"...the major cause of sepsis after surgery of the gastrointestinal tract or female genital tract".

Br.Med.J. **i**, 318, 1976

METRONIDAZOLE

INJECTION

proves decisive in anaerobic infections

Only with recent improvements in bacterial culturing techniques has the pathogenic role of anaerobes in post-surgical infections been fully recognized.[1-3] Now 'Flagyl' Injection offers you a decisive means of treating these infections—which are often life-threatening and often resistant to established antimicrobials. The response to 'Flagyl' Injection is rapid and dependable,[2] as it is consistently bactericidal to pathogenic anaerobes at tissue concentrations easily achieved in treatment. Bacterial resistance is not a problem,[2,4] and 'Flagyl' is highly acceptable—as eighteen years of use in other indications has established.

Dosage: Treatment: adults and children over 12 years: 100 ml by intravenous infusion eight-hourly, administered 5 ml per minute. Oral medication with 400 mg three times daily should be substituted as soon as this becomes feasible. Treatment for seven days should be satisfactory in most cases. Children under 12 years: as for adults but the single intravenous dose is based on 1.5 ml (7.5 mg metronidazole) per kg bodyweight and the oral dose on 7.5 mg per kg bodyweight. Prevention: adults and children over 12 years: 100 ml by intravenous infusion immediately before, during or after operation, followed by the same dose eight-hourly until oral medication (200 to 400 mg three times daily) can be given to complete a seven-day course. Children under 12 years: as for adults but the single intravenous dose is based on 1.5 ml (7.5 mg metronidazole) per kg bodyweight and the oral dose on 3.7 to 7.5 mg per kg bodyweight. Precautions: pregnancy; lactation; clinical and biological surveillance if recommended duration of treatment exceeded; dosage may be halved for patients with renal failure; avoid alcohol; if 'Flagyl' is to be given to patients receiving oral anticoagulants the dosages of the latter should be recalibrated. Side effects and adverse reactions: occasionally an unpleasant taste, furred tongue, nausea, vomiting (very rarely), gastro-intestinal disturbance. Drowsiness, dizziness, headache, ataxia, skin rashes, pruritus, inco-ordination of movement, darkening of the urine very rarely. During intensive and/or prolonged therapy, peripheral neuropathy has been reported. A moderate leucopenia has been reported but the white cell count has always returned to normal before or after treatment has been completed. Transient epileptiform seizures in a few patients undergoing intensive, high-dosage metronidazole radiosensitization therapy.

'Flagyl' metronidazole

Tablets 200 mg	PL 0012/5256
400 mg	PL 0012/0084
Suppositories 500 mg	PL 0012/0113
1 gram	PL 0012/0114
Injection 0.5% w/v	PL 0012/0107

Basic N.H.S. cost (as at November 1978)
Injection for i.v. infusion Bottle of 100 ml £6.40.

References 1. Willis, A.T. (1977) Scottish Medical Journal, **22**, 155. 2. Willis, A.T. et al. (1977) British Medical Journal, **i**, 607. 3. Finegold, S.M. Anaerobic Bacteria in Human Disease, Academic Press Inc. New York, 1977. 4. Willis, A.T. et al (1975) Journal of Antimicrobial Chemotherapy, **1**, 393, 1975.

Further information is available on request.
'Flagyl' is a trade mark.
May & Baker Ltd., Dagenham, Essex RM10 7XS.

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the complete anaerobicide

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FreAmine II is a concentrated source of naturally occurring biologically available amino acids for intravenous nutrition.

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Promoting anabolism and tissue synthesis–even when central venous administration is continued over long periods.

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Where feeding by mouth is inadequate but central venous infusion is not indicated, FreAmine II is entirely suitable for peripheral parenteral nutrition.

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When the patient is well nourished but unable to take food by mouth, FreAmine II–with or without calorific supplement–can be used for short-term administration to spare body protein.

