


# THE PRO CHOICE IN ARTHRITIS



It is commonly agreed that prostaglandins confer upon the gastric mucosa a resistance to erosion and damage.<sup>1</sup> This so called mucoprotection is compromised by the use of antiarthritic drugs which are prostaglandin synthetase inhibitors. It has been suggested that this is of great relevance to the observed level of gastric side-effects observed with this class of drug.

Lederfen in the stomach has little or no effect on the mucoprotection conferred by the endogenous prostaglandins.<sup>2</sup> Simply, unmetabolised Lederfen is not a prostaglandin synthetase inhibitor.

The major metabolites of Lederfen are however most potent PSIs, shown by in vitro studies to be twice as potent as indomethacin.<sup>2</sup> Thus, once Lederfen



has been absorbed—avoiding prostaglandin-associated gastric compromise—a powerful antiarthritic effect is observed. Lederfen has been found to be at least equal in clinical effectiveness to reference standards including naproxen,<sup>3</sup> indomethacin,<sup>4</sup> and aspirin.<sup>5</sup> But with significantly fewer side-effects.

Power without doubt. The pro-choice in arthritis.

## Lederfen fenbufen TABLETS

the pro-drug way to  
control pain, stiffness  
and side-effects

**Indications:** Rheumatoid arthritis, osteoarthritis, ankylosing spondylitis. **Dosage: Adults:** One tablet in the morning and two at night. LEDERFEN is not a gastric irritant and is converted, following absorption into long-acting active metabolites. Consequently LEDERFEN is extremely unlikely to cause gastro-intestinal bleeding or ulceration. Furthermore, LEDERFEN may be used without dosage modification in elderly patients in whom mild to moderate renal impairment commonly occurs. **Contra-indications:** Hypersensitivity to propionic acid anti-inflammatory drugs or aspirin. **Precautions:** In patients with a history or evidence of active peptic or intestinal ulceration, and only when considered essential in pregnant and nursing women. **Side-effects:** LEDERFEN is well tolerated by most patients. Gastro-intestinal symptoms, and occasionally skin rash are the most commonly reported. **Legal Category:** POM. **Presentation:** Light blue, film coated, capsule shaped 300 mg tablets engraved "LL300," or capsules printed "Lederle 300 mg," in bottles of 100. **Basic NHS Cost:** £16.24 per 100 tablets or capsules. PL/00925/0081. Further information is available on request to the company.

**Lederle Laboratories, a division of Cyanamid of Great Britain Limited, Fareham Road, Gosport, Hants PO13 0AS. Tel: (0329) 236131.**

**References:** 1. Guth PH, Ann Rev Med; 33: 183-196 (1982) 2. Birnbaum J, et al, Pharmacology; 25 (Suppl. 1): 27-38 (1982) 3. Khan FM, to be published 4. Salzman R T, Reid R T, Eur J Rheum and Inflamm; 5 (3) 318-325 (1982) 5. Roden DF, J Irish Med Assoc; 72 (No. 6.) 250-256 (1979).



Lederfen is a trademark.

# A RADICALLY NEW WAY TO DELIVER RELIEF FROM ARTHRITIS

unique pH-sensitive



**NEW**  
**ONCE-DAILY**

2 CAPSULES o.d.

# Oruvail

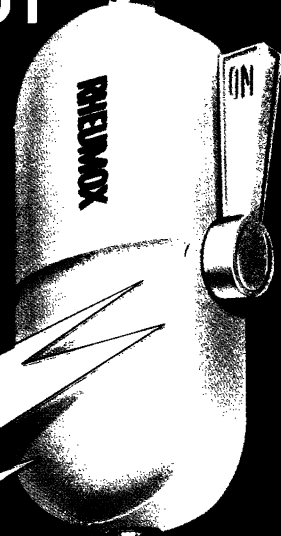
ketoprofen

Programmed to control your patients'  
symptoms 24 hours-a-day



# THE ONLY SINGLE DRUG TREATMENT FOR ACUTE AND CHRONIC GOUT

NEW  
INDICATION



# RHEUMOX

AZAPROPAZONE DIHYDRATE

Rapid pain relief

Reduction of abnormal  
serum urate levels

## The unique analgesic

**Indications:**  
Rheumatoid arthritis, acute and chronic gout, osteoarthritis, ankylosing spondylitis, neuralgia, headache, menstrual pain, postoperative pain, dental pain, and other conditions where analgesia is required.

