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The object of *Gut* is to publish original papers and reviews concerned with practice and research in the field of gastroenterology. The field is that of alimentary, hepatic, or pancreatic disease, and papers may cover the medical, surgical, radiological, or historical aspects. They may also deal with the basic sciences concerned with the alimentary tract, including experimental work. The report of a single case will be accepted only if it is of sufficient interest in relation to a wider field of research.

There will be a section for short papers on laboratory and surgical techniques and methods of investigation.

COMMUNICATIONS Papers should be addressed to the Editor, Gut, BMA House, Tavistock Square, London, WC1H 9JR. Papers are accepted only on the understanding that they are not published elsewhere without previous sanction of the Editorial Committee. They should be in double-spaced typewriting on one side of the paper only. On the paper the name of the author should appear with initials (or distinguishing Christian name) only, and the name and address of the hospital or laboratory where the work was performed. A definition of the position held by each of the authors in the hospital or laboratory should be stated in a covering letter to the Editor. Communications should be kept short, and illustrations should be included when necessary; coloured illustrations are allowed only if monochrome will not satisfactorily demonstrate the condition. It is not desirable that results should be shown both as tables and graphs.

ILLUSTRATIONS Diagrams should be drawn in indian ink on white paper, Bristol board, or blue-squared paper. The legends for illustrations should be typed on a separate sheet and numbered to conform with the relevant illustrations. Photographs and photomicrographs should be on glossy paper, unmounted. TABLES should not be included in the body of the text, but should be typed on a separate sheet.

ETHICS The critical assessment of papers submitted will include ethical considerations. Authors are referred to publications on ethics of human experimentation by the Medical Research Council in Britain and to the code of ethics of the World Medical Association known as the Declaration of Helsinki (see Brit. med. J., 1964, 2, 177).

ABBREVIATIONS In general, symbols and abbreviations should be those used by the Biochemical Journal. In any paper concerning electrolyte metabolism, it is desirable that data be calculated as m-equiv/l.

REFERENCES These should be made by inserting the name of the author followed by year of publication in brackets. At the end of the paper, references should be arranged in alphabetical order of authors' names. Such references should give author's name, followed by initials and year of publication in brackets, the title of the article quoted, the name of the journal in which the article appeared, the volume number in arabic numerals, followed by the numbers of first and last pages of the article. Abbreviations are according to World Medical Periodicals (published by BMA for World Medical Association), thus: Chandler, G. N., Cameron, A. D., Nunn, A. H., and Street, D. F. (1960). Early investigations of haematemesis. Gut, 1, 6-13.

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### The April 1973 Issue

### THE APRIL 1973 ISSUE CONTAINS THE FOLLOWING PAPERS

An analysis of the reliability of detection and diagnostic value of various pathological features in Crohn's disease and ulcerative colitis M. G. COOK AND M. F. DIXON

Non-restorative surgery in the treatment of Crohn's disease of the large bowel JEAN K. RITCHIE AND H. E. LOCKHART-MUMMERY

Inhibition of the lower oesophageal sphincter by fat—a mechanism for fatty food intolerence OTTO T. NEBEL AND DONALD O. CASTELL

Metoclopramide in gastrooesophageal reflux C. STANCIU AND JOHN R. BENNETT

Treatment of dermatitis herpetiformis with corticosteroids and a gluten-free diet: a study of jejunal morphology and function PARVEEN J. KUMAR, D. B. A. SILK, R. MARKS, M. L. CLARK, AND A. M. DAWSON

Cellular localization of gastric inhibitory polypeptide in the duodenum and jejunum JULIA M. POLAK, S. R. BLOOM, MARION KUZIO, J. C. BROWN, AND A. G. E. PEARSE

Gastric mucosal morphology and faecal blood loss during ethanol ingestion V. P. DINOSO, JR, H. MESHKINPOUR, AND S. H. LORBER

Effect of proximal gastric vagotomy on gastric acid secretion and plasma gastrin C. G. CLARK, M. R. LEWIN, B. H. STAGG, AND J. H. WYLLIE

The effect of preserving antral innervation and of a pyloroplasty on gastric emptying after vagotomy in man R. J. CLARKE AND J. ALEXANDER-WILLIAMS

The psoas sign, hepatic angle, normal patients, and everyday practice MYRON MOSKOWITZ

Antireticulin antibody: Incidence and diagnostic significance P. P. SEAH, LIONEL FRY, E. J. HOLBOROW, MARY A. ROSSITER, W. F. DOE, A. F. MAGALHAES, AND A. V. HOFFBRAND

Bile acids and vitamin A absorption in man: the effects of two bile acid-binding agents, cholestyramine and lignin D. L. BARNARD, AND K. W. HEATON

