

# Journal of Clinical Pathology

British Medical Association, Tavistock Square, London WC1H 9JR

## Contents Vol. 27, No. 1, January 1974

### A New Year Greeting

W. H. AUDEN *page 1*

A review of the pathology and pathogenesis of acute renal failure due to acute tubular necrosis

M. S. DUNNILL *pages 2-13*

The demonstration of plasma cells and other immunoglobulin-containing cells in formalin-fixed, paraffin-embedded tissues using peroxidase-labelled antibody

C. R. TAYLOR AND J. BURNS *pages 14-20*

Diffuse and focal oxygen pneumonitis

SIMON SEVITT *pages 21-30*

Mast cells in parathyroid glands of hyperparathyroidism

T. J. ANDERSON *pages 31-34*

Evaluation of a solid phase radioimmunoassay (Ausria-125) for the detection of hepatitis B antigen (Australia antigen) in two clinical materials

B. G. HANSSON AND T. JOHNSON *pages 35-39*

Latex agglutination test for detection of Australia antigen (HB-Ag) among blood donors and patients

R. HOPKINS AND P. C. DAS *pages 40-44*

Alloantibodies and Australia antigen after open heart surgery

S. D. SLATER *pages 45-49*

*Torulopsis glabrata* urinary tract infection treated with 5-fluorocytosine

D. C. E. SPELLER *pages 50-52*

The treatment of acute myeloid leukaemia

J. H. FRIEND, C. GILES, AND S. G. N. RICHARDSON *pages 53-54*

Normal laboratory values for differential white cell counts established by manual and automated cytochemical methods (Hemalog D<sup>TM</sup>)

A. SIMMONS, P. LEAVERTON, AND G. ELBERT *pages 55-58*

Experience with a commercial kit for the radioisotopic assay of vitamin B<sub>12</sub> in serum: the Phadebas B<sub>12</sub> Test

J. L. RAVEN AND M. B. ROBSON *pages 59-65*

*Candida* precipitins in pregnant women: validity of the test systems used

VALERIE C. STANLEY AND ROSALINDE HURLEY *pages 66-69*

A simple method for detecting mycoplasma infection of cell cultures

G. B. HARNETT, P. A. PHILLIPS, AND E. M. MACKAY-SCOLLAY *pages 70-73*

The estimation of serum thyroxine by competitive binding analysis: A modified method

D. J. GOLDIE, R. D. JENNINGS, AND G. K. MCGOWAN *pages 74-82*

### Technical method

A venepuncturing chair suitable for an outpatient department or laboratory blood collecting room

P. H. EVERALL AND PATRICIA A. WYCHERLEY *pages 83-84*

Letter to the Editor *page 84*

Book reviews *pages 85-86*

Association of Clinical Pathologists: General meetings 1974

92nd general meeting at the University of Warwick, Coventry, on 3 to 5 April

93rd general meeting at Imperial College, London, on 18 to 20 September

# Contents

No. 1 JANUARY 1974

A New Year Greeting W. H. AUDEN .....	Page 1
A review of the pathology and pathogenesis of acute renal failure due to acute tubular necrosis M. S. DUNNILL ..	2
The demonstration of plasma cells and other immunoglobulin-containing cells in formalin-fixed, paraffin-embedded tissues using peroxidase-labelled antibody C. R. TAYLOR AND J. BURNS .....	14
Diffuse and focal oxygen pneumonitis SIMON SEVITT .....	21
Mast cells in parathyroid glands of hyperparathyroidism T. J. ANDERSON .....	31
Evaluation of a solid phase radioimmunoassay (Ausria-125) for the detection of hepatitis B antigen (Australia antigen) in two clinical materials B. G. HANSSON AND T. JOHNSSON .....	35
Latex agglutination test for detection of Australia antigen (HB-Ag) among blood donors and patients R. HOPKINS AND P. C. DAS .....	40
Alloantibodies and Australia antigen after open heart surgery S. D. SLATER .....	45
<i>Torulopsis glabrata</i> urinary tract infection treated with 5-fluorocytosine D. C. E. SPELLER .....	50
The treatment of acute myeloid leukaemia J. H. FRIEND, C. GILES, AND S. G. N. RICHARDSON .....	53
Normal laboratory values for differential white cell counts established by manual and automated cytochemical methods (Hemalog D <sup>TM</sup> ) A. SIMMONS, P. LEAVERTON, AND G. ELBERT .....	55
Experience with a commercial kit for the radioisotopic assay of vitamin B <sub>12</sub> in serum: the Phadebas B <sub>12</sub> Test J. L. RAVEN AND M. B. ROBSON .....	59
Candida precipitins in pregnant women: validity of the test systems used VALERIE C. STANLEY AND ROSALINDE HURLEY .....	66
A simple method for detecting mycoplasma infection of cell cultures G. B. HARNETT, P. A. PHILLIPS, AND E. M. MACKAY-SCOLLAY .....	70
The estimation of serum thyroxine by competitive binding analysis: A modified method D. J. GOLDIE, R. D. JENNINGS, AND G. K. MCGOWAN .....	74
<i>Technical method</i>	
A venepuncturing chair suitable for an outpatient department or laboratory blood collecting room P. H. EVERALL AND PATRICIA A. WYCHERLEY .....	83
Letter to the Editor .....	84
Book reviews .....	85

