

#### "It is concluded that maintenance treatment of ulcerative colitis with sulphasalazine (salazopyrin) should be continued indefinitely unless contraindicated by side effects." I

The results of the above controlled trial carried out at the Nuffield Department of Clinical Medicine, Radcliffe Infirmary, Oxford are all the more welcome as earlier trials of cortisone<sup>2</sup> and prednisones at standard dosages have shown them to be ineffective in reducing the number of recurrences of ulcerative colitis.

"Fortunately, Sulphasalazine tablets, 0.5 grams 4 times a day will prevent relapses in the majority of patients with colitis, and only a few patients cannot tolerate this relatively small dose, which can be continued indefinitely since we do not know when, if ever, it can be safely stopped".4

Salazopyrin (sulphasazine) is available as the plain 0.5g. tablet, 0.5g. EN-tab and as an 0.5g. suppository.

Literature and detailed information on Salazopyrin are available on request.

"The patients who received dummy tablets had more than four times the relapse rate of those receiving sulphasalazine".1 (Salazopyrin).

A striking difference in the relapse rate". Remission maintained Relapsed 12-1 54.8

Salazopyrin is a registered trade mark.

Both groups of patients had been satisfactorily maintained for 1-5 years on Salazopyrin prior to the study, in which they took Salazopyrin or placebo for 6 months.

- 1. Gut (1973) 14 923 926 2. Brit. med. J. (1959) 1 387 394 3. Lancet (1965) 1 188 189
- 4. General Practitioner (1972) April 7 pl 1

Further information on request from:-Pharmacia (Great Britain) Ltd.
Paramount House,

75 Uxbridge Road, London W5 5SS. Telephone: 01-579 0102/7



II Gut November 1977

# SCANDINAVIAN JOURNAL OF GASTROENTEROLOGY

Volume 12, No 4, June, 1977

#### **CONTENTS**

Review: Endotoxins and Liver Disease. S. P. Wilkinson 38.	5
The Clinical Significance of Increased Plasma Levels of Liver-synthesized Coagulation Factors in Liver Disease. R. Arrman, S. Iwarson & R. Olsson	7
Inhibition of Secretin Release and Pancreatic Bicarbonate Secretion by Somatostatin Infusion in Man. L. E. Hanssen, K. F. Hanssen & J. Myren	1
Bile Acid Concentrations in Systemic and Portal Serum in Presumably Normal Man and in Cholestatic and Cirrhotic Conditions. L. Lindblad, K. Lundholm & T. Scherstén	5
Gastric Acid Secretion in Patients with Symptomatic Hiatus Hernia and Effect of a Modified Belsey MKIV Repair on Gastric Secretion. S. Boesby	1
Gastro-Oesophageal Sphincter Pressure, Mortality and Acid Clearing. S. Boesby 40	7
Light and Electron Microscopical Studies of Parietal Cells before and One Year after Proximal Gastric Vagotomy in Duodenal Ulcer Patients. S. Aase & M. Roland	7
Malabsorption, Villous Atrophy, and Excessive Serum IgA in a Patient with Unusual Intestinal Infiltration. K. Baklien, K. Fausa, P. Brandtzaeg, S. S. Fröland & E. Gjone	.1
Enzymatic Determination of Bile Acids. The NADP-specific 7α-Hydroxysteroid Dehydrogenase from P testosteroni (ATC 11996). O. Fausa & B. A. Skålhegg	3
Quantitative Determination of Serum Bile Acids Using a 7\alpha-Hydroxysteroid Dehydrogenase. O. Fausa & B. A. Skålhegg	1
Lithogenic Index of Bile after Jejunoileal Bypass Operation for Obesity. T. I. A. Sörensen, A. Bruusgaard, L. Rotböl Pedersen & E. Krag	.9
Transmural Ionic Fluxes and Electrical Potential Difference in the Human Jejunum during Perfusion with a Dihdroxy Bile Acid. E. Oddson, J. Rask-Madsen & E. Krag	3
Effects of 16,16 Dimethyl Prostaglandin E <sub>2</sub> on Food-stimulated Pancreatic Secretion and Output of Bile In Man. K. Ekelund, C. Johansson & B. Nylander	<b>7</b>
Biochemical Gradients in the Human Gastric and Duodenal Mucosa in Relation to Basal Acid Outputs. Gy. Mózsik, F. Vizi & J. Kutas	51
Intestinal Bypass. A Comparison between Two Different Bypass Operations and Resection of the Small Intestine in Rats. K. O. Viddal & K. Nygaard	i <b>5</b>
Heme Catabolism in Liver Cirrhosis with Portal Hypertension after Shunt Surgery. C. Mercke, B. Lundh, S. Bengmark, B. Börjesson, G. Simert & J. Vang	13
Radioimmunoassay of Secretin in Human Plasma. L. E. Hanssen & P. Torjesen 48	31
Prognosis of Medically Treated Gastric Ulcer. S. Aasted Halse, E. Kristensen, O. Möller Jensen & N. K. Mörkbak	39
The Effect of Vitamin D <sub>2</sub> Treatment on Bone Mineral after Partial Gastrectomy. E. M. Alhava, S. Aukee, M. Juuti, P. Karjalainen & K. Kettunen	)7
Effect of Cimetidine on Pentagastrin-stimulated Gastric Secretion in Healthy Man. E. Aadland, A. Berstad & L. S. Semb	)1
Cyclic Amp and the Release of Antral Gastrin. B. F. Gabrys-Pomykala, S. M. Alavi, L. M. Nyhus & C. T. Bombeck	)7
Indexed in Current Contents No ISSN 0036-552	21

