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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 devoted to short papers on laboratory and surgical techniques and methods of investigation where these are not part of a lesser survey.

COMMUNICATIONS Papers should be addressed to the Editor, *Gut*, B.M.A. House, Tavistock Square, London, W.C.1. Papers are accepted only on the understanding that they are not published elsewhere without previous sanction of the Editorial Board. 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.

ABBREVIATIONS In general, symbols and abbreviations should be those used by British Chemical and Physiological Abstracts. In any paper concerning electrolyte metabolism, it is desirable that data be calculated as m-equiv/l. as well as (or alternatively to) mg/100 ml.

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 author's name. 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 numbers of first and last pages of article. Abbreviations are according to *World Medical Periodicals* (published by B.M.A. 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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Signposts

COLONIC MOTOR ACTIVITY AND BOWEL FUNCTION (page 502) A time-lapse cinefluorographic study of the movement of barium in the colon, providing a most interesting picture of colon function and quantitating net propulsion in diarrhoea and in constipation

LARGE BOWEL PERISTALSIS (page 512) In patients with well-established colostomies spontaneous peristalsis was seen to occur infrequently but could be regularly stimulated by Bisacodyl or Oxyphenisatin; this effect is prevented by the prior application of a mucosal local anaesthetic, Lignocaine.

INTESTINAL FERMENTATION IN ULCERATIVE COLITIS (page 512) An interesting study demonstrating an excess of lactic acid and volatile fatty acids in the stools in a proportion of patients due to an abnormal degree of fermentation or a failure to absorb the solutes, or both. Restriction of sugar and starches may markedly reduce diarrhoea.

AMINO ACID INCORPORATION INTO PROTEINS OF HUMAN NORMAL AND ULCERATIVE COLITIS COLONIC MUCOSA (page 527) Reduced regenerative capacity of the colonic epithelial cells is demonstrated.

INTESTINAL PERFUSION TECHNIQUES (page 530) Double-lumen tubes give valid results and make the absorption studies simpler and easier.

BILIARY EXCRETION OF ANTIBIOTICS IN MAN (page 536) A study of biliary excretion of nine antibiotics showing that intramuscular injections provide a more constant concentration in bile than oral administration. The rifamycins provided the highest concentrations of the antibodies tested.

HUMAN GALL BLADDER MUSCLE (page 546) A pharmacological study of the response of the smooth muscle of the gall bladder not previously undertaken in man. A lack of sensitivity to adrenergic substances and to nitrites and great sensitivity to choleceptokinin is shown.

EXPERIMENTAL GALLSTONES (page 550) During the experimental induction of gallstones in the rabbit there is an increase in biliary mucus, although there is no mucus normally secreted. Electron microscope studies have been made on the changes in the gall bladder epithelium after the administration of dihydrocholesterol with reference to the origin of this mucus and other cellular changes.

ALCOHOL AND PANCREATIC DISEASE (page 557) These studies indicate that alcohol increases the

tone of the sphincteric mechanism at the choledochoduodenal junction in man. As the pancreatic secretion is stimulated at the same time this could lead to ductular rupture and pancreatitis.

EFFECT OF SODIUM DESOXYCHOLATE ON THE INTESTINAL ABSORPTION AND LYMPHATIC TRANSPORT OF OLEIC ACID IN THE BILE FISTULA RAT (page 561). The unconjugated bile salt sodium deoxycholate caused initial depression of absorption of fatty acid in contrast to the improvement after a conjugated bile salt. The significance of this in relation to steatorrhoea with blind loop is discussed.

MACROGLOBULINAEMIA AND STEATORRHOEA (page 564) An important case report of a possible benign 'monoclonal gammopathy' in a woman with steatorrhoea.

PRIMARY LYMPHADENOPATHY COMPLICATING IDIOPATHIC STEATORRHOEA A progressive increase and pleomorphism in reticulum cells in the intestinal mucosa and lymph nodes leading to the development of reticulosarcoma in patients with longstanding idiopathic steatorrhoea (page 569).

