

# JOURNAL OF CLINICAL PATHOLOGY

*The Journal of The Association of Clinical Pathologists*

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## The November 1967 Issue

### THE NOVEMBER 1967 ISSUE CONTAINS THE FOLLOWING PAPERS

- Activation of lymphocytes R. J. V. PULVERTAFT and ISOBEL PULVERTAFT
- Lipofuscinosis of the gastrointestinal tract in man BERNARD FOX
- Tracheopathia osteoplastica S. P. B. WAY
- Acute necrotic myelitis and perivenous encephalomyelitis associated with hypertension and renal infection A. A. MILLER and F. RAMSDEN
- Incidence and significance of argentaffin and Paneth cells in some tumours of the large intestine N. M. GIBBS
- Significance and interpretation of laboratory tests in pulmonary aspergillosis MARY P. ENGLISH and A. H. HENDERSON
- Further observations on inclusion-bearing cells in urinary sediment in infectious diseases J. F. BOYD and NADA NEDELKOSKA
- Granulomatous giant cell reticulosis associated with cases of treated leukaemia G. KRASZNAI, S. KERESZTURY, and L. SZÜCS
- Platelet adhesiveness in diabetes mellitus S. SHAW, G. D. PEGRUM, SYLVIA WOLFF, and W. L. ASHTON
- Red blood cell abnormalities in cardiac valvular disease J. FORSHAW and L. HARWOOD
- Hyaline droplet formation in the renal epithelium of patients with haemoglobinuria S. J. BRYANT
- Hyaline cast formation in patients treated with cephaloridine W. D. LINSELL, A. PINES, and J. W. HAYDEN
- Observation on the levels of  $\gamma$ G,  $\gamma$ A, and  $\gamma$ M globulins, anti-A and anti-B agglutinins, and antibodies to *Escherichia coli* in Down's anomaly M. ADINOLFI, BRIGITTE GARDNER, and WENDY MARTIN
- Mycoplasmas and recurrent oral ulceration A. M. GORDON, H. M. DICK, D. K. MASON, W. MANDERSON, and W. B. CRICHTON
- Resistance to cloxacillin among hospital staphylococci G. C. TURNER and P. E. COX
- Serological diagnosis of amoebiasis by immunofluorescence SOMNATE BOONPUCKNAVIG, and R. C. NAIRN
- Evaluation of the fluorescent antibody technique for the diagnosis of smallpox A. L. A. EL-GANZOURY
- Fatal transfusion reaction due to *Serratia marcescens* W. A. BLACK, A. POLLOCK, and ELIZABETH L. BATCHELOR
- Importance of potency in typing by colicine production J. MCGEACHIE and W. MCCORMICK
- Thyroid disease following the administration of Thorotrast A. O. LANGLANDS and KATE HERMANN
- Use of diethylenetriamine penta-acetic acid (D.T.P.A.) in the clinical assessment of total body iron stores L. W. POWELL and M. J. THOMAS
- Semi-automated method for the determination of free fatty acids in plasma JOYCE D. BAIRD, M. W. BLACK, and D. E. FAULKNER
- New automated method for measuring glucose by glucose oxidase D. G. CRAMP
- Technical methods*
- Red cell volume distribution histograms for establishing the normal range using the Coulter plotter model J. K. CRAINE and A. D. WAFT
- Measurement of red cell diameter by image shearing P. N. COLEMAN
- The Association of Clinical Pathologists: 79th general meeting
- Book reviews
- Index to volume 20

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

TABLE IV  
EXTENT OF MULTIPLE DRUG RESISTANCE OF PROTEUS SPECIES

Organism	Total No. of Strains Tested	Number of Drugs									
		1	2	3	4	5	6	7	8	9	10
<i>P. mirabilis</i>	350	3 <sup>1</sup>	31	161	92	40	15	6	2	0	0
<i>P. morgani</i>	60	1	10	6	9	18	12	2	2	0	0
<i>P. vulgaris</i>	60	2	0	4	19	18	11	3	0	3	0
<i>P. rettgeri</i>	80	0	0	1	7	8	19	31	6	6	2