The physical state of bile acids in the diarrhoeal stool of ileal dysfunction J. M. FINDLAY, M. A. EASTWOOD, AND W. D. MITCHELL

A comparative study of the major glycoprotein isolated from normal and neoplastic gastric mucosa J. SCHRAGER AND M. D. G. OATES

#### **Technique**

Collection of samples of intestinal juices in infants and children with a new device avoiding contamination S. CADRANEL, P. RODESCH, AND J. P. BUTZLER

Progress report Mechanisms and prediction of drug-induced liver disease PIERRE BERTHELOT

Notes and activities

Copies are still available and may be obtained from the Publishing Manager, BRITISH MEDICAL ASSOCIATION, TAVISTOCK SQUARE, LONDON, WC1H 9JR, price 87½p

### Notes and activities

### **British Society of Gastroenterology**

SPRING MEETING The spring meeting of the British Society of Gastroenterology was held in Cardiff in fine, sunny weather on 6 and 7 April at the splendid new hospital and medical school of the University of Wales under the stimulating Presidency of Professor Sheila Sherlock. The meeting was highlighted by the symposium on 'Secretion of bile', introduced by Dr G. Erlinger (France) with Dr K. Heaton, Dr R. Hermon Dowling, Dr N. Javitt (USA), and Dr Ian Bouchier.

The excellence of the dinner (and of the beautiful buffet at lunch time) in the medical school Lakeside Restaurant, with the Welsh entertainment by the Hennessy trio, will be long remembered. Was it possible that the catering staff thought they were looking after the Gastronomical Society?

Dr John Rhodes is the Local Secretary, and he and his colleagues had put an enormous amount of care and skill into organizing for the Society a delightful meeting at which members were stimulated not only by the scientific sessions but also by being able to meet and talk with old and new friends. No effort was spared by Dr Rhodes and his staff to ensure the comfort of their guests.

The abstracts of papers read at the meeting are printed on pages 418-430.

F.A.J.

AUTUMN MEETING Members of the Society are reminded that the autumn meeting will be held on 20 to 22 September at Imperial College, London. The Honorary Secretary is circulating the appropriate forms for sending abstracts and registering for the meeting. The Conference Department of Messrs Thomas Cook and Son Ltd, 45 Berkeley Street, London W1, is handling registration and also booking for both hostel accommodation at Imperial College and for hotels in the neighbourhood.

### **British Society for Digestive Endoscopy**

The 2nd Spring Meeting of the British Society for Digestive Endoscopy was held at Oxford from 4 to 5 April 1973 under the Presidency of Dr S. C. Truelove.

The first day of the meeting was a teaching day devoted to symposia on the general theme 'Running a gastrointestinal endoscopy service' and was open not only to members and their guests but also to others, and was aimed both at practising gastrointestinal endoscopists and at other medical practitioners, administrators, nurses, and technicians working or with a special interest in this field. The following symposia constituted the programme: 'Instrumentation' (Moderator, Dr P. B. Cotton), 'Care of the patient' (Dr K. F. R. Schiller), 'Pathology and cytology' (Dr R. Whitehead), 'Documentation and training' (Dr P. R. Salmon), and 'Organization' (Dr S. C. Truelove). The proceedings of this part of the Spring Meeting will, in due course, be available in booklet form

The Scientific Meeting constituted the second day. The programme included a number of communications. In addition, there was a symposium on 'Colonoscopy' (Moderator, Mr A. C. B. Dean). A number of speakers contributed papers in sections on 'Indications and technique', 'Inflammatory disease and polyps'. It is intended to publish the proceedings of this symposium.

A selection of the Society's teaching series of tape-slide lectures was demonstrated at the meeting. In addition there was an exhibition of instruments, pharmaceuticals, and books. The meeting, which was held at the Radcliffe Infirmary, with accommodation at St Anne's College, was attended by approximately 250 members and guests.

K.F.R.S.

BSDE ABSTRACTS

## Pancreatitis after Endoscopic-retrograde Pancreatography (ERP)

M. CLASSEN, H. KOCH. H. RUSKIN, H. J. PESCH AND L. DEMLING (University Medical Clinic, Erlangen, West Germany) Clinical and laboratory evidence of pancreatitis was sought after 101 ERPs. Urografin 60 was used as contrast material. Elevations of serum and urinary amylase concentrations without clinical signs of acute pancreatitis occurred following 24 pancreatographies. This group included 12 of 34 (35%) of those patients in whom the contrast material had filled the acini as well as the pancreatic ductal system (parenchymography). By contrast, similar enzyme elevations occurred in only 12 of 67 patients in whom the

ductal system was filled without parenchymography. This difference is statistically significant. Clinical and biochemical evidence of acute pancreatitis following ERP was detected in 12 patients. This complication also occurred more frequently in the patients with parenchymography (nine of 34). We draw the following conclusions: (1) Instillation of 60% contrast material must be restricted to the pancreatic ductal system. (2) During instillation fluoroscopic control with a fluoroscope of high resolution is essential. (3) The significance of hyper-amylasaemia and -uria without clinical evidence of pancreatitis must be determined by animal experiments.