Gut November 1977

# Vivonex HN

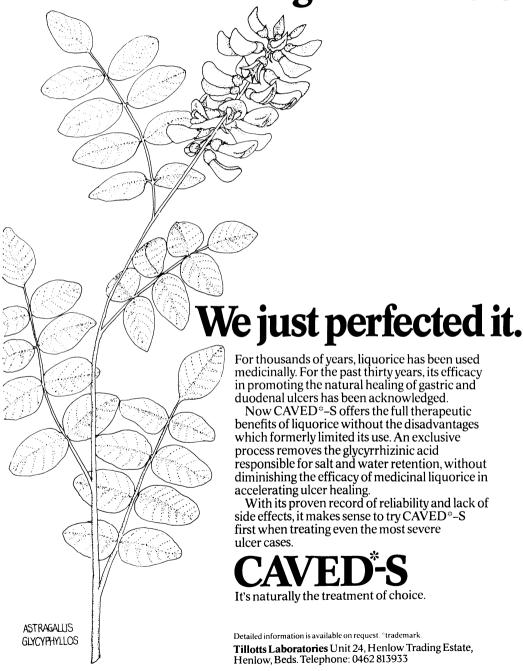
for restoring nitrogen balance in catabolic patients

Amino acids 17.7%, glucose solids 79.1%, essential fat, vitamins and minerals; powder. 1.26 MJ/80 g.



IV Gut November 1977

# Nature nearly discovered a cure for duodenal and gastric ulcers.

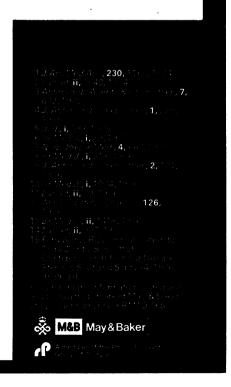


Gut November 1977

# ANAEROBIC INFECTIONS FIGURE SUPPOSITORIES are now available

'Flagyl' (metronidazole) has been shown to be the agent of choice for the specific chemotherapy of anaerobic bacterial infections both in treatment<sup>1-13</sup> and for prevention.<sup>2,5,14,15</sup>

Flagyl' Suppositories may now be prescribed for adults and children whenever oral medication is inappropriate before abdominal and gynaecological surgery and during the immediate post-operative period. This dosage form has proved to be highly effective in preventing and treating anaerobic sepsis after appendicectomy, colonic surgery, gynaecological and obstetric procedures. Among several hundred patients who received such rectal therapy no local or systemic adverse reaction was reported.



