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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.

COMMUNICATIONS Two copies of 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.

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ETHICS Ethical considerations will be taken into account in the assessment of papers (see the Medical Research Council's publications on the ethics of human experimentation, and the World Medical Association's code of ethics, known as the Declaration of Helsinki (see *British Medical Journal* (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 mEq/l. All measure-

ments should be expressed in SI units (see *Journal of Clinical Pathology* (1974), 27, 590-597; *British Medical Journal* (1974), 4, 490). Conversion to SI units is the responsibility of the author.

REFERENCES In the text these should follow the Harvard system—that is, name followed by date: James and Smith (1970). If there are more than two authors they should be cited as James *et al.* (1970) even the first time that they appear. The list of references should be typed in double spacing and in alphabetical order on a separate sheet. Such references should give the author's name, followed by initials and year of publication in brackets, *the title of the article quoted*, the name (in full) of the journal in which the article appeared, the volume number in arabic numerals, followed by numbers of first and last pages of article.

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- Pace-Asciak, C. (1972). Prostaglandin synthetase activity in the rat stomach fundus. *Biochimica et Biophysica Acta*, **280**, 161-171.
- Robert, A., Nezamis, J. E., and Phillips, J. P. (1968). Effect of prostaglandin E₁ on gastric secretion and ulcer formation in the rat. *Gastroenterology*, **55**, 481-487.
- Robert, A., Stowe, D. F., and Nezamis, J. E. (1971). Prevention of duodenal ulcers by administration of prostaglandin E₂ (PGE₂). *Scandinavian Journal of Gastroenterology*, **6**, 303-305.
- Tonnesen, M. G., Jubiz, W., Moore, J. G., and Frailey, J. (1974). Circadian variation of prostaglandin E(PGE) production in human gastric juice. *American Journal of Digestive Diseases*, **19**, 644-648.
- Trinder, P. (1954). Rapid determination of salicylate in biological fluids. *Biochemical Journal*, **57**, 301-303.
- Vane, J. R. (1971). Inhibition of prostaglandin synthesis as a mechanism of action for aspirin-like drugs. *Nature (New Biology)*, **231**, 232-235.
- Wilson, D. E. (1974). Prostaglandins: their actions on the gastro-intestinal tract. *Archives of Internal Medicine*, **133**, 112-118.

The December 1975 Issue

THE DECEMBER 1975 ISSUE CONTAINS THE FOLLOWING PAPERS

- Kinetics of bile acid metabolism in experimental blind loop syndrome STEFFEN BENDER, HOLGER SAUER, AND, DIETER HOFFMANN
- Gallstones after ileostomy and ileal resection G. L. HILL, W. S. J. MAIR, AND J. C. GOLIGHER
- Gallbladder function, cholesterol stones, and bile composition G. ANTSAKLIS, M. R. LEWIN, D. JUNE SUTOR, A. G. A. COWIE, AND C. G. CLARK
- Progressive intrahepatic cholestasis (Byler's disease): case report R. DE VOS, C. DE WOLF-PEETERS, V. DESMET, E. EGGERMONT, AND K. VAN ACKER
- Effect of vagotomy on secretin release in man A. S. WARD AND S. R. BLOOM
- Postprandial osmotic and fluid changes in the upper jejunum after truncal vagotomy and drainage in man J. G. TEMPLE, ALMA BIRCH, AND R. SHIELDS
- Post-prandial changes in pH and electrolyte concentration, in the upper jejunum after truncal vagotomy and drainage in man J. G. TEMPLE, ALMA BIRCH, AND R. SHIELDS
- Alcohol tolerance after proximal gastric vagotomy A. FRASER MOODIE, C. M. S. ROYSTON, AND J. SPENCER
- Migration inhibition with various cell fractions in human colorectal cancer P. R. ARMITSTEAD AND G. GOWLAND
- Glucagon and the colon I. TAYLOR, H. L. DUTHIE, D. C. CUMBERLAND, AND R. SMALLWOOD
- Mucosal lesions in the human small intestine in shock U. HAGLUND, L. HULTÉN, C. ÅHREN, AND O. LUNDGREN
- Serum lysozyme in inflammatory bowel disease M. W. DRONFIELD AND M. J. S. LANGMAN
- Vitamin B₁₂ absorption—a study of intraluminal events in control subjects and patients with tropical sprue C. R. KAPADIA, P. BHAT, E. JACOB, AND S. J. BAKER
- External pancreatic secretion after bombesin infusion in man NICOLA BASSO, SERGIO GIRI, GIOVANNA IMPROTA, EMANUELE LEZOCHÉ, PIETRO MELCHIORRI, MASSIMO PERCOCO, AND VINCENZO SPERANZA
- Effect of secretin on release of heterogeneous forms of gastrin EUGENE STRAUS, ADRIAN J. GREENSTEIN, AND ROSALYN S. YALOW
- Does human pancreas contain salivary-type isoamylase? JUNNOSUKE SHIMAMURA, LOUIS FRIDHANDLER, AND J. EDWARD BERK
- Notes and activities
- Notes on books