# Acute Ulceration of the Oesophagus following Hypophysectomy

W. A. DAVIES AND P. I. REED (Wexham Park Hospital, Slough) Acute stress ulceration affecting the gastrointestinal tract has been known for centuries. The ulcers have a characteristic histology, may be single or multiple, and commonly involve stomach and duodenum. Oesophageal, ileal, and colonic ulcers have been reported. Common presentations are haemorrhage and perforation, and the mortality is high.

Mrs T., aged 72, presented in September 1971 with right breast carcinoma which was treated by simple mastectomy and radiotherapy. Her past history included angina. In August 1972 dyspnoea led to the discovery of widespread lung metastases and she was referred for hypophysectomy which was performed on 25 September. Postoperative hypotension was treated by increasing the replacement dose of corticosteroids. Massive haematemeses on the eighth postoperative day produced shock and she was transfused with 8 units of blood. Emergency gastroscopy revealed extensive ulceration along the whole length of the oesophagus. Her condition deteriorated, she became hemiplegic, and died five days later.

Acute ulcers have developed following a large number of stressful situations and the commonest factors associated are hypotension and sepsis. Numerous theories have been postulated as to the pathogenesis of the ulcers but nearly all of the work has been concerned with the stomach and duodenum. The association of stress ulceration with hypophysectomy and the factors involved in its occurrence in the oesophagus will be discussed.

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# Colonoscopy in the Irritable Bowel Syndrome

A. E. STEVENS (West Kent General Hospital, Maidstone) Thirty patients with irritable bowel syndrome were investigated by fibre-colonoscopy, rigid sigmoidoscopy, and barium studies to exclude organic disease. Barium enema was normal in 13 cases, and showed spasm in 17. Following routine preparation a long Olympus colonoscope was introduced under diazepam sedation with Entonox if required, until either undue complaint of pain or failure to advance readily occurred. In 21 cases the examination was terminated because of pain or spasm, in five by difficulty with a sharp bend, and in three by inadequate preparation. In all but six cases more than 40 cm was reached, in 14 cases more than 70 cm. in two cases more than 130 cm, and in one patient the region of the caecum. The only organic finding was single small polyps in each of three patients. Multiple spastic areas were observed from the upper rectum to as high as 80 cm. Experience showed that the only way to negotiate these was to wait patiently for them to relax when the lumen would suddenly appear ahead. Complaints of pain often seemed to be disproportionate or even histrionic as the instrument was advancing readily. In a subsequent postal enquiry to which 23 patients replied, 22% said the examination was not unpleasant, and 65% said it was unpleasant but bearable; as compared with 37 patients with other conditions, 49% of whom found the examination not unpleasant and 46% unpleasant but bearable. An important part of the management of irritable bowel syndrome is to demonstrate to all that organic disease has been excluded.

# Antritis and Duodenitis in Duodenal Ulcer and Non-ulcer Dyspepsia

M. ROCA, S. C. TRUELOVE, AND R. WHITE-HEAD (Radcliffe Infirmary, Oxford) A comparative study has been made of patients with duodenal ulcer (DU) and patients with non-ulcer dyspepsia (NUD) in relation to the histology of the antral and duodenal mucosa. Biopsy specimens were obtained under direct vision from the antrum, the duodenal cap, and the second part of the duodenum, and were graded histologically without the histopathologist being aware of the type of patient being studied. We have examined 15 cases of DU and seven cases of NUD

with the following results: (1) The incidence of antritis and duodenitis is high in patients with DU. (2) Antritis is much less common in the NUD group and the difference is statistically significant. (3) The occurrence of duodenitis in the NUD group follows a similar pattern to that of the DU group, although the severity of the inflammatory changes is less pronounced. This raises the possibility that the duodenitis may be responsible for the symptoms in some patients with NUD. (4) There are no significant differences in the patients with definite ulcer at the time of the endoscopy and in those in whom the ulcer had healed, but antritis is significantly more severe in the patients with an actual ulcer at the time of biopsy. (5) Endoscopic pyloric deformity is a common finding in DU and does not occur in NUD.