# SQUIBB SURGICARE LIMITED

# Golostomy Pack

incorporating the **New** Colostomy Pouch Mk.1 with Stomahesive and Flange



#### + Special Sealing Ring

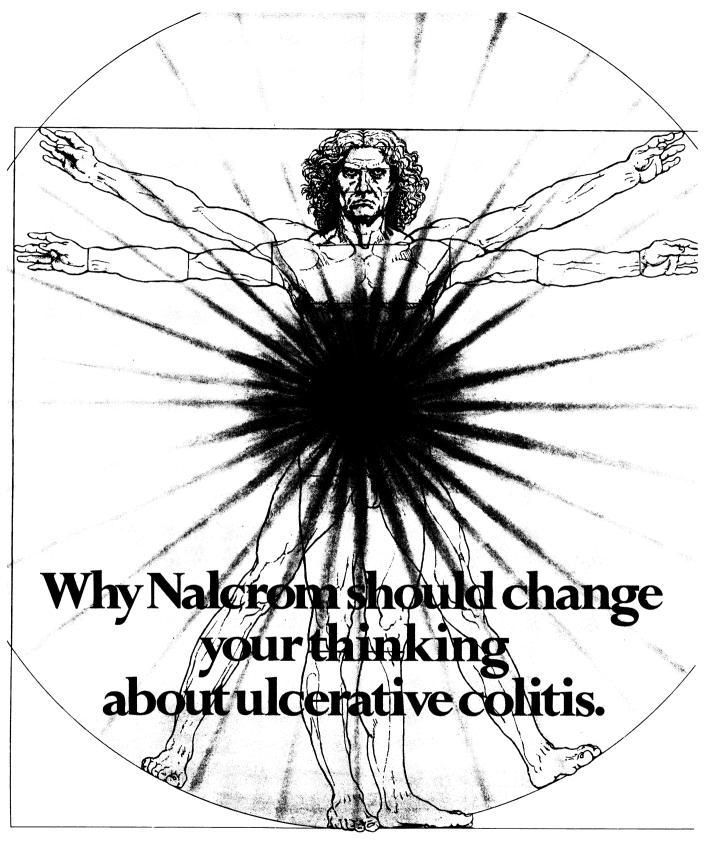
The Squibb Surgicare Colostomy Pack:
a new, easy-to-use system of colostomy management
ensuring freedom from skin problems with extra
security comfort and convenience

From the inventors of Stomahesive™

Further information is available on request from SQUIBB SURGICARE LIMITED \*
Regat House Twickenham TW1 3QT

Stometwalve is the registered trade mark of E. R. Squibb and Sons Limited





Prescribing Information
PRESENTATION: Nalcromis a presentation of sodium cromoglycate for oral use. It is presented in clear / clear hard gelatine capsules printed Fisions 101 in black. Each capsule

presented in clear, clear hard gelatine capsules printed risons 101 in black, Each capsule contains 100mg sodium cromoglycate as a white powder.

USES: As an adjuvant in the treatment of dicerative colitis, proctitis and proctocolitis. Sodium cromoglycate is considered to exert a stabilising effect upon mast cells capable of releasing mediators, thus preventing the local inflammatory reaction in the gastrointestinal contains the contains of the contains th tract

DOSAGE AND ADMINISTRATION: Dosage Adults: Two capsules four times dairy Children: From 2-14 years; one capsule four times daily. Nalcrom should not be used for children under two years

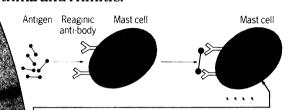
Maintenance dosage To prevent relapses dosage should be maintained indefinitely at two capsules four times daily in adults and one capsule four times daily in children. Administration The capsules may be swallowed whole or alternatively the powder contents may be dissolved in 20-30m; of water and swallowed.

#### Nalcrom offers a completely new approach to the management of ulcerative colitis.

And it could mean freedom from side effects often associated with the limited number of treatments now available.

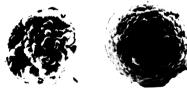
#### Nalcrom is sodium cromoglycate.

Sodium cromoglycate is the unique drug which is used successfully in the treatment of allergic diseases, such as isthma and rhinitis.



Sodium cromoglycate prevents the degranulation of mast cens caused by the interaction of antigens and reaginic antibodies.