**Contraindications:**  
Hypersensitivity to azapropazone or any of the excipients, severe liver or kidney disease, and pregnancy.


**Side Effects:**  
Nausea, vomiting, diarrhoea, constipation, dizziness, and headache.

**ALLROBINS**


ALLROBINS COMPANY LIMITED  
Parsippany, N.J., U.S.A.  
West Wycombe, England BB10 2UP




# Long term activity in arthritis




**I**N the treatment of arthritis, relief of pain and inflammation is a major objective. The ultimate aim, however, is to restore mobility lost through painful, stiffened joints. This requires long-term, consistently effective control of pain and inflammation. Continuity of treatment is fundamental to the successful management of arthritis.



**PRODUCT** of Boots Research, Froben is designed for the long-term treatment of arthritis. Rapidly absorbed, it quickly reaches the affected joints bringing pain and inflammation firmly under control and maintaining that control over long periods of treatment. Drug accumulation does not occur and Froben is well tolerated by most patients. Froben is suitable for continuous treatment. Which is why it is effective.



**S**UITABLE for most arthritic patients, Froben is particularly valuable for those who need a high level of relief from pain and inflammation. Froben will provide that extra relief without the high incidence of side-effects often associated with the more potent of the anti-arthritic agents.



**F**ROBEN is an excellent anti-arthritic with which to start treatment. It is an excellent antiarthritic with which to continue treatment. With Froben, your arthritic patients will receive the full benefit of continuous, consistent long-term therapy.


## Froben flurbiprofen Active in Arthritis

**Prescribing information:**  
**Precautions:** Sugar-coated tablets, each containing either 50mg or 100mg of flurbiprofen. **Uses:** Froben is indicated in the treatment of rheumatoid disease, osteoarthritis and ankylosing spondylitis. **Dosage:** 150mg to 200mg daily in 3 or 4 divided doses. In patients with severe symptoms or disease of recent origin, or during acute exacerbations, the total daily dose may be increased to 300mg in divided doses. **Contra-indications, Warnings etc:** Froben should not be given to patients with peptic ulceration. Care should be taken when administering the drug to patients with asthma or who have experienced bronchospasm with other anti-inflammatory or analgesic agents. The safety of Froben during pregnancy or lactation has not been established. In animal experiments, no teratogenic effects were demonstrated but parturition was delayed and prolonged. **Side-effects:** dyspepsia, heartburn and headache are the commonest encountered. Occasional skin rashes have been reported. **Treatment of overdose:** gastric lavage and, if necessary, correction of serum electrolytes. There is no specific antidote. **Boots N.B. Price:** 50mg tablets, 100 £2.24 100mg tablets, 100 £1.65. **Product Licence No:** 50mg tablets, PL0014/0167, 100mg tablets, PL0014/0168. Further information is available on request.

If you have not yet used Froben, naturally you will wish to know more about the product than we can convey in this advertisement. We will gladly send you the Froben Clinical & Technical Review upon your request.

Name .....

Address .....

 The Boots Company Ltd. Nottingham England

# New Product

# towards mobility

**F**losint offers major anti-inflammatory/analgesic activity WITHOUT an unacceptable level of adverse effects, possessing both the powerful anti-inflammatory properties of indomethacin and the potent analgesic effects of the propionic acid derivatives.

Flosint is particularly suitable for treatment of a wide range of arthritic disorders including:

- ✦ Osteoarthritis
- ✦ Rheumatoid arthritis
- ✦ Ankylosing spondylitis
- ✦ Non-articular rheumatism

## Prescribing Information

**Presentation** White, uncoated, biconvex, scored tablets containing 200 mg indoprofen.

**Uses** Flosint is an analgesic anti-inflammatory indicated for the treatment of the arthritides; rheumatoid arthritis, osteo-arthritis, ankylosing spondylitis and others. Its analgesic activity may be utilised in a variety of disorders characterised by mild to moderate pain such as lower limb ischaemia, episiotomy and other surgical and dental procedures, and malignancy.