No. 2 FEBRUARY 1974

A reappraisal of the antibacterial action of cotrimoxazole <i>in vitro</i> EVELYN L. LEWIS, J. D. ANDERSON, AND R. W. LACEY .....	87
Aeruginocine typing of <i>Pseudomonas aeruginosa</i> SHRINIWAS .....	92
A symptomatic infection with EB virus R. N. P. SUTTON, S. D. MARSTON, E. J. P. ALMOND, K. REYNOLDS, AND F. J. POUNDS .....	97
Counting cells in cerebrospinal fluid collected directly on membrane filters F. BURECHAILO AND T. A. CUNNINGHAM .....	101
The cellular composition of the granulocyte series in the normal human bone marrow according to the volume of the sample C. DRESCH, A. FAILLE, O. POIRIER, AND J. KADOUCHE .....	106
Red face and reduced plasma volume SYLVIA W. DAVIES, EVELINE GLYNNE-JONES, AND E. PATRICIA LEWIS .....	109
Effect of phytohaemagglutinin in the leucocyte migration inhibition test as a measure of cell-mediated immunity WARWICK L. MORISON .....	113
The detection of autoantibodies with an enzyme bridge method P. M. FORD AND P. J. STOWARD .....	118
Arthritis, deformities, and runtling in C5-deficient mice injected with human rheumatoid arthritis synovium J. F. S. CROCKER, T. GHOSE, K. ROZEE, J. WOODBURY, AND B. STEVENSON .....	122
Hepatitis B antigen (HB <sub>A</sub> ) and its antibody (HB <sub>Ab</sub> ) in hospital patients R. W. PAYNE, A. BARR, AND J. WALLACE .....	125
The effect of serum protein concentrations on the specificity of the radioimmunoassay of carcinoembryonic antigen in malignant neoplasia and non-neoplastic disease J. M. CRAWLEY, B. E. NORTHAM, J. P. G. KING, J. C. LEONARD, S. N. BOOTH, AND P. W. DYKES .....	130
Steroid excretion and metabolism by gonadal tissue from a subject with testicular feminization syndrome E. LOCKWOOD, P. C. GHOSH, G. W. PENNINGTON, AND R. TIPTON .....	135
An assessment of serum acid and alkaline phosphatase determinations in prostatic cancer with a clinical validation of an acid phosphatase assay utilizing adenosine 3'-monophosphate as substrate DAVID M. GOLDBERG AND GRAHAM ELLIS .....	140
A rapid method for determining decarboxylase and dihydrolase activity K. BROOKS AND T. SODEMAN .....	148
Evaluation of new kits for the assessment <i>in vitro</i> of thyroid function by determination of serum total thyroxine, free TBG capacity, and free thyroxine index using Sephadex G-25 and <sup>125</sup> I-labelled triiodothyronine and thyroxine P. J. N. HOWARTH AND C. G. MCKERRON .....	153
Evans blue as counterstain in the demonstration of muscle antibodies by immunofluorescence in myasthenia gravis O. CLOSS AND J. A. AARLI .....	162
<i>Technical method</i>	
Modification of the urease method for gentamicin assays P. R. BOURNE, I. PHILLIPS, AND S. E. SMITH .....	168