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Notes and activities

British Society for Digestive Endoscopy

The fourth annual general meeting of the British Society for Digestive Endoscopy was held at Oxford on 25 September 1975. Abstracts of the free papers that were given follow.

Balloon catheters in the biliary and pancreatic ducts

B. LAURENCE, P. B. COTTON, H. SHAPIRO, AND T. HEAP Experimental balloon tipped catheters have been manufactured by the Edwards Company (Santa Ana, California) small enough to be passed through the biopsy channel of the standard duodenoscope and gastroscope. We have described a technique for leaving such balloon tipped catheters in the bile duct (Shapiro and Cotton, 1975), allowing studies of biliary physiology and pharmacodynamics. Retention balloon tipped catheters in the bile duct may have application for the introduction of chemicals for dissolution of calculi.

We now describe the use of balloon catheters in the Fogarty mode, for extraction of gallstones after endoscopic sphincterotomy, and also to demonstrate conclusively an empty bile duct. Balloons of increasing diameter have also been used to measure the size of surgical and endoscopic sphincterotomies, complementing sphincter of Oddi pressure measurements. Weidenhiller and his colleagues (1975) have described the use of balloon catheters for abrasive cytology in the bile ducts and pancreatic duct.

The safety of balloon tipped catheters in the pancreatic duct has not yet been established, and certain precautions are stressed. The duodenoscope size catheter provides a considerable resistance to flow, a rate of 3 ml/min of water being achieved only under a pressure of 75 mmHg. In routine pure pancreatic juice collection this is not hazardous, since any excess pancreatic juice can escape around the sides of the cannula. Balloon occlusion of the pancreatic duct to obtain 'complete' collections may result in an unacceptable rise in pancreatic duct pressure, and indeed inhibit secretion. Endoscopic channel size is a limiting factor at the present time, but may be overcome by catheter design, or the use of a 'piggy-back' technique. These aspects are being further studied.

References

- Shapiro, H. A. and Cotton, P. B. (1975). Leaving a balloon-tip catheter in the bile duct at duodenoscopy. *Lancet*, 2, 13-14.
- Weidenhiller, S., Fluegel, H. and Rösch, W. (1975). Abrasive cytology of the pancreatic and biliary duct in man. *Endoscopy*, 7, 72-74.

Pain in duodenal ulcer

R. M. WILLIAMS, M. S. MATHUR, AND A. E. READ. Duodenal ulcer pain is often regarded as being epigastric, periodic, relieved by alkalis, and waking the patient at night. Doubts about constancy of these features (Edwards and Coghill, 1968) and whether cessation of pain indicates ulcer healing (Brown *et al.*, 1972) can be resolved by fiberoptic endoscopy (Salmon *et al.*, 1972).

Twenty-nine patients with pain, having the above four features, were endoscoped, 35% have duodenal ulcers, 13% have other duodenal abnormalities, 10% gastric ulcers, and 13% hiatus hernias, and 17% were normal.

Another series of 40 patients with endoscopically proven chronic duodenal ulcers were asked about pain, smoking, and psychological stress. After four to eight weeks symptomatic treatment, questions and endoscopy were repeated. All data was recorded on a standard form. Ninety-five per cent of patients had had some pain, in 77% three or four characteristic features were present. At review ulcers were still present in all seven patients still in pain, in four of the 10 with less pain, three of the nine whose pain ceased, and two of the nine pain free on both occasions. Neither smoking nor stress seemed related to pain or the ulcer.

The classic features of duodenal ulcer pain are usually found with duodenal ulceration but may occur in other conditions; cessation of pain does not necessarily indicate ulcer healing.

References

- Edwards, F. C., and Coghill, N. F. (1968). Clinical manifestations in patients with chronic atrophic gastritis, gastric ulcer and duodenal ulcer. *Quarterly Journal of Medicine*, 37, 337-360.
- Brown, P., Salmon, P. R., Thien Htut, and Read, A. E. (1972). Double-blind trial of carbenoxolone sodium capsules in duodenal ulcer therapy based on endoscopic diagnosis and follow-up. *British Medical Journal*, 3, 661-664.
- Salmon, P. R., Brown, P., Thien Htut, and Read, A. E. (1972). Endoscopic examination of the

duodenal bulb: clinical evaluation of forward- and side-viewing fiberoptic systems in 200 cases. *Gut*, 13, 170-175.