**Dosage and Administration** Adults: The recommended initial dosage of indoprofen is 200 - 600 mg daily in two to three divided doses. In some severe conditions it can be advantageous to increase the daily dosage to 800 mg. Maintenance therapy can be accomplished by reducing the dosage to the level which gives satisfactory relief of symptoms for prolonged periods. The tablets should be taken with food to increase tolerability. Children: Paediatric usage has not been established.

## Contra-Indications, Warnings, etc.

**Contra-Indications:** Indoprofen is a propionic acid derivative and a prostaglandin synthetase inhibitor. It should not be given to patients with known sensitivity to this class of compounds or to patients with active peptic ulceration. **Warnings:** Bronchospasm may be precipitated in patients suffering from or with a previous history of bronchial asthma or allergic disease. Indoprofen is extensively protein-bound, and may displace oral anti-coagulants, sulphonylureas, etc. from binding sites. Dosage alterations may be needed in patients requiring concomitant treatment with these agents. Dosage reduction may be required in renal or hepatic impairment. **Pregnancy:** Animal experiments show no evidence of teratogenicity. However, this class of compounds has been shown to delay parturition in animals. The use of indoprofen during pregnancy should be avoided if possible. **Adverse Effects:** The most common adverse reactions caused by indoprofen are gastro-intestinal, including dyspepsia and nausea. Haemorrhage can occur rarely, as well as peptic ulceration. Other effects include mild central nervous system symptoms, such as dizziness and headache, and also skin rashes of various types. Decrease in platelet count has been observed rarely and blood dyscrasias may uncommonly occur. Limited data available suggests that abnormal liver function may be further impaired by treatment with indoprofen. **Overdosage:** Gastric lavage and general supportive treatment should be carried out. There is no specific antidote.

## Legal Category POM

**Package Quantities** Containers of 100 tablets.

**Basic NHS Cost** Container of 100 tablets - £16.00

**Product Licence Number,** 3433/0034  
April 1983

## References:

1. *Eur. J. Rheumatol. Inflamm.* (1981), **4**, 103
2. *Curr. Med. Res. Opin.* (1979), **5**, 793
3. *Eur. J. Rheumatol. Inflamm.* (1981), **4**, 74
4. *Eur. J. Rheumatol. Inflamm.* (1981), **4**, 53
5. *Eur. J. Rheumatol. Inflamm.* (1981), **4**, 1
6. *J. Oral Surg.* (1981), **39**, 21
7. *J. Int. Med. Res.* (1982), **10**, 306.

Further information is available from:  
MONTEDISON GROUP

**FARMITALIA**  
**CARLO ERBA LTD.**

KINGMAKER HOUSE, STATION ROAD, BARNET,  
HERTS EN5 1NU

# without pain

Clinical evidence has confirmed that Flosint is at least as effective as other anti-inflammatory agents in relieving pain and inflammation.<sup>1,4</sup>

**FLOSINT**  
INDOPROFEN

- Highly effective anti-inflammatory properties.<sup>5</sup>
- Powerful, rapid relief of pain - superior in pain relief to paracetamol (650mg) plus dextropropoxyphene (100mg).<sup>6</sup>
- Well tolerated by most patients<sup>5</sup> - the spectrum of adverse reactions does not differ significantly from other leading non-steroidal, anti-inflammatory drugs.<sup>7</sup>
- Dosage tailored to meet the patients' changing needs - simple b.d. dosage.





# in arthritis

# FLENAC<sup>®</sup>

fenclofenac

## a step beyond symptomatic relief

Flenac is not only a first-class treatment for arthritic pain and inflammation; recent studies<sup>1-4</sup> point to an extra benefit not shared by other non-steroidal anti-inflammatories.