Contents

Letters to the Editor .....	Page 170
Book reviews .....	170
Notices .....	172

No. 3 MARCH 1974

Hypothalamic regulatory hormones: A review G. M. BESSER AND C. H. MORTIMER .....	173
An assessment of one year of computer-assisted microbiology reporting at Charing Cross Hospital H. J. ANDREWS AND M. VICKERS .....	185
Activity of FL 1060, a new $\beta$ -lactam antibiotic, against urinary tract pathogens D. GREENWOOD, H. LINTON BROOKS, R. GARGAN, AND F. O'GRADY .....	192
Serum IgM and IgA responses in influenza A infections G. E. D. URQUHART .....	198
A morphological assessment of immunoreactivity in colonic Crohn's disease and ulcerative colitis by a study of the lymph nodes J. M. SKINNER AND R. WHITEHEAD .....	202
Experience with a cholinesterase histochemical technique for rectal suction biopsies in the diagnosis of Hirschsprung's disease P. H. TRIGG, R. BELIN, S. HABERKORN, W. J. LONG, H. H. NIXON, J. PLASCHKES, L. SPITZ, AND G. H. WILLITAL .....	207
Malignant haemangioendothelioma involving the liver STELLA M. POLLARD AND G. H. MILLWARD-SADLER .....	214
An automated micromethod for measuring iron concentration in serum using thioglycolic acid and bathophenanthroline sulphonate B. BROZOVIĆ AND YVONNE PURCELL .....	222
The cerebrospinal fluid in acute leukaemia of childhood: studies with the Cyto centrifuge D. I. K. EVANS, COLLEEN O'ROURKE, AND PATRICIA MORRIS JONES .....	226
The bone marrow in aplastic anaemia: Diagnostic and prognostic features B. FRISCH AND S. M. LEWIS .....	231
Cyclic thrombocytopenia: A thrombopoietin deficiency? M. L. LEWIS .....	242
The estimation of haemoglobin A <sub>2</sub> : Is visual assessment reliable? G. I. YAWSON, H. FESSAS, F. E. BOULTON, R. G. HUNTSMAN, AND I. S. MENZIES .....	247
Heparin therapy: A simpler test of control ANTHONY J. HANDLEY .....	250
<i>Technical methods</i>	
Modification of an incident light microscope for fluorescence D. J. LEA AND D. J. WARD .....	253
Improved mountant for immunofluorescence preparations G. V. HEIMER AND C. E. D. TAYLOR .....	254
Symposium on Anticoagulant Control L. POLLER .....	256
Letters to the Editor .....	257
Book reviews .....	258

No. 4 APRIL 1974

Chemotherapy of experimental streptococcal endocarditis. Part III Failure of a bacteriostatic agent (tetracycline) in prophylaxis FREDERICK S. SOUTHWICK AND DAVID T. DURACK .....	261
An improved test for <i>Haemophilus influenzae</i> precipitins in the serum of patients with chronic respiratory disease JUDITH L. DAVIES, CHRISTIAN R. LAUGHTON, AND J. ROBERT MAY .....	265
The effect of minocycline on <i>Candida albicans</i> PAMELA M. WATERWORTH .....	269
An experimental assessment of different anaerobic blood culture methods D. C. SHANSON .....	273
A comparison of media used <i>in vitro</i> to isolate non-sporing Gram-negative anaerobes from blood W. R. FORGAN-SMITH AND J. H. DARRELL .....	280
Chlorhexidine resistance in <i>Proteus mirabilis</i> D. J. STICKLER .....	284
Membrane filtration in the study of antimicrobial drugs P. D. MEERS AND GILLIAN M. CHURCHER .....	288
A comparative study of viruses associated with acute haemorrhagic conjunctivitis P. G. HIGGINS, R. D. J. SCOTT, PATRICIA M. DAVIES, AND D. R. GAMBLE .....	292
The relationship between urinary infection, cystoscopic appearance, and pathology of the bladder in man I Lymphocytes in the lamina propria II Squamous change in the bladder epithelium F. P. MARSH, R. BANERJEE, AND P. PANCHAMIA .....	297
Disseminated histoplasmosis successfully treated with amphotericin B R. P. S. EDMONSON, SUSANNAH EYKYN, D. R. DAVIES, I. W. FAWCETT, AND IAN PHILLIPS .....	308
Mucin histochemistry of mucous carcinomas of breast and colon and non-neoplastic breast epithelium D. J. COOPER .....	311
Changes in composition of mucin in the mucosa adjacent to carcinoma of the colon as compared with the normal: A biochemical investigation M. I. FILIPE AND K. B. COOKE .....	315
Iodine contamination of the serum protein-bound iodine: Incidence and clinical significance P. R. PANNALL, P. C. MINNAAR, AND A. T. NESER .....	319
Antibody to hepatitis B antigen in haemophiliacs and their household contacts C. J. BURRELL, A. C. PARKER, D. M. RAMSAY, AND ELAINE PROUDFOOT .....	323
The effect of age on the fibrinolytic enzyme system P. J. HAMILTON, AUDREY A. DAWSON, D. OGSTON, AND A. S. DOUGLAS .....	326
A system for data processing in haematology I. CAVILL, C. RICKETTS, T. MOULDING, A. JACOBS, AND M. PAGE .....	330
Training of pathologists by a system of modules JOHN STUART AND PHILIP A. GORDON .....	334