#### Surgical Indications for Gastroscopy

B. J. WILKEN AND F. P. MCGINN (Southampton University Medical School. Southampton) Precise preoperative definition and localization of upper gastrointestinal disease makes fibreoptic endoscopy of this region of great value in surgical management. This applies in both the elective and emergency situation. The element of surprise is greatly reduced and definitive surgical procedures can be more readily planned. The principal surgical indications for gastroscopy are similar to but differ in timing and emphasis from primary medical indications. The organization of a surgical endoscopy service requires greater flexibility and mobility with more emphasis on providing an emergency diagnostic service. At least one side-viewing and one endviewing instrument are required and at least two members of the endoscopy team must be capable of carrying out any required surgical procedure. Close collaboration with radiological colleagues is essential, since the two methods of investigation are complementary and not mutually exclusive. The correlation of results achieves greater diagnostic accuracy than either investigation alone. This paper describes the organization of a surgical endoscopy service in a general surgical unit and presents an analysis of the first 300 examinations. The assessment of gastroduodenal ulcer disease (26%), of acute gastrointestinal bleeding (18%), of x-ray negative dyspepsia (23%), and late postoperative problems (11%) comprise the principal indications. An incidence of 2% of unsatisfactory or incomplete examinations and one death following endoscopy for acute gastrointestinal haemorrhage are reported.

## Oesophago-gastro-duodenoscopy in Acute Bleeding

P. B. COTTON, M. T. ROSENBERG. R. P. L. WALDRAM, AND A. T. AXON (St Thomas' Hospital and Brook General Hospital, London) Two hundred and eight patients admitted with haematemesis or melaena underwent oesophago-gastro-duodenoscopy, 72% within 48 hours of admission. Ages ranged from 2 to 84 years. Gastric lavage was not performed. Twelve examinations proved useless, due to excessive bleeding (eight), poor cooperation (three), and one small upper oesophageal tear (managed conservatively). An unequivocal diagnosis was reached in 80% of all patients, or 96% of those with a final positive diagnosis in the oesophagus. stomach, or duodenal bulb. Commonest causes were gastric ulcers (28%), duodenal ulcers (24%), gastric and duodenal erosions (11%), and oesophagitis (8%). Multiple lesions were seen in 15% of all patients. Twenty-six per cent of those with duodenal ulcers were bleeding from another site. No dyspeptic history was present in 30% of patients with bleeding ulcers. Forty-five patients had taken salicylates shortly before bleeding; only six had acute erosions. Early barium meals were performed in 81 patients. At endoscopy bleeding lesions were found in 24 patients out of 34 with negative x-ray findings. Barium studies showed lesions on 47 occasions; endoscopy revealed a different bleeding source in 15. Twenty-six per cent of patients underwent emergency surgery and only eight (3.8%) died. Early endoscopy can provide an exact diagnosis in most bleeding patients and should lead to more rational management.

#### **Endoscopic Pancreatography**

There will be a workshop on problems of technique and interpretation at St Thomas' Hospital, London, on Saturday July 14 1973 (10 am-4 pm).

Co-chairman: Mr Rodney Smith (St George's Hospital) and Professor R. E. Steiner (Royal Postgraduate Medical School).

Further details from Dr P. B. Cotton, St Thomas' Hospital, London, SE1.

# **Enzyme Assays in Medicine**

Symposium organized by The Association of Clinical Pathologists and delivered in London on 23 and 24 November 1970

### Edited by G. K. McGowan and G. Walters

CONTENTS: Editors' foreword ● Chairman's introduction ● The mechanism of enzyme action B. R. Rabin ● The nature of isoenzymes A. L. Latner ● Enzyme kinetics and its relevance to enzyme assay J. H. Wilkinson ● Accuracy, precision and quality control of enzyme assays D. W. Moss ● Automation of enzyme assays A. W. Skillen ● Quantitative assay of enzymes in tissues E. Anne Burgess and B. Levin ● Histochemical localization and assay of enzymes F. W. D. Rost ● Enzyme assays in liver disease R. J. Wieme and L. Demeulenaere ● Enzyme assays in diseases of the heart and skeletal muscle Sidney B. Rosalki ● Enzyme assays in diseases of erythrocytes T. A. J. Prankerd ● Enzyme changes in malnutrition J. C. Waterlow ● Enzyme assays in malignant disease C. B. Cameron ● Genetics and clinical enzymology Harry Harris ● Enzyme assays in the management of pregnancy Peter Curzen ● Chairman's summary

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The Unit is geographically situated in the new wing of the hospital with its own laboratory, endoscopy room, office accommodation and nine patient beds.

Qualifications: Legally qualified medical practitioner, registrable with the Medical Board of South Australia and a registered Specialist in Gastroenterology. Some administrative experience and research training is essential.