POSTGASTRECTOMY MALNUTRITION (page 576) H. S. Hillman demonstrates the importance of pancreatic insufficiency as a factor contributing to post-gastrectomy steatorrhoea and malnutrition. Treatment with pancreatic extracts may be of real help.

B-GLUCORONIDASE ACTIVITY OF GASTRIC JUICE IN GASTRIC CARCINOMA (page 585) Increased levels of activity were found in 93% of patients with gastric carcinoma. False positive and negative results can occur.

CLINICAL EVALUATION OF THREE LONG-ACTING ANTI-CHOLINERGIC COMPOUNDS (page 590) This study underlines the marked differences in the pattern of response of one individual to different antibiotics and of different individuals to the same antibiotic. Gastric secretion was significantly suppressed by all three compounds but the limiting side effects differed between subjects on the same drug and in the same person with different drugs.

CALCIUM ABSORPTION IN THE NORMAL BILE-DUCT LIGATED, AND CIRRHOTIC RAT, WITH OBSERVATIONS ON THE EFFECT OF LONG- AND MEDIUM-CHAIN TRIGLYCERIDES (page 597) An experimental study of calcium absorption in relation to liver dysfunction and disease.

VAGUS INFLUENCE ON GASTRIC ACID SECRETION (page 604) These interesting studies lend no support to the concept of vagal overactivity being the cause of hypersecretion in duodenal ulcer.

COARSE DUODENAL FOLDS (page 609) This study demonstrates a correlation between high acid output and markedly coarse duodenal folds.

- Nordin, B. E. C., MacGregor, J., and Smith, D. A. (1965). The incidence of osteoporosis in normal women: its relation to age and the menopause. *Quart. J. Med.*, **35**, 25-38.
- Pavlov, I. P. (1905). Laboratornye nabliudeniia nad razmiagcheniem Kosteï u sobaki. *Trudy Obsch. russk. Vrach. S-Peterb.*, **72**, 314-320. (Reprinted in German in Pavlov, I. P. (1952) *Samtliche Werke*, **6**, 184-189).
- Sallis, J. D., and Holdsworth, E. S. (1962). Influence of vitamin D on calcium absorption in the chick. *Amer. J. Physiol.*, **203**, 497-505.
- Schachter, D., Finkelstein, J. D., and Kowarski, S. (1964). Metabolism of vitamin D. I. Preparation of radioactive vitamin D and its intestinal absorption in the rat. *J. clin. Invest.*, **43**, 787-796.
- Seidel, H. (1910). Permanente Gallenfistel und Osteoporose beim Menschen. *Munch. med. Wschr.*, **572**, 2034-2036.
- Snapper, I., Seely, R., Falk, S., and Feder, I. (1954). Osteomalacia in New York. *Ann. intern. Med.*, **41**, 893-909.
- Steggerda, F. R., and Mitchell, H. H. (1951). The calcium balance of adult human subjects on high- and low-fat (butter) diets. *J. Nutr.*, **45**, 201-211.
- Telfer, S. V. (1931). The influence of free fatty acids in the intestinal contents on the excretion of calcium and phosphorus. *Biochem. J.*, **15**, 347-354.
- Verzár, F., and McDougall, E. J. (1936). *Absorption from the Intestine*, p. 106. Longmans, Green, London.
- Webling, D. D'A., and Holdsworth, E. S. (1965). The effect of bile, bile acids and detergents on calcium absorption in the chick. *Biochem. J.*, **97**, 408-421.
- , — (1966). Bile salts and calcium absorption. *Ibid.*, **100**, 652-660.
- Westerlund, A. (1934). The effect of tributyrin on the faecal output of calcium in full grown rats. *Lantbr Högsk. Annl.*, **1**, 1.
- Wisner, F. P., and Whipple, G. H. (1922). Variations in output of bile salts and pigments during 24 hour periods. *Amer. J. Physiol.*, **60**, 119-133.