	Page
<i>Technical method</i>	
Demonstration of lymphocyte nucleoli J. C. RIDWAY AND J. V. GARRETT	337
Letter to the Editor	339
Book reviews	339

No. 5 MAY 1974

Identity of a newly isolated human polyomavirus from a patient with progressive multifocal leucoencephalopathy ANNE M. FIELD, SYLVIA D. GARDNER, R. A. GOODBODY, AND M. A. WOODHOUSE	341
Asymptomatic liver disease in hepatitis B antigen carriers I. L. WOOLF, B. E. BOYES, D. M. JONES, J. S. WHITTAKER, E. TAPP, R. N. M. MACSWEEN, P. H. RENTON, F. STRATTON, AND I. W. DYMOCK	348
Increased incidence of HL-A 1 and 8 in patients showing IgG or complement coating on their red cells J. A. G. DA COSTA, A. G. WHITE, A. C. PARKER, AND G. B. GRIGOR	353
The effect of ambient temperature on the anti-D assay using the AutoAnalyzer H. H. GUNSON, P. K. PHILLIPS, AND F. STRATTON	356
Preparation of test cells for the antiglobulin test FRED STRATTON AND VIOLET I. RAWLINSON	359
A comparative study of some commercially available tests for rheumatoid factor R. N. M. MACSWEEN, HAZEL HUGHES, CATRIONA BREEN, P. KITCHEN, BRENDA CATHCART, AND W. W. BUCHANAN	368
An evaluation of absorbent granule kits for determining serum thyroxine concentration and free thyroxine index in the diagnosis of thyroid function T. K. BELL, D. A. BOYLE, D. A. D. MONTGOMERY, AND S. J. TODD	372
Conventional and dual competitive binding analyses of thyroxine using the Thyopac-4 kit SATOSHI HAMADA, KANJI TORIZUKA, AND TETSUO UETE	377
Comprehensive one-day renal function testing in man A. Z. GYÖRY, K. D. G. EDWARDS, J. H. STEWART, AND H. M. WHYTE	382
The nature of the serum alkaline phosphatases in liver diseases C. P. PRICE AND H. G. SAMMONS	392
The nitroblue-tetrazolium test following acute myocardial infarction J. SHAFAR, G. BEHR, AND J. RUSIUS	399
Fibrin degradation products in the serum and cerebrospinal fluid of patients with group A meningococcal meningitis M. J. BRUETON, P. TUGWELL, H. C. WHITTLE, AND B. M. GREENWOOD	402
A one-day selective migration procedure for detecting salmonellae in faeces P. Y. CHAU AND C. T. HUANG	405
Gram-positive, motile, cluster-forming cocci as a cause of urinary infection S. VIRTANEN	408
The effect of the dye neutral red on a strain of <i>Staphylococcus aureus</i> in the presence of sunlight B. CHATTO-PADHYAY	413
Changes in the oral flora in Sjögren's syndrome T. W. MACFARLANE AND D. K. MASON	416
The reliability of methicillin sensitivity tests on four culture media D. F. J. BROWN AND D. KOTHARI	420
The signing of laboratory reports G. K. MCGOWAN	427
<i>Technical method</i>	
Antibiotic sensitivity testing: A modification of the Stokes method using a rotary plater C. H. PEARSON AND J. E. M. WHITEHEAD	430
Letter to the Editor	432
Book reviews	432
Notice	434