These studies show Flenac to have a beneficial effect on E.S.R. and on C-reactive protein and Rheumatoid Factor titres – the laboratory parameters considered to best reflect disease activity and correlate with radiological evidence of joint damage<sup>5</sup>

## reducing eventual joint damage

## relieving pain and inflammation



**Prescribing information: Presentation** Tablets of 300mg fenclofenac. **Indications** Chronic and sub-acute rheumatoid conditions such as osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, **Dosage and Administration** Adults 600-1200mg (2-4 tablets) daily in divided doses (morning and night) with or after food. Flenac is not recommended for children. **Contra-indications** Active peptic ulceration or gastric bleeding. **Warnings** Flenac should not at present be prescribed for children or for pregnant or lactating women. Flenac should not be co-administered with anti-coagulants. Care should be taken when treating patients with known renal or hepatic dysfunction, eczema, asthma or sensitivity to other non-steroid anti-inflammatory drugs. **Note** Flenac interferes with the 17-OH test. **Side-effects** Gastro-intestinal symptoms sufficient to require discontinuing treatment are rare. Rashes have occurred, but have resolved shortly after withdrawal of the drug. **N.H.S. Price** £10.40 pack of 100. **P.L.** 44/0060. **References** 1. *Roy Soc Med (CSS)* (1980) No 28, p.95-100. 2. *Roy Soc Med (CSS)* (1980) No 28, p.11-22. 3. *Roy Soc Med (CSS)* (1980) No 28, p.67-69. 4. *Roy Soc Med (CSS)* (1980) No 28, p.109-112. 5. *Brit Med J* (1980) 280, p.964. Additional information is available from Reckitt & Colman Pharmaceuticals Division, Hull HU8 7DS, Tel: (462) 26151. Flenac is a registered trademark. P01075/9/80



# NEUROGAR TENS Why pay Less?



Of course you can buy a cheaper TENS unit. But when the most effective pain relief is required, NEUROGAR leaves the others behind. The range features the exclusive modulated pulse, lessening patient adaptability and proving its value in many areas including anaesthetics, physiotherapy, rheumatology, post-operative work, obstetrics, dental surgery, orthopaedics and other pain relief applications.

Prices, including full accessories:

Neurogar II £132.80 plus VAT  
Neurogar III £147.30 plus VAT  
Neurogar IV\* £208.00 plus VAT

\*This model combines pain relief with a unique muscle rehabilitation programme.

I would like to know more about the NEUROGAR range of TENS:

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
POSITION \_\_\_\_\_ **ARD1**

SUPPLIED BY:

**EURO  
CRAFT**

3 CORK STREET  
LONDON W1K 1HA  
TEL 01 734 9651



**Royal Postgraduate  
Medical School**

(University of London)

## Advanced Rheumatology

22-24 June 1983

This annual course in postgraduate rheumatology is aimed at consultants, senior registrars and others interested in advanced rheumatology.

The course will include lectures, seminars and clinical presentations. Direct practical experience with certain laboratory procedures will be arranged.

**Topics will include:**

SLE—immunology and genetics  
RA—markers of disease modification  
Seronegative arthritis and bowel-associated antigens  
Overlap syndromes and ENA  
Arteritis—pathogenetic mechanisms  
Crystals and inflammation  
Malignancy and arthritis  
Collagen and arthritis  
Treatment; conventional and unconventional  
(Recent topics include plasma exchange, sex hormones, total body irradiation, pulse methylprednisolone, etc)

**Course fee (inc catering):**  
£60 for home and EEC students  
£225 for overseas students

**Course organiser:**  
Dr G R V Hughes

**Application forms from:**

School Office (SSC)  
Royal Postgraduate Medical School  
Hammersmith Hospital  
Du Cane Road  
London W12 0HS Tel: 01 743 2030 ext 351

## STATISTICS IN PRACTICE

STATISTICS AND ETHICS IN MEDICAL  
RESEARCH *Douglas G Altman*

STATISTICS IN QUESTION *Sheila M Gore*

No doctor can afford to ignore statistics: most modern medical research uses statistics. This important and authoritative book, which is a collection of articles that have appeared in the BMJ, provides clear information on designing studies, applying statistical techniques, and interpreting studies that use statistics. It can be easily understood by those with no statistical training and should be read by all those who want to keep abreast of new developments.

Price: Inland £7.00; Overseas US\$27.50  
(including air mail postage overseas)

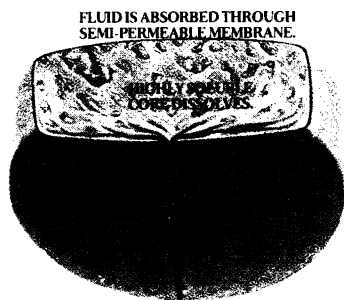
**Order your copy now**

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



**Osmosis.**

# The tablet.



FLUID IS ABSORBED THROUGH  
SEMI-PERMEABLE MEMBRANE.

