed

NAME.....

ADDRESS.....

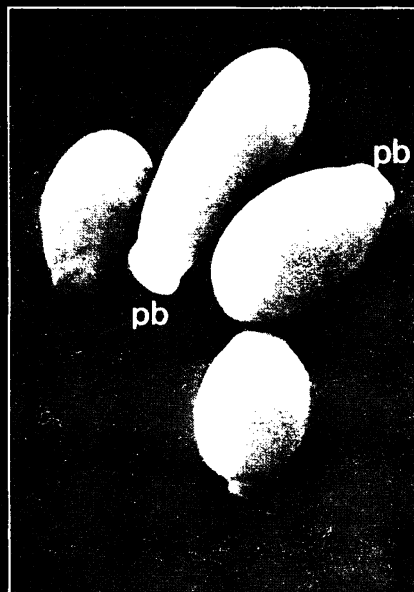
To be completed by Consultant

I hereby confirm that the above mentioned doctor is a member of the junior hospital staff/resident/intern at

..... Signed.....

the fungicidal breakthrough

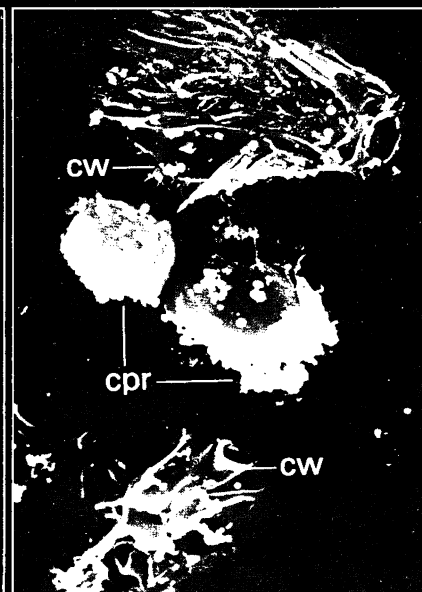
Scanning Electron Microscopic photographs of *Candida albicans* before and after treatment with miconazole.



1. Untreated cells appear as isolated yeast forms in an oval shape and with a smooth surface showing the formation of polar buds (pb).



2. Upon exposure to a fungistatic dose (10^{-7} M) of miconazole the cells tend to cluster. Budding becomes disorganized with visible budding scars (bs) that are randomly distributed over the surface of the cells.



3. Treatment with a fungicidal dose of miconazole causes the cell wall (cw) to burst. Vesicles of cytoplasm disintegrate and adhere to the surface of yet unbroken cells (cpr). (The interior of the cells is completely lytic).



the standard fungicidal treatment

Daktarin

miconazole nitrate 2 % w/w

*highly effective
in all fungal infections*

further information available on request from :



Janssen Pharmaceutica
2340 Beerse, Belgium.

or from :
Janssen Pharmaceutical Ltd.
Janssen House, Marlow, Bucks.
PL/0242/0016, 17, 47, 48, 52

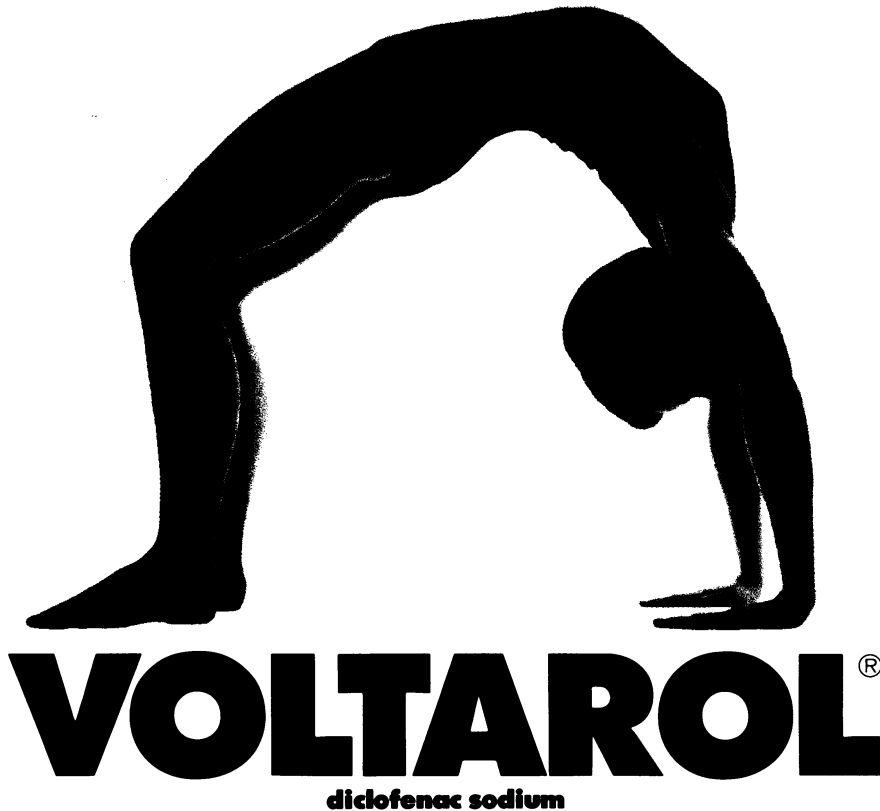
Trade Marks : Brentan in Denmark and Spain, Daktar in Germany, Daktarin in all other countries.