No. 6 JUNE 1974

The laboratory diagnosis of tropical diseases with special reference to Britain: A review D. S. RIDLEY	435
The effect of bilirubin on the assay of gentamicin S. RENSHAW AND B. CORNERE	445
Serum gentamicin assay: A comparison and assessment of different methods I. PHILLIPS, CHRISTINE WARREN, AND S. E. SMITH	447
Rapid gentamicin assay by enzymatic adenylation ELISABETH TEN KROODEN AND J. H. DARRELL	452
Assay of rifampicin in serum JEAN M. DICKINSON, V. R. ABER, B. W. ALLEN, G. A. ELLARD, AND D. A. MITCHISON	457
Comparative sensitivity and resistance of some strains of <i>Pseudomonas aeruginosa</i> and <i>Pseudomonas stutzeri</i> to antibacterial agents A. D. RUSSELL AND A. P. MILLS	463
$\alpha_1$ Antitrypsin deficiency and liver disease in childhood: genetic, immunochemical, histological, and ultrastructural diagnosis A. MILFORD WARD AND J. C. E. UNDERWOOD	467
The antigenic determinant of fibrin(ogen) measured with agglutination inhibition immunoassays AYESHA MOLLA, MARIA BENEDETTA DONATI, AND J. VERMYLEN	473
Automated technique for the estimation of fetal haemoglobin S. R. BROOK, R. S. CRANE, R. G. HUNTSMAN, T. D. DE C. MARSHALL, D. S. MCLELLAN, AND M. J. SEMPLE	480
Coagulation fibrinolysis in sickle-cell disease P. A. GORDON, G. R. BREEZE, J. R. MANN, AND J. STUART	485
A rapid, simple assay for digoxin HELENA GREENWOOD, M. HOWARD, AND J. LANDON	490
Immunofluorescence staining for the diagnosis of herpes encephalitis A. H. TOMLINSON, I. J. CHINN, AND F. O. MACCALLUM	495
Amino acid imbalance in cystinuria A. M. ASATOOR, P. S. FREDMAN, J. R. T. GABRIEL, M. D. MILNE, D. I. PROSSER, J. T. ROBERTS, AND C. P. WILLOUGHBY	500

Contents

	Page
<i>Technical method</i>	
Experience with a three-hour electron microscopy biopsy service G. ROWDEN AND M. G. LEWIS .....	505
Letters to the Editor .....	510
Book reviews .....	511
The Association of Clinical Pathologists: 92nd general meeting .....	512