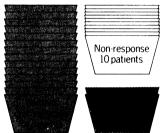
is a potent inhibitor of mast cell ulation. It prevents the release of matory agents into sub-mucosal in the lung, nose and other organs. o it stops symptoms before they tart. And over ten years of clinical use broved it to be a very effective drug remarkably few serious side-effects. Now it offers hope as a new treatment ulcerative colitis.



On left mast cell undergoing gross degranulation. On right mast cell stabilised after treatment with sodium cromoglycate. Photomicrographs prepared by: R & D Laboratories, Fisons Ltd., Pharmaceutical Division.

Why an anti-allergy drug?

Ulcerative colitis in its natural history and histological appearance has many features such as macrophages, mast cells and eosinophils that suggest that an allergic or immunological process may be involved. Sodium cromoglycate may have a clinically beneficial effect in these processes. So a double blind cross-over trial was carried out with 26 patients suffering from chronic proctitis<sup>1</sup>. The 14 responders to sodium cromoglycate had a high local eosinophil count which in most cases fell in the course of treatment.



In a double-blind crossover trial of 26 patients. 14 responded to sodium cromoglycate, 10 didn't respond and 2 responded to placebo.

Another study of 12 patients with ulcerative colitis treated with sodium cromoglycate showed a significant improvement in sigmoidoscopic appearance. And again, rectal biopsies showed a significant reduction in eosinophil counts<sup>2,3</sup>

#### How to find out more about Nalcrom.

Specialist representatives are available at this stage to discuss Nalcrom with hospital doctors. Simply fill in and post the coupon or write to: Fisons Limited. Pharmaceutical Division. Loughborough. Leicestershire.

References 1. Heatley, R.V. et al. 1975, "Gut," 16, 559 2. Mani, V. et al. 1976, "Lancet," 1, 439 3. Mani, V. et al. 1977, "Gastro-enterology," 72, 1093.

Please arrange for a specialist representative to call.

Address

Further information is available on request from Fisons Limited, Pharmaceutical Division, Loughborough, Leicestershire.



(Sodium Cromoglycate B.P.)

CONTRA-INDICATIONS, WARNINGS, ETC: Contra-indications There are no specific contra-indications. The safety of Nalcrom during pregnancy has not yet been established Side-effects Nausea has been reported in a few cases

Overdosage As Nalcrom is absorbed only to a very limited extent, no action other than medical observation should be necessary

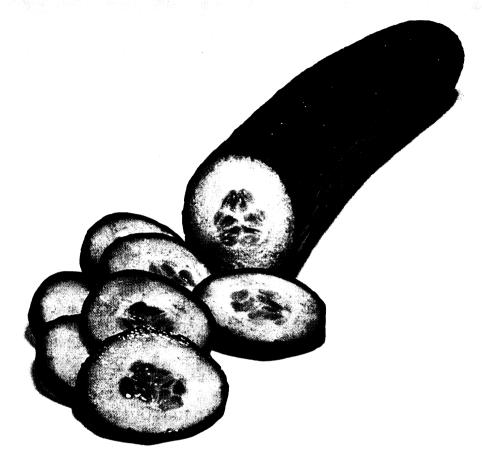
PHARMACEUTICAL PRECAUTIONS: Store in a dry place. Reclose the container tightly

LEGAL CATEGORY: P.O.M. PACKAGE QUANTITIES: Containers of 100 capsules.

FURTHER INFORMATION: 1. Nalcrom may be used in conjunction with steroid therapy and sulphasalazine in the treatment of acute relapses of proctocolitis and in maintaining remissions

2. If steroid therapy is to be reduced or withdrawn this should be done cautiously. 3. Nalcrom may be used in patients with a history of hypersensitivity to or intolerance of

4. Dosages of 2000mg daily have been used in some cases of proctocolitis. PRODUCT LICENCE NUMBER: PL 0113/0073.



## When dyspepsia repeats.... Maxolon

Unlike the traditional antacid therapies. Maxolon protects the gastric mucosa from over-long exposure to gastric acid<sup>1</sup> by promoting normal peristalsis and gastric emptying<sup>2,3</sup> 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. 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



Full prescribing information is available on request. Maxolon\* (metoclopramide) is a product of

Beecham Research Laboratories, Brentford, England.