Some observations on the effects of radiation on the fiberoptic duodenoscope

B. STERRY ASHBY, D. A. GOODMAN, AND A. P. MARLTON. There are no published data on the effects of radiation on fiberoptic instruments, or on how long an instrument is likely to last. Two aspects of this problem are being investigated: the effect of radiation on a fiberoptic bundle, and the dose received by the bundle during ERCP examinations.

Fiberoptic bundles were irradiated while transmitting light from a constant intensity source to a photo-diode detector. Deterioration of light transmission started immediately, and continued during exposure to radiation. There was a linear relationship between dose \times length irradiated (rad-m) and optical density. A 50% reduction in optical density was caused by 30 rad-m.

The radiation dose received by the duodenoscope during ERCP examinations was measured, using lithium fluoride thermoluminescent dosimeters attached to the instrument. With a mean screening time of 70 s, at 85 kV, the mean incident dose to the instrument was 0.78 rad, the mean length irradiated being 18 cm. The screening effect of the instrument sheath was studied by placing dosimeters inside the sheath. The sheath had considerable screening properties, and only 33% of the dose incident upon the instrument actually reached the fiberoptic bundle.

Knowing the average radiation dose to the instrument, and the linear relationship between rad-m and deterioration of light transmission, it is thus possible to calculate the minimum 'half-life' of a duodenoscope. To reduce radiation damage during ERCP, the duodenoscope should be as straight as possible to minimise the length of bundle irradiated, and minimal screening time should be used with x-rays of as low energy as possible.

Anatomical landmarks on fiberoptic oesophagoscopy

J. SPENCER AND C. M. S. ROYSTON. Standard textbooks of anatomy and oesophageal surgery quote four landmarks that may be

encountered on oesophagoscopy at various distances from the incisor teeth—the cricopharyngeus (15 cm), aortic impression (22.5 cm), bronchial impression (27.5 cm), and the cardia (40 cm). The gastro-oesophageal mucosal junction is described as lying just above the cardia.

We have studied the normal anatomy in 60 patients without oesophageal disease to assess the variability in site and visibility of these structures at fiberoptic endoscopy. All patients were examined in the semirecumbent position. Landmarks were assessed as 'definitely', 'probably', and 'not' visible.

The cricopharyngeal sphincter was definitely observed in 58 patients (range 10-19 cm, mean 15.0 cm) and not observed in two patients. The aortic impression was definitely observed in 25 patients (range 15-28 cm, mean 23.1 cm); probably observed in a further 19 (range 20-30 cm, mean 23.7 cm), and not observed in 16 patients. A bronchus was definitely observed in only two patients (25 and 30 cm), probably in a further four patients (range 20-30 cm), and not observed in 54 patients. The mucosal junction varied between 33 and 46 cm (mean 39.7 cm) and was observed definitely in 56 patients and probably in four.

The gastric mucosa extended into the tubular oesophagus > 2 cm in eight patients, 1-2 cm in 10, and < 1 cm in 37; it was not identified in seven subjects.

The squamocolumnar junction was classified in 26 patients as a straight line, in 17 as irregular, and in 10 as very irregular with a tongue of columnar mucosa extending up into the oesophagus.

We have found considerable variation in the position of the anatomical landmarks studied, mainly because of variation in body height, which was significantly correlated with all the distances of each landmark from the incisors ($P < 0.01$ in each instance).

British Digestive Foundation

The Second Annual General Meeting was held at Lettson House on 4 December. The Chairman, Dr T. C. Hunt, CBE, reported on the progress of the restricted appeal and commented on the success which they had had with insurance companies and also very useful contributions from trusts—notably the Sobell, the Lucas, and the Lord Scott of Yews. A national structure was beginning to