No. 7 JULY 1974

The structure and growth of valve-pocket thrombi in femoral veins SIMON SEVIET .....	517
Pathological features of hypertrophic obstructive cardiomyopathy M. J. DAVIES, ARIELA POMERANCE, AND R. D. TEARE .....	529
Indolent mucoid carcinoma of stomach W. L. BRANDER, P. R. G. NEEDHAM, AND A. D. MORGAN .....	536
A membrane filter method for correlating colposcopic, histological, and cytological pictures: The application to nuclear DNA measurements G. P. BURN, A. SINGER, AND A. I. SPRIGGS .....	542
Intracellular immunoglobulins J. BURNS, MARIA HAMBRIDGE, AND C. R. TAYLOR .....	548
Thiamine deficiency and oxalosis WILLIAM R. SALYER AND DIANE C. SALYER .....	558
Osmotically stable L forms of <i>Haemophilus influenzae</i> and their significance in testing sensitivity to penicillins DAVID E. ROBERTS, A. INGOLD, SUSAN V. WANT, AND THE LATE J. ROBERT MAY .....	560
Thymidine-dependent <i>Escherichia coli</i> infection and some associated laboratory problems ELIZABETH I. TANNER AND C. H. BULLIN .....	565
Evaluation of commercially available antisera for serotyping of <i>Pseudomonas aeruginosa</i> A. H. AL-DUJAILI AND D. M. HARRIS .....	569
Resistotyping of <i>Proteus mirabilis</i> and a comparison with other methods of typing I. M. KASHBUR, R. H. GEORGE, AND G. A. J. AYLIFFE .....	572
The isolation of anaerobic bacteria from wound swabs SUSAN PEACH AND L. HAYEK .....	578
The influence of paraproteinaemia on the Technicon automated platelet counter P. C. HALL AND R. M. IBBOTSON .....	583
A test system for the biological safety cabinet S. W. B. NEWSOM .....	585
The use of SI units in reporting results obtained in hospital laboratories D. N. BARON, P. M. G. BROUGHTON, M. COHEN, T. S. LANSLEY, S. M. LEWIS, AND N. K. SHINTON .....	590
<i>Technical method</i>	
Latex spheres: A new use in transmission electron microscopy M. E. TITFORD .....	598
Letters to the Editor .....	600
Notices .....	601
Book reviews .....	602

No. 8 AUGUST 1974

Diagnostic electron microscopy of faeces I The viral flora of the faeces as seen by electron microscopy T. H. FLEWETT, A. S. BRYDEN, AND HEATHER DAVIES .....	603
II Acute gastroenteritis associated with reovirus-like particles T. H. FLEWETT, HEATHER DAVIES, A. S. BRYDEN, AND M. J. ROBERTSON .....	608
Measurement of section thickness in quantitative microscopy with special reference to enzyme histochemistry A. D. PEARSE AND R. MARKS .....	615
Failure to demonstrate an advantage in combining sulphamethoxazole with trimethoprim in an experimental model of urinary infection J. D. ANDERSON, R. W. LACEY, E. L. LEWIS, AND M. A. SELLIN .....	619
Differential white cell counts by frequency distribution analysis of cell volumes N. C. HUGHES-JONES, IAN NORLEY, JANET M. S. YOUNG, AND J. M. ENGLAND .....	623
Sensitivity of some smooth strains of <i>Escherichia coli</i> to the bactericidal action of normal human serum P. W. TAYLOR .....	626
Further isolations of non-flagellate <i>Pseudomonas aeruginosa</i> F. W. LEE .....	630
Sporicidal activity of hospital disinfectants J. C. KELSEY, I. H. MACKINNON, AND ISOBEL M. MAURER .....	632
A comparison of techniques for determining prenatal sex from liquor amnii B. V. LEWIS AND P. A. CHAPMAN .....	639
The plasma cells in inflammatory disease of the colon: A quantitative study J. M. SKINNER AND R. WHITEHEAD .....	643
Studies on the diagnostic value of an immunofluorescence test for EB virus-specific IgM JOAN M. B. EDWARDS AND D. A. MCSWIGGAN .....	647
Serum ferritin in children with thalassaemia regularly transfused E. A. LETSKY, F. MILLER, M. WOKWOOD, AND D. M. FLYNN .....	652
Amyloid in normal and pathological parathyroid glands T. J. ANDERSON AND S. W. B. EWEN .....	656
Asymptomatic arteritis of the uterine cervix I. D. ANSELL, D. J. EVANS, AND D. G. D. WIGHT .....	664
A clinicopathological review of 100 cases of primary malignant tumours of the liver R. N. M. MACSWEEN .....	669

<i>Technical method</i>	<i>Page</i>
An improved procedure for determining thromboplastin generation T. EXNER AND K. A. RICKARD	683
Letter to the Editor	685
Book reviews	685