SEMI-PERMEABLE  
CORE DISSOLVES.

SOLUTIONS RELEASED  
CONTINUOUSLY  
AT A PRECISE RATE.

OSMOSIN is the tablet that releases therapy only in solution.

Designed to deliver a constant flow of relief from pain, inflammation and stiffness.

With a precision and regularity that no other oral therapy can achieve.

OSMOSIN releases a solution gradually and consistently which is absorbed throughout the digestive system.

To help minimise GI and CNS side effects associated with conventional therapies.

One tablet daily will provide full 24-hour efficacy, for most patients.

OSMOSIN is the principle of osmosis in a tablet.

**Osmosin**<sup>TM</sup>  
sodium indomethacin trihydrate

**Antiarthritic.**

FOR MOST ARTHRITIS

**OSMOSIN:** One tablet a day gives  
24-hour relief.

**OSMOSIN:** Highly effective relief  
from pain, inflammation and stiffness.

**OSMOSIN:** Minimises GI and  
CNS side effects.

*Rx Osmosin daily (30)*

**Abridged Product Information.**

Full prescribing information is available on request and should be consulted before prescribing.

**INDICATIONS** Osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, acute musculo-skeletal disorders and low back pain. Pain and associated symptoms of primary dysmenorrhoea.

**DOSEAGE** Usually one daily. If required one twice daily, take whole - do not chew or crush - and take with food or immediately after a meal. The maximum dose is two per day.

**CONTRA-INDICATIONS** Active peptic ulcer, history of gastro-intestinal lesions, sensitivity to indomethacin or other non-steroidal anti-inflammatory agents, children, lactating women, and pregnancy.

**PRECAUTIONS** If GI symptoms occur, weigh benefits against risks of continuing. If GI bleeding occurs discontinue OSMOSIN. May mask the signs and symptoms of infection. Use cautiously in the elderly and in patients with a history of psychiatric disorders, epilepsy or parkinsonism. Monitor the prothrombin time when adding OSMOSIN to the treatment of patients on anticoagulants. Interactions: aspirin, probenecid, lithium, frusemide, thiazides, beta-blockers.

**SIDE EFFECTS** OSMOSIN is usually well tolerated. GI symptoms including nausea, dyspepsia, are most common. Isolated cases of peptic ulcer and bleeding have been reported with indomethacin as have hepatic, CVS, and renal effects. CNS symptoms including headache, dizziness, rarely hypersensitivity including skin rashes, and haematological reactions; ocular changes including blurred vision and corneal deposits have occurred.

**BASIC NHS COST** Each OSMOSIN Tablet is blue, coded 'OSMOSIN' and contains 105mg sodium indomethacin trihydrate. Pack of 30 - Basic NHS price £10.80.

Product licence number: 0025-0148 Product authorisation number: 35-59-1

Issued November 1982

TM denotes trademark.



Merck Sharp & Dohme Limited, Hoddesdon, Hertfordshire, EN119BU

**Osmosin**<sup>TM</sup>  
sodium indomethacin trihydrate  
**Antiarthritic.**

# This Publication is available in Microform.



Please send additional information for \_\_\_\_\_  
(name of publication)

Name \_\_\_\_\_

Institution \_\_\_\_\_

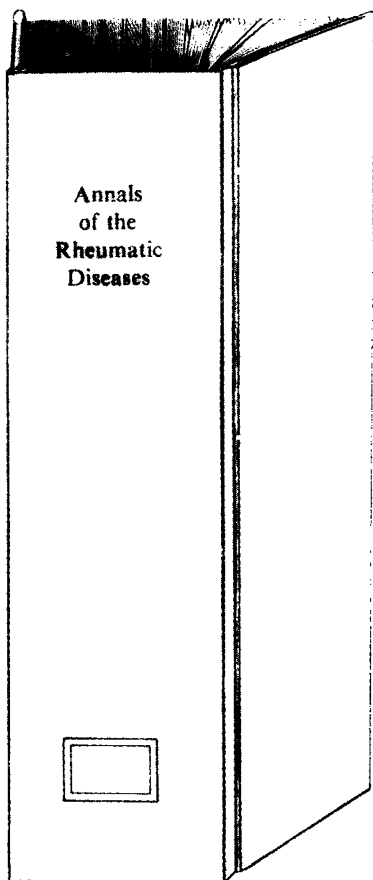
Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