<sup>1</sup>Figures indicate numbers of resistant strains.

tiated in this series, the overall percentage of sensitive strains of *Proteus* to ampicillin (25 µg) would be 61.4% and to chloramphenicol (10 µg) would be 69.2%. Such data are erroneous because the actual percentage of sensitive strains of *P. mirabilis* to ampicillin was much higher (96.5%) and, on the other hand, the actual percentage of sensitive strains of *P. rettgeri* to chloramphenicol was very low (8.7%). The Multitest media (Huang, 1966), which enables rapid differentiation of species without excessive use of materials and labour, are therefore, very helpful in routine sensitivity testing of *Proteus*.

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## Reports and Bulletins prepared by the Association of Clinical Biochemists

The following reports and bulletins are published by the Association of Clinical Biochemists. They may be obtained from Mr. J. T. Ireland, Biochemistry Laboratory, Alder Hey Children's Hospital, Liverpool, 12. The prices include postage, but airmail will be charged extra.

## SCIENTIFIC REPORTS

- 1 Colorimeters with Flow Through Cells. A critical assessment of 4 instruments. 1965. P. M. G. BROUGHTON and C. RILEY. 13s. 6d.
- 2 Colorimeters. A critical assessment of 5 commercial instruments. 1966. P. M. G. BROUGHTON, C. RILEY, J. G. H. COOK, P. G. SANDERS and H. BRAUNSBURG. 15s.
- 3 Automatic Dispensing Pipettes. An assessment of 35 commercial instruments. 1967. P. M. G. BROUGHTON, A. H. GOWENLOCK, G. M. WIDDOWSON and K. A. AHLQUIST. 10s.

## TECHNICAL BULLETINS

- 3 Non-recording Spectrophotometers for the Visible and Ultraviolet Ranges. A comparative table of instruments available in Great Britain. May 1965. A. H. GOWENLOCK, P. C. NICHOLAS and J. H. WILKINSON. 1s. 6d.
- 4 Control Solutions for Clinical Biochemistry. June 1965. P. M. G. BROUGHTON and A. H. GOWENLOCK. 1s. 6d.

- 5 Recording Spectrophotometers. A comparative list of low-priced instruments readily available in Britain. July 1965. P. SEWELL. 2s. 6d.
- 6 A Guide to Automatic Pipettes. A list of more than 100 instruments compiled from manufacturers' literature. August 1965. P. M. G. BROUGHTON. 5s.
- 7 Variability Between AutoAnalyzer Modules. August 1965. B. E. NORTHAM. 1s. 6d.
- 8 Flame Photometers. A comparative list of 15 instruments readily available in Britain. June 1966. C. RILEY. 4s.
- 9 Determination of Urea by AutoAnalyzer. November 1966. RUTH M. HASLAM. 2s. 6d.
- 10 Filter Fluorimeters. A comparative list of 14 instruments. March 1967. HANNELORE BRAUNSBURG. 5s.
- 11 Determination of Serum Albumin by AutoAnalyzer using Bromocresol Green. October 1967. B. E. NORTHAM and G. M. WIDDOWSON. 2s. 6d.

## Postgraduate education

Since its inception in 1964 two of the main aims of the College of Pathologists have been to design a suitable training programme for pathologists and to set up a qualification which would be the hallmark of satisfactory training. Already, the wide recognition of this qualification has underlined the wisdom of the policy. As the College has made it clear that it is not its intention to organize training for its own examinations, it is not altogether surprising that there has been a growing concern about the ways in which trainee pathologists might obtain educational assistance to supplement their routine day-to-day experience and training at the bench.