No. 9 SEPTEMBER 1974

Interaction of gelatin with stereospecific binding proteins and its enhancement of competitive binding assays BEVERLEY E. PEARSON MURPHY AND MAVIS MARVIN	687
The problem of the demonstration of hepatitis B antigen in faeces and bile J. W. MOODIE, LINDA M. STANNARD, AND A. KIPPS	693
A light and electron microscopic study of the liver in case of erythrohepatic protoporphyria and in griseofulvin-induced porphyria in mice A. MATILLA AND ELIZABETH A. MOLLAND	698
Necropsy studies on adult coeliac disease H. THOMPSON	710
Antibodies to <i>Candida albicans</i> in hospital patients with and without spinal injury and in normal men and women P. H. EVERALL, C. A. MORRIS, AND DELIA F. MORRIS	722
Sensitivity of <i>Citrobacter freundii</i> and <i>Citrobacter koseri</i> to cephalosporins and penicillins B. HOLMES, ANNA KING, I. PHILLIPS, AND S. P. LAPAGE	729
The nitroblue tetrazolium (NBT) test in renal transplantation A. M. GORDON, J. D. BRIGGS, AND P. R. F. BELL	734
Comparison of the diagnostic value of bone marrow biopsy and bone marrow aspiration in neoplastic disease JAMES D. BEARDEN, GARY A. RATKIN, AND CHARLES A. COLTMAN	738
Separation of abnormal cells in the peripheral blood by means of the zonal centrifuge PATRICIA M. EGAN AND J. V. GARRETT with an appendix by C. W. GILBERT	741
Collimation and surface counting in haematology C. S. BOWRING AND H. I. GLASS	751
Automated quality control for the haematology laboratory I. CAVILL AND C. RICKETTS	757
Tests for disinfection by heat in a bedpan washing machine G. A. J. AYLIFFE, B. J. COLLINS, AND C. E. A. DEVERILL	760
<i>Technical method</i>	
The isolation and identification of <i>Vibrio cholerae</i> A. L. FURNISS AND T. J. DONOVAN	764
Book reviews	766

No. 10 OCTOBER 1974

Cytochemical profile of B and T leukaemic lymphocytes with special reference to acute lymphoblastic leukaemia D. CATOVSKY, J. GALETTO, A. OKOS, E. MILIANI, AND D. A. G. GALTON	767
Leucocyte migration inhibition in liver disease C. VERGANI, T. OLDONI, AND N. DIOGUARDI	772
Characteristics of colony growth from normal human bone marrow T. C. M. MORRIS, T. A. MCNEILL, AND J. M. BRIDGES	776
Sickle cell anaemia and the NBT test THOMAS R. WALTERS AND B. NARASIMHA REDDY	783
Serum ferritin concentration as an index of storage iron in rheumatoid arthritis D. P. BENTLEY AND P. WILLIAMS	786
Serum 'uracil + uridine' levels in normal subjects and their possible significance T. E. PARRY AND J. A. BLACKMORE	789
Discrepancies between immunological and caseinolytic plasma plasminogen assays in health and hyperfibrinolytic states V. MUSUMECI, G. LEONE, AND B. BIZZI	794
An immunoperoxidase technique for the identification of gastrin-producing cells J. PIRIS AND R. WHITEHEAD	798
Glomerular nodules and long-spacing collagen in kidneys of patients with multiple myeloma G. E. SCHUBERT AND A. ADAM	800
Primary myxoma of the aorta J. GOUGH AND W. MOREANO	806
Systemic nodular panniculitis with cardiac involvement P. J. WILKINSON, R. R. M. HARMAN, AND C. R. TRIBE	808
A correlative isotopic and histological study of soleal vein thrombosis RICHARD WRAY, D. RIMMER, M. DENHAM, AND E. B. RAFTERY	813
The small intestine in dermatitis herpetiformis LIONEL FRY, P. P. SEAH, P. G. HARPER, A. V. HOFFBRAND, AND R. M. H. MCMINN	817
Antibody levels in human sera measured by the fluorescent-antibody technique against the coxsackie B viruses types 1-5 grown in HEp2 cells compared with results obtained by neutralization KATHLEEN M. MACWILLIAM AND MARGARET A. COOPER	825
Comparative activity of ampicillin and seven cephalosporins against group D streptococci J. M. T. HAMILTON-MILLER	828
A new <i>E. coli</i> O group O158 associated with an outbreak of infantile enteritis B. ROWE, R. J. GROSS, R. LINDOP, AND R. B. BAIRD	832
Surface viable counts with nichrome wire loops OMAR KHAIRAT	834