\*read.



# Reduces gastrucid secretion.

#### New data now available.

#### 1 Healing

Further experience in clinical trials confirms that 4-8 weeks 'Tagamet' treatment achieves remarkable results in duodenal ulcer 1.2.3. gastric ulcer, 2.4.6 and reflux oesophagitis.2.5

Overall Experience	TAGAMET % healed	PLACEBO · % healed
Duodenal	77% of 803	41% of 252
Ulcer	patients	patients
Gastric	79% of 130	45% of 64
Ulcer	patients	patients
Reflux Oesophagitis*	62% of 39 patients	9% of 23 patients

\*includes oesophageal ulcers and erosions: complete healing or marked improvement. In addition to complete healing (proven endoscopically), early and dramatic symptomatic relief is achieved in most patients. With its convenient dosage and low incidence of side effects, 'Tagamet' is well suited to everyday treatment.

#### 2 Recurrence

A group of duodenal ulcer patients was followed for periods of up to 6 months after completing 4-6 weeks 'Tagamet' treatment. Preliminary results show that the incidence of relapse was no greater than in a similar group who had healed their ulcers on placebo.2.7



Artist's impression of H<sub>2</sub> receptor antagonist acting at receptor site in gastric mucosa.

#### 3 Maintenance

377 chronic duodenal ulcer patients, who had healed their ulcers after 4-6 weeks treatment were entered into controlled, double-blind maintenance trials. They were maintained on 'Tagamet' or placebo therapy, at a reduced dosage, for periods of up to 6 months. Results from these ongoing studies have shown that only 5.7% of the 'Tagamet' group relapsed 7 compared with 42.1% of the group who were maintained on placebo.

#### References

1. Oral cimetidine in severe

duodenal ulceration, (1977) Lancet, i, 4. 2. Data on file (March 1977), Smith Kline & French. 3. The effect of cimetidine on duodenal ulceration. (1977). The Second International Symposium on

Histamine H<sub>2</sub> Receptor Antagonists. Excerpta Medica, p.260.

4. Treatment of gastric ulcer by cimetidine. (1977) ibid. p.287.

5. Cimetidine in the treatment of oesophagitis. (1977) ibid. p.297.

6. Healing of gastric ulcer during treatment with cimetidine. (1976) Lancet, 1, 337.
7. Long-term treatment with cimetidine in duodenal

ulceration (1977) Lancet, i. 900.

"Tagamet" (cimetidine) is available as 200mg film-coated tablets, 200mg/5ml syrup and 200mg/2ml ampoules.

Full prescribing information is available from Smith Kline & French Laboratories Limited, a SmithKline company, Welwyn Garden City, Hertfordshire, AL7 lEY Tagamet' is a trade mark





### The Perfect Imitation

#### Vamin

The amino acid solution closely resembling W.H.O. egg protein standard.

The complete amino acid solution containing all 18 essential and non-essential L-form amino acids.

#### Intralipid

The isotonic fat emulsion derived from soya beans.

The most concentrated, safe, source of energy available for nutrition.

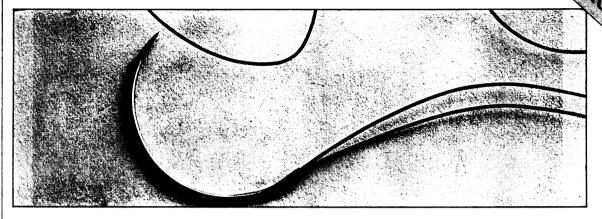
Simultaneous infusion of Intralipid and Vamin is the complete way to fulfil metabolic needs, maintain positive nitrogen balance and establish a good nutritional state.



KabiVitrum Ltd., Bilton House, Uxbridge Road, Ealing, London W5 2TH. Telephone 01:567 4717. Full prescribing information available on request.