FreAmine® II

Amino Acids for Intravenous Nutrition

Further information is available on request. FreAmine II is a McGaw product from

The Boots Company Limited Nottingham.

FOR PRESCRIBING INFORMATION SEE OVERLEAF

DUODENAL ULCERATION. WHAT COMES NATURALLY?

'Tagamet' has been shown to be unequalled in the short-term treatment of duodenal ulceration, inducing early and dramatic symptomatic relief, rapid healing and subsequent remission.[1,2]

In addition, 'Tagamet' has been shown to prevent relapse during longer-term maintenance therapy;[3-5] the only drug so far proven to have this property.

However, experience to date tends to suggest that for many patients the natural history of the disease remains unaltered despite medical intervention[6] and the question inevitably arises – will patients with a severe condition require medical treatment for the rest of their lives?

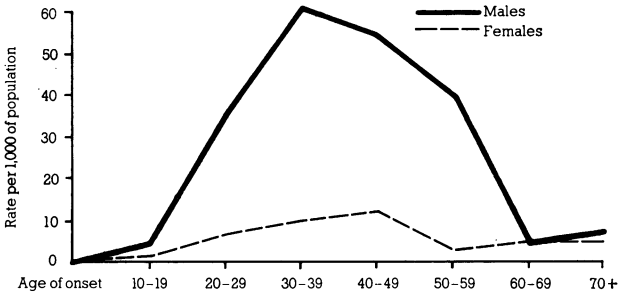
This can only be answered when the natural history of duodenal ulcer disease is fully understood. Some aspects of the natural history of the disease, however, have been well recognised for some years.

It is a naturally relapsing condition; in fact, it has been estimated that 75-80% of patients have at least one recurrence within 5 years of the initial episode,[7] some relapsing several times in one year.

The onset of duodenal ulceration is related to age, as shown in Figure 1. The initial episode is most likely in the 30-39 age group for males and slightly later in life for females.

Of greater interest is the natural development of the disease following its onset. Figure 2 demonstrates how the disease tends to 'burn itself out' after a certain period of time.[8] In a group of duodenal ulcer patients who were followed for 15 years, the symptoms tended to peak in severity after 5 years and then progressively remit until at 10 years no more than 5% of patients had severe symptoms.

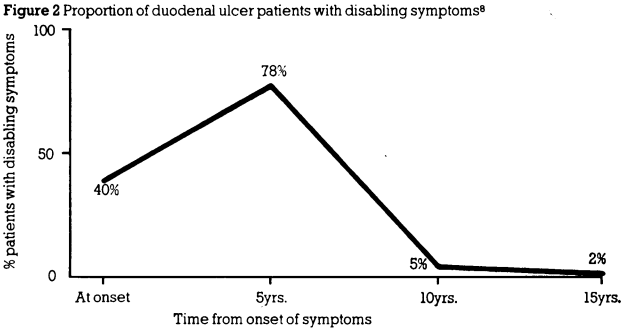
Figure 1 The Onset of Duodenal Ulceration[8]



This finding has been recently substantiated by workers in Denmark who found in a retrospective study that the disease is present for a finite time.[9]

The workers concluded "...most patients with duodenal ulceration will need only intermittent or continuous cimetidine treatment for a limited period."

Figure 2 Proportion of duodenal ulcer patients with disabling symptoms[8]



Prescribing Information
Presentations
'Tagamet' Tablets PL0002/0063 each containing 200mg cimetidine. 100, £13.22; 500, £64.75.
'Tagamet' Syrup PL0002/0073 containing 200mg cimetidine per 5ml syrup. 200ml, £6.29.
Indication
Duodenal ulcer.
Dosage
Adults: 200mg tds with meals and 400mg at bedtime (1.0g/day) for at least 4 weeks (for full instructions see Data Sheet).
To prevent relapse, 400mg at bedtime or 400mg morning and evening for at least 6 months.
Cautions
Impaired renal function: reduce dosage (see Data Sheet).
Potentiation of oral anticoagulants (see Data Sheet).
Prolonged treatment: observe patients periodically.
Avoid during pregnancy and lactation.
Adverse reactions
Diarrhoea, dizziness, rash, tiredness. Rarely, mild gynaecomastia, reversible liver damage, confusional states (usually in the elderly or very ill), interstitial nephritis.