WHY NOT SUBSCRIBE TO THE SPECIALIST JOURNALS PUBLISHED BY THE BMA:—A SELECTION INCLUDES

Archives of Disease in Childhood, British Heart Journal, British Journal of Ophthalmology, Gut, Journal of Clinical Pathology & Journal of Neurology, Neurosurgery & Psychiatry.

FULL DETAILS OF SUBSCRIPTION RATES FROM BMA SPECIALIST PUBLICATIONS: BMA HOUSE, TAVISTOCK SQUARE, LONDON WC1H 9JR
TELEPHONE 01-387 4499 EXT. 309.

The new antirheumatic from Geigy



**bridges the gap
between efficacy and tolerability**

**The potent antirheumatic effect
and very good tolerability
of Voltarol have been confirmed**

- **in over 90 countries throughout the world**
- **in over 10,000,000 patients**
- **in comparison with aspirin, indomethacin, ibuprofen, ketoprofen, naproxen and phenylbutazone**
- **in more than 15,000 patients in controlled clinical trials.**

Presentation Tablets containing 25mg diclofenac sodium, circular, slightly biconvex with bevelled edges, yellow enteric coated, approximately 7mm diameter, imprinted Geigy on one side.

Mode of action Voltarol is a non-steroidal agent with marked analgesic/anti-inflammatory and antipyretic properties. Like most other drugs in this class, it is an inhibitor of prostaglandin synthetase.

Indications Rheumatoid arthritis, osteoarthritis.

Dosage Oral: In adults the initial dosage is 25-50mg 3 times daily, depending on the severity of the condition. Maintenance dose should be reduced to the minimum amount that will provide continuous therapeutic control, usually 1 x 25mg tablet three times daily.

Dosage in children has not yet been established.

The tablets should be swallowed whole, with a meal.

Contraindications Peptic ulcer.

Voltarol is contraindicated in asthmatic patients in whom attacks of asthma, urticaria or acute rhinitis are precipitated by aspirin or other non-steroidal anti-inflammatory agents with prostaglandin synthetase inhibiting activity.

Precautions Voltarol should not be prescribed during pregnancy, unless there are compelling reasons for doing so.

Patients with a history of peptic ulcer, haematemesis, or melaena, or with severe hepatic or renal insufficiency, should be kept under close surveillance.

Voltarol has been reported to depress

salicylate levels, and vice versa; the clinical relevance of this phenomenon is not yet clear.

Warnings & side-effects Initially, some patients may complain of epigastric pain, nausea and diarrhoea, headache and slight dizziness. These side-effects are often transient, disappearing with continuation of medication.

Occasionally skin rash, peripheral oedema and abnormalities of serum transaminases have been reported.

Very rarely peptic ulcer and haematemesis or melaena have been reported, mainly in patients with a history of such disorders, or who were receiving concomitant anti-rheumatic medication.

Accidental overdosage There is no known antidote to Voltarol and the treatment is

symptomatic. Immediate treatment consists of forced emesis to recover undigested tablets.

Pharmaceutical precautions Storage - protect from moisture.

Legal Category Prescription only

Package quantities Basic N.H.S. prices
Packs of 100. £9

Further information Pharmacodynamic studies have shown no potentiation of oral hypoglycaemic and anti-coagulant drugs.

Product Licence No. Tablets 25mg PL0001/0036

Product Licence Holder Geigy Pharmaceuticals, Macclesfield, Cheshire, SK10 2LY