emerge. An office had been started in London, from which there had been much coordination of the work of the Foundation. In addition, an encouraging development of regional committees had already started. Mr Bruce Torrance had formed a group of leading Manchester businessmen into a local committee under the chairmanship of Sir Neville Butterworth, and an outstandingly successful launching function was held at the Hayworth Gallery in October, with the Patron of the BDF, the Duke of Devonshire, receiving the guests. This included a concert, a tour of the Whitworth Art Gallery, and dinner. In Hull, Dr J. R. Bennett had formed a local branch, and a public luncheon was being planned. In Scotland, a strong committee had been formed, with the Earl of Elgin as patron, Dr W. Sircus as chairman, and Mr Alan Dean as the honorary secretary. In Bristol, Mr G. C. Osborne, a former patient, with Dr J. Naish as President, are organizing functions and publicity on behalf of the Foundation. A report on the work of the Scientific Committee was given with special reference to the studies on transmissible factor in Crohn's disease. The British Digestive Foundation, in spite of the very difficult economic times, has made a significant start, with an income during the year of over £10,000 and an accumulated fund which will help in continuing the work until the economic climate improves. Great credit is due to Dr T. C. Hunt for the sustained effort and for his enthusiasm which has been transmitted to the regional activities.

F.A.J.

Norman Tanner Endoscopy Unit

The Norman Tanner Endoscopy Unit was opened at St James's Hospital on 11 December 1975, by Mrs. Alison Munro, the Chairman of the Merton, Sutton, and Wandsworth Area Health Authority (Teaching). This new gastroenterology unit is a converted ward, with clinical and endoscopy rooms, laboratory, offices, and recovery area. Specially designed trolleys enable the patients to stay on them the whole time. The unit will include facilities for all the usual gastroenterology diagnostic tests, such as jejunal biopsy and pancreatic tests. Mr. Norman Tanner, whose name has been given to the unit, has worked at St. James's Hospital since 1939 and it was here that he became so well known for his work on gastric and oesophageal surgery and where he acquired

unparalleled experience in surgery for gastrointestinal bleeding. The opening ceremony was followed by the first Norman Tanner Lecture on 'Peptic Ulcer—Past, Present and Future' given by Sir Francis Avery Jones.

XII Argentinian Congress of Gastroenterology

This meeting was held in the splendid cultural centre named after General San Martin in Buenos Aires from 2 to 7 November 1975, under the able Presidency of Dr Luis Bustos Fernandez. A considerable number of overseas guests from North America and Europe were invited to participate in this well-organized Congress, the British representatives being Dr Julia Polak and Dr J. H. Baron from the Royal Postgraduate Medical School, London, and Professor I. E. Gillespie from Manchester. Participants from Denmark, France, Germany, and most of the other South American countries were also present, and, in addition to the main scientific programme, there were several parallel and post-course informal sessions at which a combination of teaching and discussion of 'recent advances' was possible.

The first day was mainly devoted to the oesophagus, the second to the stomach, the third to the liver disorders, and the fourth to small intestine function and disorders. The final day was devoted to hormones of the gastrointestinal tract and a variety of other topics including bile acids, epidemiology of gastrointestinal diseases, and further aspects of viral hepatitis. This grouping under main subject headings was highly successful, and allowed those with a particular special interest to get together informally at times when another topic was under consideration, for smaller group discussions. Simultaneous translation of a high standard was provided for all of the main sessions, and this was greatly appreciated mainly by the European participants. Several panel discussions were included after the series of presentations, and this gave ample opportunity for a large number of questions, and the further amplification of points of interest touched on by the different speakers.

A most delightful social programme was laid on by our very hospitable Argentinian hosts, and nothing was too much trouble for them to ensure that all their visitors were completely spoiled. One small example is the immediate change of date,

time, and venue for a combined session undertaken jointly by Dr J. H. Baron and Professor I. E. Gillespie on the medical and surgical treatment of peptic ulcer, when such a change was necessitated by alterations to travel arrangements. In spite of the last-minute alterations, a large, interested, attentive audience was obtained, and none seemed in any way put out by such radically altered arrangements.

This was a full and interesting programme, reflecting considerable credit on the organizers of this congress held every two years in Buenos Aires, and it is hoped that contact between the Argentinian Society of Gastroenterology and British gastroenterologists will continue to flourish.

I.E.G.

Peptic ulcer symposium—Marburg

Dr. Wilfried Lorenz has been Professor of Experimental Surgery and Pathological Biochemistry in Professor Hamelmann's Department of Surgery, Marburg, since 1970, and, on 22 November 1975, he organized a one day symposium on 'Peptic Ulcer and Histamine' to inaugurate new surgical research laboratories. Professor G. A. Martini (Marburg) introduced the morning session on pathophysiology (S. O. Konturek, Cracow), medical treatment (J. H. Baron, London), and H_2 receptor antagonists (J. W. Black, London), and the organization of cooperative studies between clinical and theoretical surgeons (W. Lorenz). Professor Hamelmann was chairman of the afternoon session on surgical treatment (J. C. Goligher, Leeds), gastric mucosal histamine (H. Troidl, Marburg), and histamine methyl transferase (H. Barth, Marburg), gastrin (F. Largiader, Zurich), stress ulcers (K. Mohri, Kyoto), and catechin inhibition of stress erosions (H. J. Reimann, Marburg). The symposium will be published (in English) in *Klinische Wochenschrift*.

