

Pain relieving power in harness

When Brufen was first introduced, it soon established a reputation as an effective and exceptionally well tolerated drug.

That was more than ten years ago.

Since then, many new anti-inflammatory agents have become available for the treatment of rheumatic conditions. Brufen has been evaluated against most of them.

Today, Brufen is prescribed in more than 100 countries across the World; more than 30 million people have been treated with Brufen.

Experience has confirmed that Brufen is one of the most efficient, reliable and best tolerated drugs available for the treatment of arthritis.

BRUFEN

ibuprofen B.P.

400

The Great British Workhorse in arthritis

Prescribing Information:

Presentation: Brufen 400 are 400mg tablets each containing 400mg of ibuprofen B.P. The tablets are white, triangular, and marked with the word "Brufen 400" on one side.

Uses: Brufen is indicated for the relief of inflammation and pain, and is used in the treatment of rheumatoid arthritis, osteoarthritis, ankylosing spondylitis, and other forms of arthritis. It is also used for the relief of pain and inflammation in the treatment of acute and chronic gout. Brufen is also used for the relief of pain and inflammation in the treatment of menstrual pain and dysmenorrhea.

Dosage and Administration

Adults: The recommended dose is 400mg Brufen 400 tablets 3-4 times daily, after meals. The maximum dose is 1200mg daily. The tablets should be taken with food and water. The tablets should be taken with food and water. The tablets should be taken with food and water. The tablets should be taken with food and water.

Contraindications

Brufen should not be given to patients with severe renal impairment or liver disease.

Use in Pregnancy

Brufen should not be given to pregnant women.

Warnings and Adverse Effects

Brufen should be prescribed with caution to patients with asthma, peptic ulcer, or other gastrointestinal disorders. Brufen should be prescribed with caution to patients with renal impairment, liver disease, or other conditions. Brufen should be prescribed with caution to patients with hypertension, heart disease, or other conditions. Brufen should be prescribed with caution to patients with diabetes, epilepsy, or other conditions. Brufen should be prescribed with caution to patients with other conditions.

Treatment of Overdosage

There is no specific antidote for Brufen. Treatment should be symptomatic and supportive.

Pharmaceutical Precautions

Brufen should be stored in a cool, dry place, protected from light and moisture.

Legal Category

Brufen 400 is a Schedule 2 drug under the Misuse of Drugs Act 1968.

Package Quantities

Brufen 400 is available in 100 and 250 tablets.

Further Information

Brufen should be taken on an empty stomach, 30 minutes before or after meals. Brufen should be taken with food and water. Brufen should be taken with food and water. Brufen should be taken with food and water. Brufen should be taken with food and water.

Basic NHS Price

Brufen 400 250 Pack: £10.54

Product Licence Number

Brufen 400: PL0014-01A



BRUFEN is a registered trade mark.
The Boots Company Ltd.
Nottingham

Nu-Seals. The logical route for aspirin in arthritis.

Enteric sealed Aspirin BP.

Nu-Seals offers all the accepted benefits of aspirin in arthritis without the drawbacks and at a fraction of the cost of most anti-inflammatories.

Caution against
frequent
gastric side-effects.

 **Nu-Seals**
600mg 2 tabs q.i.d.

Enteric coated
Nu-Seals resist the
gastric acids.

Nu-Seals dissolve readily in
the less acid conditions of
the duodenum, minimising
gastric side-effects.

Nu-Seals. Prescribing Information.

Presentation.

Enteric sealed tablets of Aspirin BP. Nu-Seals Aspirin is available in two sizes containing 300 mg (coded B01) and 600 mg (coded B06) acetylsalicylic acid covered in a special coating, red in colour.

Uses.

Aspirin has analgesic, antipyretic and anti-inflammatory actions. Nu-Seals Aspirin is indicated wherever high and prolonged dosage of aspirin is required. The special coating resists dissolution in gastric juice, but will dissolve readily in the relatively less acid environment of the duodenum. In addition the coating is susceptible to the action of certain intestinal enzymes which assist the release of the drug at this point. Owing to the delay that the coating imposes on the release of the active ingredient, Nu-Seals Aspirin is unsuitable for the short-term relief of pain.

Dosage and Administration.

"NU-SEALS" Aspirin is for oral administration. The usual adult dose of aspirin is 300-900 mg repeated three to four times daily according to clinical needs. In acute rheumatic disorders the dose is in the range of 4-8 g daily, taken in divided doses. "NU-SEALS" Aspirin should not be given to children under the age of 5 years, as the usually recommended maximum single dose is less than that provided by the smaller size tablet. Children aged 6-12 years may be given 300 mg up to four times daily.