# CONTINUOUS CLOSURE IN ABDOMINAL WOUNDS

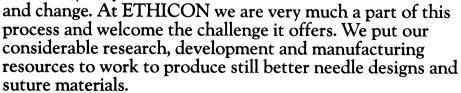


Continuous monofilament closure in abdominal wounds is increasingly favoured by surgeons today. The introduction of a suture consisting of a strand of material formed into a loop eliminates the need for the first knot in a continuous suture line. ETHICON\* have now produced a MERSUTURES\* Eyeless Needled Suture in which both ends of the loop are securely attached into one end of a needle. Another idea

developed by ETHICON in answer to a surgical challenge.

MEETING THE CHALLENGE Suture requirements and

wound closure techniques are constantly subject to re-evaluation





XIV Gut November 1977



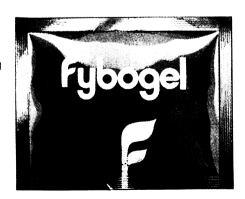
### GEOFFREY'S REFINED HABITS HAVE LED TO A SERIOUS PROBLEM.

Many patients suffer from serious conditions such as haemorrhoids. diverticular disease, irritable colon or anal fissure, which may be associated with long standing dietary constipation.

These problems won't be resolved overnight. Fybogel, by quickly restoring natural fibre to the diet, relieves the constipation and rapidly improves the symptoms of the condition.

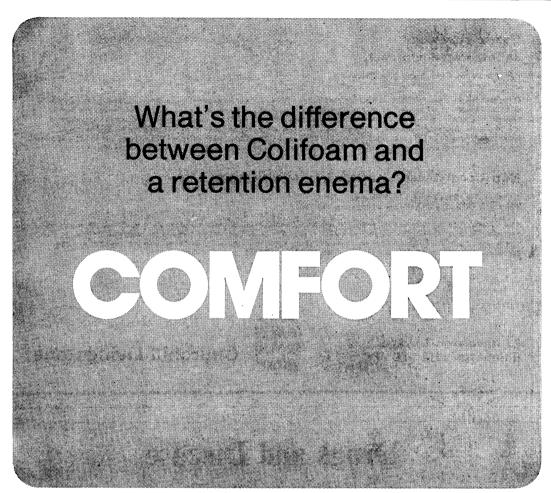


Fybogel sachets contain 3.5 g Ispaghula husk BPC Full prescribing information is available on mouest from Reckitt & Colman Pharmaceutical Division, Hull HU8 7DS Fybogel is a recister of transmit FUN model midd. 1128



the natural way to end dietary constipation

Gut November 1977 XV



Colifoam is a foam aerosol with special applicator, for treating ulcerative colitis and proctitis. Its active principle is hydrocortisone 10%, Trials<sup>1,2,3,4</sup> have shown that Colifoam is just as effective as retention enemas, but

much more comfortable

for patients. They prefer Colifoam
because it avoids the need
to instil large volumes
of liquid into the rectum,
it's quick and simple to
apply, and it's easily
retained without embarrassing
leakage or staining.

### COLFOAM hydrocortisone acetate foam

Further information and a data sheet available on request from: The Professional Relations Division, Stafford-Miller Limited, Hatfield, Herts.

#### Stafford-Miller

 Practitioner, Accepted for publication 2. Rosser, R.G. Treatment of Proctosigmoiditis Scientific Exhibit presented at 121st Annual Convention of the American Medical Association, June 1972 3. Kratzer, G.L. (1970) Amer.J.clin.Res. 1, 1114. Scherl, N.D. and Scherl, B.A. (1973) Dis.colon.Rectum. Mar/Apr.

### Gastroenterology: an integrated approach

Edited by Iain E. Gillespie and T. J. Thomson Second edition 304 pages illustrated £3.95

Gastroenterology is one of the most appropriate clinical subjects for an integrated approach, since patients with gastro-intestinal disorders may require the help of experts in several medical disciplines. In this edition the content has been updated throughout. Several new subjects are covered, including the diagnostic and management problems encountered by the general practitioner. Greater emphasis is given to the psychological disturbances which manifest themselves in symptoms referrable to the gastrointestinal tract. The clinical application of new methods of investigation and management are stressed throughout the book, ensuring that all the information given is of practical value to the reader.