Just over a year ago the Council of the Association of Clinical Pathologists, realizing the changing situation and the pressing importance of the problem, decided to make education one of its main objectives and appointed an Education Committee under the chairmanship of Professor George J. Cunningham. This was not an entirely new venture because the Association has long had an interest in postgraduate education, and one of its pioneer members, Dr. Cuthbert Dukes, had with admirable foresight instituted a series of short refresher courses for consultants just after the Second World War. The courses were based on the specialist hospitals and institutes of the Post-Graduate Medical Federation in London and were chiefly related to special problems in histopathology. They were an immediate success and continued in their original form until, in 1959, Professor Cunningham took over their overall organization and widened their scope. The current programme contains no fewer than 30 short courses, covering a wide range of subjects, held in many centres throughout the country. In 1961 the secondment scheme was started which offered facilities for learning special techniques in a number of selected laboratories.

Though these facilities have proved to be of considerable value to the established consultant little or nothing has hitherto been arranged specifically for the trainee, and the Education Committee saw that its first task was to cater for his needs. That the matter is of some urgency is emphasized by the recent Ministry of Health decision to permit 30 days of study leave per annum for all trainees. The Committee set about the problem by first finding out the numbers and distribution of trainees throughout the country. Courses already in existence, thanks to the enthusiasm of many individual pathologists in many of the larger centres, were extended

and, in other places where no formal courses existed, ACP members were asked to organize teaching programmes. The problem of an effective liaison between the central committee and the trainee—in which a thorough knowledge of local circumstances and facilities is essential—has been met by the appointment of local education organizers. Each ACP branch now has its own 'Branch education organizer' whose job it is to be responsible for the overall organization of postgraduate education within the branch, to act as a link between the branch and the Education Committee, and to give guidance and to be of assistance to the individual trainee. Nevertheless, communication with the trainee still remains a major difficulty, particularly with those who are not members of the Association. The ACP Council has recently agreed that the Committee should compile a register of trainees who, on payment of a small annual fee, would be given educational information as well as certain other privileges concerned with attendance at training courses. It is anticipated that this scheme will become fully effective during the 1968/69 academic year and it is hoped that it will bring about the much needed improvement in communication.

In April 1968 a short vacation school in haematology, suitable for trainees taking the final MCPATH examination, will be held at Oxford. This is an entirely new venture and will be organized by the local branch education organizer. Other similar schools are being planned and it is hoped that one in general pathology, suitable for primary MCPATH candidates, will be held about the same time if there is sufficient demand.

Audio-visual education aids are an important aspect of modern training in all disciplines, and the Education Committee has decided to produce two such aids in the near future. These will illustrate haematological subjects and each will consist of sets of transparencies accompanied by a commentary on tape. It is intended that they will be on sale at a reasonable price early in 1968 and that they will be the forerunners of many other similar schemes.

It is hoped that all senior pathologists will cooperate by drawing the attention of their trainees to the facilities provided by the Association. The wide-ranging education programme could not have been developed without the willing cooperation of a large number of ACP members throughout the country who have given so freely of their time and energy.

MODERN TRENDS IN FORENSIC MEDICINE 2nd series. Edited by K. Simpson. (Pp. x + 374; illustrated. 98s.) London: Butterworths. 1967.

The first series of *Modern trends in forensic medicine* was published in 1953 and, like the volume now reviewed, was edited by Professor Keith Simpson. It is not a revision and the two books are complementary.

Thirteen subjects are discussed and all are worth attention. Much is happening in this field, and a chapter by Professor Gilbert Forbes on the organization, staffing, and equipment of an institute of forensic medicine is timely and contains much wisdom. His remarks about the deficiencies in the clinical side of this subject are undoubtedly true and should be noted by police authorities, especially in rural areas.

Professor Keith Simpson writes on two important subjects. In his chapter on the pattern of traffic accidents information is given which should be helpful to all those, including lawyers and the police, who have to try to assess what actually happened in a given road accident. It is a sobering thought that traffic accidents cause 7,000 deaths and 350,000 cases of injury in Britain each year. The statistical analysis of the accidents is worthy of study.