Contra-indications, Warnings, etc.

Hypersensitivity to aspirin. Hypoproteinaemia and haemophilia. Warnings: Salicylates should be used with caution in patients with peptic ulcer or coagulation abnormalities. In large doses, salicylates may also decrease insulin requirements.

Precautions: Salicylates may enhance the effect of anti-coagulants and inhibit the uricosuric effect of probenecid. They may also precipitate bronchospasm or induce attacks of asthma in susceptible subjects. The safety of aspirin during pregnancy has not been established.

Side-effects: Salicylates may induce hypersensitivity, urate kidney stones, chronic gastro-intestinal blood loss, tinnitus, nausea and vomiting. The special coating of Nu-Seals Aspirin helps to reduce the incidence of side-effects resulting from gastric irritation.

Overdosage: produces dizziness, tinnitus, sweating, nausea and vomiting, confusion and hyperventilation. Gross overdosage may lead to CNS depression with coma, cardiovascular collapse and respiratory depression. Treatment of overdosage consists of gastric lavage and forced diuresis. Haemodialysis may be necessary in severe cases.

Pharmaceutical precautions. Nil.

Legal category. P.

Package quantities. Bottles of 100 and 500.

Further information. Nil.

Product licence numbers,

Nu-Seals Aspirin 300 mg 0006/5093 PA 47/36/1.

Nu-Seals Aspirin 600 mg 0006/5094 PA 47/36/2.

Basic NHS price. £1.63 for 100 enteric coated 600 mg tabs.



Further information is available on request from
Eli Lilly and Company Limited, Kingsclere Road,
Basingstoke, Hampshire RG21 2XA. NU 18 Mar '80.

Diseases of Connective Tissue

*The Proceedings of a Symposium organized by
The Royal College of Pathologists*

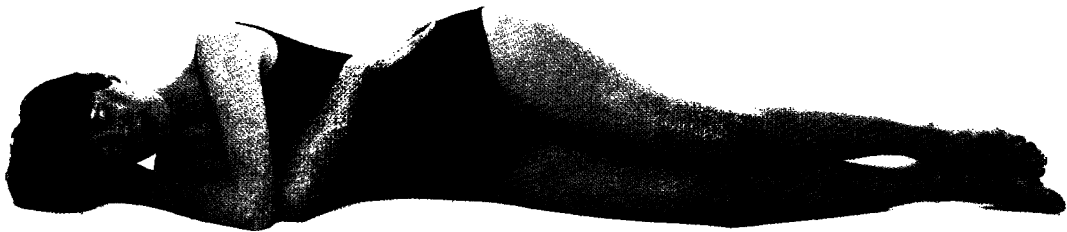
Edited by D. L. Gardner

The cells—Fibroblasts ● Chondrocytes ● Synoviocytes ● The muscle cell ● **Extra-cellular materials**—Collagens ● Collagen and elastin fibres ● Basement membrane ● Proteoglycans of cartilage ● **Disease mechanisms**—Diseases of the collagen molecule ● Molecular abnormalities of collagen ● Lysosomes and the connective-tissue diseases ● **Genetic disease**—HLA system and rheumatic disease ● Replacement therapy in the mucopolysaccharidoses ● Genetic disease and amyloid ● **Inflammation and fibrosis**—Rheumatoid arthritis—a virus disease? ● Systemic lupus erythematosus—an autoimmune disease? ● Hepatic cirrhosis—a collagen formative disease? ● Fibrosis of lung—an environmental disease? ● **Kettle Memorial Lecture**—Atherosclerosis—disease of old age or infancy? ● **Structural and metabolic disease**—New knowledge of connective tissue ageing ● New knowledge of osteoarthritis ● New knowledge of intervertebral disc disease ● New knowledge of the pathogenesis of gout ● New knowledge of chondrocalcinosis ● **A consensus**—Connective tissue diseases: A consensus

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**Especially suited for treating
night pain and morning stiffness**

**In rheumatoid arthritis
and osteoarthritis**

Geigy

Full prescribing information is available from
Geigy Pharmaceuticals, Horsham, West Sussex.

feprazone

As befits a modern anti arthritic, Methrazone has a low incidence of major adverse effects – and has stood up strongly to a particularly searching scrutiny of its safety in short and long term monitored programmes. Adding Methrazone to the armamentarium can only strengthen your choice.