#### **Nutritional Aspects of Care in the Critically III**

Edited by J. R. Richards and J. M. Kinney 704 pages 50 line + 25 half-tone illustrations £12.00

This volume is the most up to date single text available encompassing the exciting advances in nutritional therapy that have recently been made in Europe and the United States. The book has been produced in an endeavour to bring together in one volume detailed information on the basic science background to the body's response to injury, together with the practical application of nutritional support regimes in the critically ill.

23 Ravelston Terrace Edinburgh EH4 3TL



### **Drugs and Disease**

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

#### Edited by Sheila Worlledge

Mechanisms of drug action—The molecular basis of drug toxicity ● The incidence of adverse reactions to drugs ● Drugs and the kidney—Analgesic nephropathy ● Problems with immunosuppressive agents in renal disease ● Drug treatment of hypertension ● Drug-induced blood disorders—Effect of drugs on red cell membranes: Insights into normal red cell shape ● Immunological mechanisms in drug-induced blood dyscrasias ● Clotting and fibrinolysis ● Drugs and the skin—The clinical aspects of drugs and disease of the skin ● Immunological mechanisms in the reaction between drugs and the skin ● Drugs and the liver—Drug metabolism in liver disease ● Acute liver injury ● Long-term effects on the liver ● Drugs and the lung—The effect of oxygen on the lung ● The pathology of the lung in paraquat poisoning ● The drug dilemma—benefits and hazards—Drug interactions and lethal drug combinations ● Antidiabetic agents and vascular events ● Hypolipaemic drugs and coronary heart disease ● The widespread use of pesticides ● Legislation and drug safety

#### Price: Inland £3.00; Abroad US \$7.50 including postage

Payment must be enclosed with order or surcharge of 30p will be made for rendering invoices and statements

The Publisher, Journal of Clinical Pathology, B.M.A. House, Tavistock Square, London WC1H 9JR

### ANNALS OF THE RHEUMATIC DISEASES Volume 36 Supplement Number 1

#### DETECTION AND MEASUREMENT OF CIRCULATING SOLUBLE ANTIGEN-ANTIBODY COMPLEXES AND ANTI-DNA ANTIBODIES

Edited by R. N. Maini and E. J. Holborow

A supplement to the Annals of Rheumatic Diseases based on workshops to promote wider knowledge of laboratory methods available for measuring circulating immune complexes and anti-DNA antibodies has recently been published.

The supplement is in two parts. 15 methods for detecting soluble immune complexes are described in Section A, including the following: detection by electron microscopy, ultracentrifugation, anti-complementary activity, 125-I-Clq binding activity, binding to Clq-coated tubes, inhibition of complement dependent rosette formation, polyethylene glycol fractionation, rheumatoid factors and Clq precipitation, C3 activity associated with macromolecules, inhibition of agglutination of IgG-coated particles by rheumatoid factor or Clq, cryoprecipitation, radio-bioassay using macrophages, platelet aggregation and inhibition of antibody-mediated lymphocyte cytotoxicity. Authors include: Almeida, Stanworth, Mowbray, Lambert, Hayward, Hay, Zubler, Winchester, Williams, Masson, Cream, Holborow, Penttinen, Panayi and Soothill.

Section B is divided into three parts. The first contains the details and evaluation of a joint experiment for the detection of anti-DNA antibodies conducted by 12 laboratories in Europe and USA on a panel of 8 sera. The following laboratories were represented: Aarden (Amsterdam), Barnett (Los Angeles), Federlin (W. Germany), Hughes (London), Johnson (Taplow), Lambert (Geneva), Maini (London), Schur (Boston), Steward (London), Stollar (Boston), Tan (La Jolla), Talal (San Francisco). In the second part the methods used by the participants are described. In the third Dr. Barnett, who has a long association with this field, presents a personal view on the present state and future developments in the clinical application of tests for anti-DNA antibodies.

Price: Inland £4.50; Abroad: US \$11.25 including postage

Payment must be enclosed with order or a surcharge of 30p will be made for rendering invoices and statements

#### ORDER YOUR COPY NOW FROM

The Publisher, ANNALS OF THE RHEUMATIC DISEASES, B.M.A. House, Tavistock Square, London WC1H 9JR