The August 1968 Issue

THE AUGUST 1968 ISSUE CONTAINS THE FOLLOWING PAPERS

Signposts

Primary anorexia nervosa A. H. CRISP

Gastric intrinsic factor I. CHANARIN

Three cases of ischaemic colitis GEORGE H. DICKSON

Multiple tuberculous perforations of ileum W. G. PROUT

Crohn's disease and diffuse symmetrical periostitis
G. NEALE, A. R. KELSALL, and F. H. DOYLE

Radiological findings in carcinoma of the colon complicating chronic ulcerative colitis JOHN J. FENNESSY, MARSHALL B. SPARBERG, and JOSEPH B. KIRSNER

The source of duodenal aspirate in man K. G. WORMSLEY

Action of pancreozymin preparations on gastric acid secretion M. NAKAMURA, S. NAKAJIMA, and D. F. MAGEE

Blood changes eight years after vagotomy with gastrojejunostomy compared with those after Polya partial gastrectomy ALAN G. COX, H. E. HUTCHISON, and C. A. J. WARDROP

Site and localization of duodenal ulcers: a study at operation R. M. KIRK

Gastric emptying rate of the water and fat phases of a mixed test meal in man C. A. CHANG, RICHARD D. MCKENNA, and IVAN T. BECK

Absorption and malabsorption of glycine and glycine peptides in man I. L. CRAFT, D. GEDDES, C. W. HYDE, IRENE J. WISE, and D. M. MATTHEWS

Retrospective review of 208 proved cases of anastomotic ulcer JOHN R. CONDON and NORMAN C. TANNER

Colonic motor activity and bowel function J. A. RITCHIE

Basal electrical activity in the anal canal in man W. J. WANKLING, B. H. BROWN, C. D. COLLINS, and H. L. DUTHIE
Hypertrophic tuberculosis of the rectum P. R. HAWLEY, H. R. I. WOLFE, and J. M. FULLERTON

Protein metabolism in the intestinal stagnant loop syndrome E. A. JONES, A. CRAIGIE, A. S. TAVILL, G. FRANGLÉN, and V. M. ROSENOER

An analysis of the insulin test after vagotomy using single and multiple criteria G. GILLESPIE, I. E. GILLESPIE, and A. W. KAY

Effect of five salicylate-containing compounds upon loss of ⁵¹chromium-labelled erythrocytes from the gastrointestinal tract of normal man WARREN L. BEEKEN

Incidence of primary carcinoma of the liver in the west of Scotland between 1949 and 1965 W. G. MANDERSON, R. S. PATRICK, and ELIZABETH E. PETERS

Slowly evolving widespread diffuse alimentary tract carcinoma (linitis plastica) J. PINTO CORREIA, AMÉLIA S. BAPTISTA, and J. FELIX ANTÓNIO

Acute fatty liver of pregnancy R. A. JOSKE, D. J. MCCULLY, and F. L. MASTAGLIA

Comment

Notes and activities

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BRITISH MEDICAL ASSOCIATION, TAVISTOCK SQUARE W.C.1, price 18s. 6d.

Notes and activities

INTERNATIONAL GASTROENTEROLOGICAL RESEARCH The Research Committee of the World Organization of Gastroenterology (OMGE) is organizing further studies on alimentary cancer with special reference to variations in the site of tumours. There is a continuing interest in gross geographical differences between countries. All the evidence points towards alimentary cancer being related to exogenous aetiological factors which most likely have been ingested. Where there is a difference there is a cause and the study of differences may provide aetiological clues. Further studies are being organized by Dr Michael Langman, Medical Unit, The General Hospital, Nottingham, England.

A prospective study on the epidemiology of gall stones is also being arranged with the assistance of Dr I. Bouchier, Medical Unit, Royal Free Hospital, Gray's Inn Road, London, W.C.1.

A pilot study on inflammatory diseases of the colon is being undertaken with special reference to the incidence of different pathological groups, and it is hoped that this may become available for international comparisons.

Any suggestions for further international cooperation in gastroenterological research will be welcomed by Dr F. Avery Jones, Department of Gastroenterology, Central Middlesex Hospital, Acton Lane, London, N.W.10.