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1. Oral cimetidine in severe duodenal ulceration. (1977) Lancet, **i**, 4.
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8. Peptic ulcer: a profile. (1964) Brit. med. J., **2**, 809.
9. Long-term prognosis of duodenal ulcer: follow-up study and survey of doctors' estimates. (1977) Brit. med. J., **2**, 1572.

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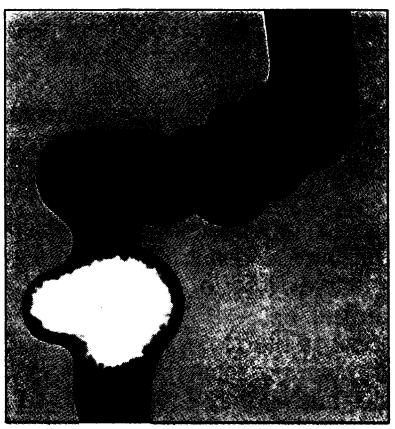
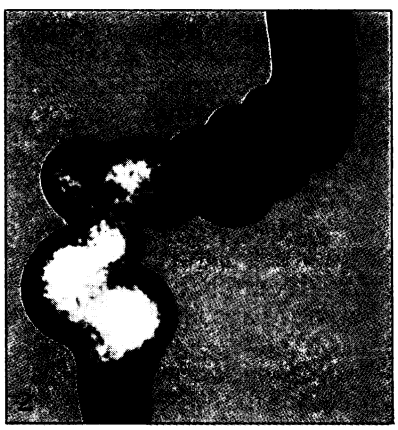
Colifoam

hydrocortisone acetate foam





A remarkable new study[1] carried out in the gastro-enterology department of St. Bartholomew's Hospital now provides firm evidence of the extent to which 'Colifoam' penetrates into the colon – and how long it remains in situ.

The study involved 14 patients with ulcerative colitis. 'Colifoam' labelled with a radioactive marker was administered in the normal recommended dosage, and its penetration recorded by gamma photography.

In all of the patients with active disease the foam reached the mid-sigmoid colon, and in 78% the foam reached the proximal sigmoid colon.

These photographs illustrate results in a typical case:

1. Immediately after instillation. There is already good penetration through the rectum.
2. After 1 hour. 'Colifoam' has now reached the sigmoid colon.
3. After 6 hours. 'Colifoam' is present in high concentration throughout the sigmoid colon, including the proximal segment.

This study confirms the relevance of 'Colifoam' therapy in patients with ulcerative colitis throughout the sigmoid colon: that means a high proportion of new cases, and a significant proportion of all ulcerative colitis sufferers. Indeed, it is noteworthy that retrograde spread of the foam was greatest in patients with more extensive disease.

'Colifoam' offers these patients the benefits of anti-inflammatory therapy

Delivery

in a form that is much more acceptable than the outmoded retention enema.

"Of the twenty patients, 19 found Colifoam easy to use and more comfortable to insert than a steroid enema..."[2]

References

1. Paper presented at Meeting of British Society of Gastro-enterology, Hull, 1979. March 29-30.
2. Practitioner (1977) *219*: 103

In ulcerative colitis

Colifoam

gets to the point

Presentation
White odourless aerosol foam containing hydrocortisone acetate 10% with inert propellants.

Uses
Anti-inflammatory corticosteroid therapy for the topical treatment of ulcerative colitis, proctosigmoiditis and granular proctitis.