W.B. Pharmaceuticals Ltd. 577

A preliminary study reported at the IXth European Congress of Rheumatology at Wiesbaden¹ indicates that there may be an important addition to that select group of drugs which can actually alter the disease profile of rheumatoid arthritis. This agent is Flenac, already known for its analgesic and anti-inflammatory properties, but now also shown to exhibit anti-rheumatoid effects comparable with those of D-penicillamine.

anti-rheumatoid effects demonstrated in recent study

The report described a single-blind trial, conducted in two British hospital centres, comparing the effects of Flenac, D-penicillamine and placebo in three groups of patients (47 in all) with severe rheumatoid disease. All patients were maintained on their existing anti-inflammatory/analgesic treatment throughout the study.

Clinical and laboratory parameters of disease activity were assessed three, four and six months after treatment began.

Flenac significantly improved all clinical parameters of disease activity – the duration of early morning stiffness was reduced and severity of pain decreased, joint size, grip strength and articular index all improved.

Laboratory parameters of rheumatoid activity – E.S.R., C-reactive protein and immunoglobulins – all showed decreases. In seven out of the eight seropositive

patients in the Flenac group a fall in rheumatoid factor titre was observed during the trial.

In the context of this preliminary study, Flenac was comparable with, or superior to, D-penicillamine in the majority of measured parameters. In contrast, 13 of the 15 patients on placebo had to be

withdrawn from the trial, 12 of them because of lack of effect.

The total number of side-effects reported in the Flenac group (7) was not significantly different from that reported in the placebo group (5), whilst a total of 18 side-effects was reported in the group receiving D-penicillamine.

Changes in clinical and laboratory parameters during therapy

	Flenac			D-penicillamine		
	after 3 months	after 4 months	after 6 months	after 3 months	after 4 months	after 6 months
Early morning stiffness (minutes)	-25	-36*	-37*	+20	-26	-60**
Articular index	-3.8	-7.9	-9.2*	-1.6	-1.9	-0.9
Ring size	-6	-14**	-18**	-3	-6	-16**
Grip strength (mm Hg)	+20	+58	+68*	+2	+23	+37
Pain – visual analogue scale	-13	-22**	-35**	-1	-6	-14
C-reactive protein (mg 100ml ⁻¹)	-0.02	-1.7*	-1.6*	+1.3	-0.04	-0.5
ESR (mm/hr ⁻¹)	-8	-18**	-9	-18**	-13*	-20*
IgM (mg 100ml ⁻¹)	-30*	-12	-15	-8	-4	+3
IgG (mg 100ml ⁻¹)	-32*	-300*	-240**	+179	-62	+80

*significance $p < 0.05$

**significance $p < 0.01$

FLENAC[®]

fenclofenac

**analgesic, anti-inflammatory
and now shown to exert
demonstrable anti-rheumatoid effects**

Presentation Tablets of 300mg fenclofenac.

Indications Chronic and sub-acute rheumatological 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 gastro-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-steroidal anti-inflammatory drugs.

Note Flenac interferes with thyroid function tests.

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 £11.24 (pack of 100).

¹ Paper presented at IXth European Congress of Rheumatology, Wiesbaden, Germany, Sept. 1979.

Additional information is available from Heckli & Colman, Pharmaceutical Division, Hull HUB 705, Tel. 0482 26151. Distributors in Republic of Ireland: Reckitt's Ireland Ltd., Dublin 12. Flenac is a registered trade mark.

PL 44,000p (incl. VAT) 7/15



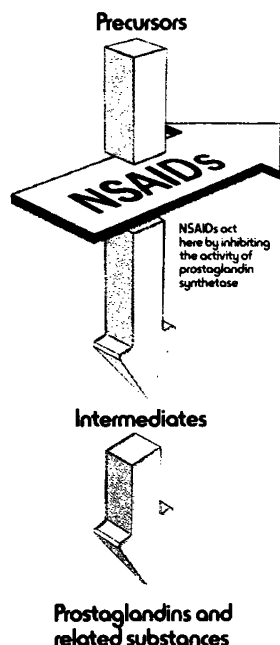
Arthritis

When a nonsteroidal
anti-inflammatory agent
is indicated...

...a potent
antiprostaglandin
must be considered
as first line treatment

Froben is a potent antiprostaglandin

It is now accepted that the analgesic and anti-inflammatory effect of nonsteroidal anti-inflammatory drugs (NSAIDs) is due mainly to their inhibitory action on prostaglandin synthetase activity. It has also been well demonstrated that the level of antiprostaglandin activity exhibited by these drugs correlates closely with their clinical analgesic and anti-inflammatory potency.