The chapter by Professor Simpson on the pathology of the myopathies is a useful summary of what many morbid anatomists find a very difficult subject.

Dr. Keith Mant writes on post-mortem changes and timing death and also on the pathology of hypothermia. Dr. G. R. Osborn gives a critical and interesting review of coronary disease which includes much of his own research into this subject.

The legal application of blood group systems was dealt with in the earlier series, but in this book Dr. Alan Grant brings the subject up to date, and it seems amazing that Parliament has not found time to pass legislation requiring the application of blood grouping to affiliation problems.

Other subjects discussed are photography in crime investigation, forensic immunology, the pathology of the foetus and infant, and mishaps of modern therapeutics. A final chapter by W. H. D. Winder, a barrister, on civil liability and the law of evidence gives the present position on matters which are of importance to all doctors.

This is a good and important book and is well produced but, perhaps, a little expensive. It is essential for forensic pathologists and should be in the possession of all pathologists doing hospital or coroners' necropsies.

G. STEWART SMITH

HANDBOOK OF EXPERIMENTAL PHARMACOLOGY VOL. 16, SECTION 15 By E. Eichenberger, P.P. Foa, and T.A.I. Grillo. (Pp. xii + 472; 94 figures. DM 136.) Berlin: Springer-Verlag. 1966.

In volume 16, section 15 of the *Handbuch der Experimentellen Pharmakologie* the study of 'Carbohydrate metabolism' is discussed by P. P. Foa of Detroit, and 'Fever and endogenous hyperthermia...' by E.

Eichenberger of Berne. The first of the two articles is in English, the second is in German.

Foa's contribution is concerned mainly with biological and chemical methods currently or formerly used in the experimental study of carbohydrate metabolism in laboratory animals and in man, and with their interpretation in terms of physiological or clinical significance. Histological and histochemical methods for investigating the endocrine pancreas are discussed in 13 pages by Foa and A. I. Grillo.

The scope of the presentation is wide and literature quoting extensive, though not exhaustive. The material is presented clearly and concisely—factually rather than critically.

It is inevitable in a volume of this size, especially in so rapidly expanding a field, that the most recent contributions to knowledge are not included: 1,587 references are cited in the main text and an addendum, completed on 31 January 1965—little more than 18 months after the main work—contains references to a further 650 publications in the field of carbohydrate metabolism, and only a slightly smaller number of references are cited by Eichenberger.

The book is a mine of information but first and foremost it is a source book rather than a working manual. It would repay study by anyone entering the fields of scientific investigation dealt with within its covers and should have a place on the bookshelf of the established investigator for reference. Its use to the practising clinical pathologist, however, is likely to be limited.

VINCENT MARKS

#### *Journal of Medical Microbiology*

A new journal, the *Journal of Medical Microbiology* is soon to be established by the Pathological Society of Great Britain and Ireland. The aim will be to publish papers on all aspects of microbiology—bacteriology, protozoology, virology, mycology, and immunology—insofar as they are applicable to human or veterinary medicine, and advance knowledge in these fields. Papers that include clinical or epidemiological observations, as well as the results of laboratory work, will be welcome, particularly if they help to define diseases caused by individual microorganisms, to improve methods of diagnosis or treatment, or to increase understanding of the sources and routes of infection.

It is expected that the first issue will appear in August 1968. The price will be 17/6 per issue, or £3 for the four issues to be published every 12 months, on the assumption that there will be about 64 pages per issue: the price may have to be adjusted if the number of papers printed increases.

The Editors will be C. L. Oakley, S. D. Elek, M. T. Parker, J. P. Duguid, and J. G. Collee. All manuscripts should be sent to Professor C. L. Oakley, School of Medicine, Leeds 2, with a clear statement that they are intended for the *Journal of Medical Microbiology*.