**University  
Microfilms  
International**

300 North Zeeb Road, Dept. P.R., Ann Arbor, Mi. 48106



# 'CORDEX'

## SELF-BINDING CASES

*for easy and instant reference*

Made to hold one volume  
(6 issues) of your  
**ANNALS OF THE  
RHEUMATIC DISEASES.**

Each case is handsomely  
bound with a colour to  
complement the journal.  
Spring nylon cords, to carry  
the journals, slide freely along  
the spine of the binder. The  
name of the journal is gold-  
blocked on the spine. Date  
labels are also provided.

**Price:** Inland £4.00; Overseas US\$12.00  
including postage (air mail overseas) and packing

## ORDER NOW

*From:* The Subscription Manager,  
**ANNALS OF THE RHEUMATIC DISEASES**  
BMA House, Tavistock Square, London WC1H 9JR

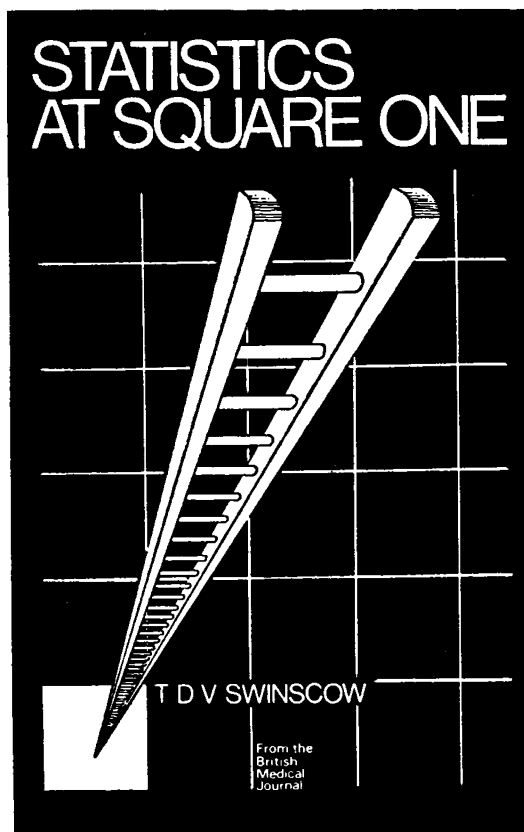
# STATISTICS by T. D. V. SWINSCOW AT SQUARE ONE

from the *British Medical Journal*

The statistical testing of data is indispensable in many types of medical investigation and a help on countless occasions in clinical practice. This book provides step-by-step instruction. Subjects covered include standard deviation,  $\chi^2$  tests, t tests, non-parametric tests, and correlation. The book includes sections on Fisher's exact probability test and rank correlation not published in the *B.M.J.* series. Methods specially adapted to pocket calculators.

"The ability to put symbols in sequence may well be one of the greatest advances in man's development . . . This excellent and attractive volume will give you an idea into which category an article or projected article fits. The ink you save may be your own. It is superb value."  
O'Donnell, Barry, *British Medical Journal*, 1977, 1, 451.

" . . . this gem of a practical booklet squeezes the essence of biostatistics into 75 well-written, well-organized pages. Newcomers to the field will like the way obscure concepts are clarified; experts will find the book valuable as a teaching aid."  
de Jong, Rudolph, H., *J.A.M.A.*, 1977, 237, 1874.



---

**Seventh edition**

---

PRICE: Inland £2.50

Overseas US\$10.00  
including postage  
by air mail

*Payment must be enclosed with order or a surcharge of 50p will be made for rendering invoices and statements*

**ORDER YOUR COPY NOW**

*From: The Publisher,  
British Medical Journal,  
BMA House,  
Tavistock Square,  
London WC1H 9JR*

*or through any leading bookseller*