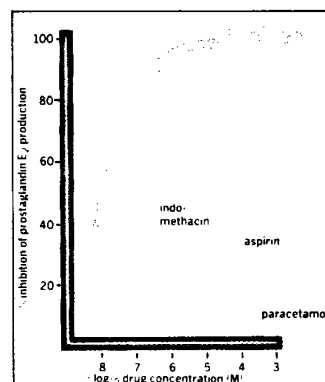


Since the antiprostaglandin activity of a drug bears a relationship to its clinical potency, the higher the level of this activity, the more likely it is that the drug will be effective in reducing pain and inflammation.

"...the study *in vitro* of the inhibitory effect of a drug on prostaglandin synthetase activity may be used to predict, in most cases, its anti-inflammatory activity..."¹

A potent antiprostaglandin must be considered as first line treatment in arthritis.

"Concurrent studies in our department have shown flurbiprofen to be one of the most powerful of the anti-inflammatory drugs in inhibiting the action of prostaglandin synthetase from rheumatoid synovium..."²



Froben is a potent antiprostaglandin.

In the treatment of osteoarthritis, rheumatoid disease and ankylosing spondylitis, Froben provides the powerful analgesic and anti-inflammatory action needed to effectively relieve the pain and stiffness of arthritis and so provide a progressive improvement in the mobility of the arthritic patient.

Prescribing Information

Presentation: 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 of 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 overdosage: gastric lavage and, if necessary, correction of serum electrolytes. There is no specific antidote.

Basic NHS Price: 50mg tablets, £0.65; 100mg tablets, £1.15.

Product Licence No: 50mg tablets, PL0014/0167; 100mg tablets, PL0014/0168.

References: 1. Garcia-Rafanelli J. and Forn J. *Arzneim-Forsch. Drug Res.* 1979, **29**, 630.
2. Bacon P.A. *et al. Curr. Med. Res. Opin.* 1975, **3**, Suppl 4/20.

Froben

flurbiprofen

**Arthritis: tomorrow
there may be a cure.
Today, there's Froben.**



Arthritis

- ★ 24 hour cover
- ★ Highly effective
- ★ Low level of side effects

2 capsules at night **Lederfen**^{*}
fenbufen



Prescribing Information

Presentation 300 mg Capsules Dark blue capsules each containing 300 mg of fenbufen and printed 'Lederfen 300 mg' on both the cap and body. **Uses** Lederfen is a potent non-steroidal anti-inflammatory and analgesic agent indicated for the symptomatic treatment of rheumatoid arthritis and osteoarthritis. **Dosage and Administration Adults** 2 or 3 capsules (600/900 mg) daily in single or divided doses. Many patients can be adequately controlled with a daily dosage of 2 capsules (600 mg) taken at night, whereas some may require extra capsules in the morning. Total daily dosage should not exceed 600 mg in single doses or 900 mg in divided doses. **Children** Not recommended for administration to children under the age of 14. **Contra-indications, Warnings, etc.** **Contra-indications:** Hypersensitivity to non-steroidal anti-inflammatory drugs or aspirin. **Precautions:** Lederfen should be used with great caution in patients with a history or evidence of peptic ulcer, asthma, ulceration and so on, when considered essential in pregnant and nursing women. **Warnings and Adverse Effects** Adverse effects may include gastrointestinal intolerance. Other reactions have occurred infrequently, including skin rash, dizziness, drowsiness and headache. Skin rashes, diarrhoea, blood leukocytes, haemoglobin and haematocrit as well as liver enzymes.

and liver function and also uric acid have occasionally been recorded. Transient equine skin reactions and conjunctivitis have occurred in some patients. **Drug Interactions:** When single doses of aspirin 900 mg and Lederfen 500 mg are administered together, serum concentrations of Lederfen and its metabolites are reduced by 10% to 20%. Concurrent use of aspirin may reduce the apparent dosage of Lederfen. Lederfen is strongly protein bound. Although plasma protein binding has not been studied, other practitioners should be aware of this property. **Overdosage:** There is no experience with overdosage, consequently the signs, symptoms and treatment have not been identified. There is no specific antidote. **Pharmaceutical Precautions:** Store at a temperature not exceeding 15°C in the original container. Keep tightly closed. **Legal Category:** POM. **Package Quantities:** Bottle of 100. Base N.H.S. cost £16.24 per 100 capsules. **Further Information:** Lederfen's long duration of action is attributable to the prolonged half-life of its active metabolites (10-17 hours). Metabolites are detectable 48 hours after oral administration. Single oral doses given at night will therefore provide adequate plasma levels to provide symptomatic relief throughout the night and morning. **Product Licence Number** 0095/0047

Further information available in request to the company.



Lederle Laboratories, a division of Cyanamid of Great Britain Limited
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