SIR ARTHUR HURST MEMORIAL LECTURE The second of these lectures will be given to the British Society of Gastroenterology at the Royal College of Physicians, London, on Friday, 8 November by Dr Brian Creamer on 'Body-mucosa-lumen: A small intestinal trilogy'.

BOOKS OF INTEREST TO READERS OF GUT

Monographs are often an invaluable source of references quite apart from their intrinsic scientific merit and this is particularly true of two recently published. 'Signification Du Tissu Lymphoïde Des Muqueuses Digestives' by Paul Crabbe published by Editions Arscia S.A. Bruxelles, is written in French and includes a very detailed summary in English. It is concerned mainly with an immunological analysis of the plasma cells in the human gastrointestinal mucosa. The large numbers suggest that the digestive tract may play an important role in the synthesis of immunoglobulins. The distribution of the different immunoglobulins was studied in biopsy specimens obtained from a number of gastrointestinal diseases, but in most instances the IgA cells were predominant as in normal biopsies. There was one exception in a single case of idiopathic ulcerative colitis when numerous IgD cells were focally distributed in the diseased rectal mucosa. An interesting group of cases of steatorrhoea associated with hypogammaglobulinaemia were studied and in these there were striking changes and it seemed likely that the deficiency of immune globulin and plasma cells was the primary defect.

In his monograph 'Gastro-intestinales Serumeiwuitscheiding' B. P. Hazenberg (Wolters-Noordhoff Medische Publikaties, Groningen) has studied the excretion of

serum proteins into the gastrointestinal tract. It is written in Dutch, but again has a detailed summary in English and has a very full bibliography. The monograph reports the immunofluorescence studies made with special reference to the identification of the different immunoglobulins. The specific anti IgA, anti IgM, and anti IgG antisera used in the fluorescence technique were prepared by the investigators. A hitherto unreported finding was the demonstration of lipoprotein in approximately half the patients with protein-losing enteropathy. The studies seem to indicate that protein loss might be associated with an increased capillary permeability as found in the glomerular capillaries.

Of more limited interest is the Italian monograph reporting the incidence of digestive diseases in 19,093 subjects and the type of digestive upset has been correlated with the work, age, time of onset, and conditions of work. It is written in Italian with a short summary in French and in English 'Lavoro E Malattie Dell'Apparato Digerente' by Rodolfo Cheli and Giuseppe Canciani. *Artis Medicae Studia* 38, Istituto Nazionale per l'Assicurazione Contro Le Malattie.

Biopsy procedures in clinical medicine This small authoritative book of 184 pages edited by Dr A. E. Read will be widely welcomed. It brings together precise details of techniques used in biopsy. Naturally it includes full details of biopsy methods and instruments used for the gastrointestinal tract and the liver, as well as methods concerning other parts of the body. There is a chapter on laboratory handling of biopsy material and also an appendix on the cost of apparatus and where it can be obtained. John Wright & Sons Ltd (1968) 40s.

Tropical diseases It is essential for all concerned with gastroenterology to keep up to date with tropical diseases and we welcome the 'Synopsis of infectious and tropical diseases' by Professor A. W. Woodruff and S. Bell. It represents an extensive revision of Sir Henry Tidy's original synopsis with much new material. Published by Medical Books, London. Price 47s. 6d.

GASTROENTEROLOGICAL JOURNALS How many gastroenterological journals are available in London Libraries?

IN ENGLISH

American Journal of Digestive Diseases
American Journal of Gastroenterology
American Journal of Proctology, Gastroenterology, and Allied Subjects
Digestion (formerly Gastroenterologia)
Diseases of the Colon and Rectum
Gastroenterology
Gut

Scandinavian Journal of Gastroenterology

IN OTHER LANGUAGES

Acta Gastro-enterologica Belgica
Acta Hepato-Splenologica
Archives Francaises des Maladies de l'Appareil digestif
Archives Maladies de l'Appareil Digestif et des Maladies de la Nutrition
Archivio Italiano della Malattie dell'Apparato Digerente
Ceskoslovenska Gastroenterologie a Vyziva
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