Dosage and Administration
One applicatorful inserted into the rectum once to twice daily for two or three weeks and every second day thereafter. Shake can vigorously before use (illustrated instructions are enclosed in each pack).
Satisfactory response usually occurs within five to seven days.
One applicatorful of Colifoam provides a dose of approximately 90-110mg of hydrocortisone acetate, similar to that used in a retention enema, for the treatment of ulcerative colitis, sigmoiditis and proctitis.

Contra-indications and Warnings, etc.
Local contra-indications to the use of intrarectal steroids include obstruction, abscess, perforation, peritonitis, fresh intestinal anastomoses and extensive fistulas.
General precautions common to all corticosteroid therapy should be observed during treatment with Colifoam. Treatment should be administered with caution in patients with severe ulcerative diseases because of their predisposition to perforation of the bowel wall.
Safety during pregnancy has not been fully established.

Package Quantities
Aerosol canister containing 20g (14 applications) plus a plastic applicator and illustrated leaflet.
Basic NHS cost £6.27

Product Licence No.
0036/0021
Further information is available on request.
Stafford-Miller Ltd., Professional Relations Division, Hatfield, Herts.

In dyspepsia, antacids only cloud the issue.

Maxolon
metoclopramide

clears it.

Maxolon protects the gastric mucosa from over-long exposure to gastric acid[1] by promoting normal peristalsis and gastric emptying.[2,3] This action contrasts with that of antacids.

By restoring the stomach's normal control, symptoms described by the patient as fullness, pain, heartburn and discomfort can be effectively treated and their recurrence prevented.[4]

To the patient, Maxolon is the simple and convenient therapy to replace his repetitive antacid prescriptions.

Prescribing Information

Indications
Dyspepsia, heartburn and flatulence associated with the following conditions e.g., Reflux oesophagitis, Gastritis, Hiatus hernia, Peptic ulcer.

Adult Dosage (oral)
Adults 10mg
1 tablet or 10ml syrup 3 times a day.
Young adults (15-20 years) 5-10mg
½-1 tablet or 5-10ml syrup 3 times a day commencing at the lower dosage.

Note: Total daily dosage of Maxolon, especially for children and young adults should not normally exceed 0.5mg/kg body-weight.

Side-effects and Precautions
There are no absolute contra-indications to the use of Maxolon.

Various extra-pyramidal reactions to Maxolon, usually of the dystonic type, have been reported. The incidence of these reactions in children and young adults may be increased if daily dosages higher than 0.5mg/kg body-weight are administered. The majority of reactions occur within 36 hours of starting treatment and the effects usually disappear within 24 hours of withdrawal of the drug. Should treatment of a reaction be required, an anticholinergic anti-Parkinsonian drug e.g. benapryzine, or a benzodiazepine may be used. Since extra-pyramidal symptoms may occur with both Maxolon and phenothiazines, care should be exercised in the event of both drugs being prescribed concurrently.

Raised serum prolactin levels have been observed during metoclopramide therapy; this effect is similar to that noted with many other compounds.

Maxolon's action on the gastro-intestinal tract is antagonised by anticholinergics. Although animal tests in several mammalian species have shown no teratogenic effects, treatment with Maxolon is not advised during the first trimester of pregnancy.

Following operations such as pyloroplasty or gut anastomosis Maxolon therapy should be withheld for three or four days as vigorous muscular contractions may not help healing.

Availability and NHS Prices
Tablets 10mg (£5.84 per 100).
Syrup 5mg/5ml (£2.42 for 200ml).

A paediatric liquid presentation and ampoules for injection are also available.

Average daily cost of Maxolon tablets (ex. 500 pack) 17p. Prices correct at January 1979. Further information is available on request to the company.

Maxolon (metoclopramide) is a product of
Beecham Research Laboratories,
Brentford, England.
A branch of Beecham Group Limited.

1. Gut. (1969). *10*. 678-680 **2.** Postgrad. med. J.. (1973). *49*. (Suppl). 29 **3.** Gut. (1974). *15*. 462-467 **4.** Brit. med. J.. (1971). *2*. 25

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