J.H.B.

The gut as an endocrine organ

There will be a two day joint meeting between the Endocrine Section of the Royal Society of Medicine and the Society for Endocrinology on 'The gut as an endocrine organ' on 24–25 February 1976. The main sessions cover the nature, localization, and pathophysiology of

- Gastrin, secretin, cholecystokinin/pancreozymin.

- GIP, VIP, motilin.
- Cellular mechanisms and gastrointestinal hormones.
- GHRH, substance P, neurotransmitters, skin hormones.

Fuller details can be obtained from: Mrs. E. Coley, The Sections Secretary, The Royal Society of Medicine, 1 Wimpole Street, London, W1M 8AE.

Training course: British Society for Digestive Endoscopy

A Teaching and Scientific Meeting will be held at The Middlesex Hospital Medical School, London W1, 25–26 March 1976. The first one-and-a-half days of the Meeting will be devoted to teaching. In particular, one aspect of endoscopy, routine upper GI endoscopy, ERCP, colonoscopy, will be taught in great detail and delegates will be able to choose which of these subjects to study. There will also be quizzes, workshops, and teaching models. There will be a separate session for nurse/technician endoscopy assistants on the first day. The last half-day will be the scientific programme of the Society. Further details may be obtained from the Local Secretary, Dr M. E. Denyer, Gastrointestinal Unit, The Middlesex Hospital, London, W1N 8AA.

11th Congress: European Society for Surgical Research 27–30 April 1976, Dublin. Principal topics will include: tumour markers, bio-engineering, wound healing, pathophysiology of ischaemia, gastroenterology, rheology, and thrombosis. Inquiries to T. V. Keaveny, Conference Centre, Irish Medical Association, 10, Fitzwilliam Place, Dublin 2, Eire.

Spring Meeting of British Society of Gastroenterology

The Spring meeting of the Society will take place at the University of Canterbury, Canterbury, Kent on 9 and 10 April 1976. The local Organising Secretary is Dr M. O. Rake, Kent and Canterbury Hospital, Ethelbert Road, Canterbury, Kent. Registration forms will be sent to all members later.

Abstracts of papers for this meeting (nine copies, not more than 200 words and three references, typed on one side only of A4 papers one table or one figure can be included, but will not be published) should reach the Hon. Secretary, Dr J. J. Misiewicz, Medical Research Council Gastroenterology Unit, Central

Middlesex Hospital, Park Royal, London, NW10 7NS, by first post on Friday, 6 February 1976. Full details in *BSG News*.

Notes on books

Intestinal Absorption and Malabsorption edited by T. Z. Csaky. (Pp. x + 308; illustrated, price not stated.) Raven Press: New York. 1975. This publication is based on an international symposium at the Graduate School, University of Kentucky. It brought together basic scientists and clinicians and covered the biochemistry, biophysical, and physiological aspects of intestinal transport of water, electrolytes, amino acids, and peptides in man and experimental animals. The malabsorption produced by cholera and other toxins is covered. It is an important statement on present-day knowledge in this field.

Transactions of the Third International Orthodontic Congress Edited by J. T. Cook. (Pp. xxii + 594; illustrated; £16.00) Crosby Lockwood Staples: London. 1975. This reports the proceedings of the Third International Congress on Orthodontics held in London in 1973. This has been a very rapidly developing specialist field.

Human Nutrition and Dietetics Sixth edition by Sir Stanley Davidson, R. Passmore, J. F. Brock, and A. S. Truswell. (Pp. viii + 756; illustrated; price not stated) Churchill Livingstone: Edinburgh. 1975. This is the 6th edition of this very well-known textbook. Three new chapters have been added, on historical and geographical perspectives, hyperlipidaemias, and on nutrition and cancer. Dietary fibre has been given suitable prominence. The whole book has been brought up to date and remains a most readable source of reference in nutrition and dietetics.

Disease of the Small Intestine in Childhood By John Walker-Smith. (Pp. x + 254; illustrated; £7.00). Pitman Medical, London. This book reviews diseases of the small intestine in children with special emphasis on causes, clinical manifestations, and diagnostic techniques. It is a field in which the author has specially worked for some years, first in Australia and now in London. A concise but very informative and practical publication.