Contents

	Page
Deep scopulariopsis: A case report and sensitivity studies AWATAR S. SEKHON, D. J. WILLANS, AND J. H. HARVEY	837
<i>Technical method</i>	
The assay of tritium-labelled folate in faeces by the oxygen flask combustion technique followed by liquid scintillation counting J. G. STEYTLER	844
Letter to the Editor	847
Book reviews	847
No. 11 NOVEMBER 1974	
Immunological studies in a case of T-cell leukaemia G. STATHOPOULOS, M. PAPAMICHAIL, P. SHELDON, D. CATOVSKY, A. J. S. DAVIES, E. J. HOLBOROW, AND EVE WILTSHAW	851
High counting rates from <sup>125</sup> I in radioimmunoassays T. K. BELL	860
The role of circulating hepatitis B antigen/antibody immune complexes in the pathogenesis of vascular and hepatic manifestations in polyarteritis nodosa CHRISTIAN G. TREPO, ARIE J. ZUCKERMAN, RICHARD C. BIRD, AND ALFRED M. PRINCE	863
Capillary blood collection in haematology J. STUART, B. A. BARRETT, AND D. R. PRANGNELL	869
Folates in human serum K. RATANASTHIEN, J. A. BLAIR, R. J. LEEMING, W. T. COOKE, AND V. MELIKIAN	875
A simple method for the clinical determination of the mitotic activity of the human prostate <i>in vitro</i> K. E. O. SENIUS, J. PIETILÄ, I. ARVOLA, AND P. TUOHIMAA	880
Culture of specimens other than sputum for Mycobacteria D. A. MITCHISON AND V. R. ABER	883
Unusual skin sepsis due to a strain of multiresistant <i>Staphylococcus aureus</i> JOY HARRISON AND R. W. LACEY	888
Comparison of the titres of ASO, anti-DNase B, and antibodies against the group polysaccharide of group A streptococci in children with streptococcal infections L. E. GOEDVOLK-DE GROOT, N. MICHEL-BENSINK, M. M. VAN ES-BOON, A. H. VAN VONNO, AND M. F. MICHEL	891
Sensitivity of <i>Streptococcus pyogenes</i> to sulphamethoxazole, trimethoprim, and cotrimoxazole E. YOURASSOWSKY, M. P. VANDERLINDEN, AND E. SCHOUTENS	897
The rapid recognition of Lancefield group B haemolytic streptococci R. J. FALLON	902
Bactericidal capacity of peripheral blood leucocytes in relation to bacterial infections in acute lymphoblastic leukaemia in childhood EILEEN N. THOMPSON AND RALPH WILLIAMS	906
Indirect immunofluorescence test for the detection of <i>Aspergillus fumigatus</i> antibodies D. W. WARNOCK	911
Separation of three isoenzymes of N-acetyl-β-D-hexosaminidase from human tissues by cellulose acetate membrane electrophoresis A. WESTWOOD AND D. N. RAINE	913
Plasma alkaline phosphatase isoenzymes in hepatobiliary disease A. O. AFONJA AND D. N. BARON	916
Sterilization of the biological safety cabinet S. W. B. NEWSOM AND B. M. WALSHINGHAM	921
<i>Technical method</i>	
A simple and rapid method for the differentiation of the members of the genus <i>Klebsiella</i> R. FREEMAN	925
Book review	926
Notice	926
The Association of Clinical Pathologists: 93rd general meeting	927
No. 12 DECEMBER 1974	
Quality control in cervical cytology O. A. N. HUSAIN, E. BLANCHE BUTLER, D. M. D. EVANS, J. ELIZABETH MACGREGOR, AND R. YULE	935
Observer variation and quality control of cytodagnosis D. M. D. EVANS, GLENYS SHELLEY, B. CLEARY, AND YVONNE BALDWIN	945
Comparative cytogenetical and morphological studies in ovarian dysgenesis MAGDOLNA GAÁL, J. LÁSZLÓ, AND P. BÖSZE	951
A functioning black adenoma of the adrenal cortex: A clinico-pathological entity J. W. VISSER, J. K. BOELJINGA, AND C. V. D. MEER	955
Tietze's disease H. U. CAMERON AND V. L. FORNASIER	960
Nodular, non-cirrhotic liver associated with portal hypertension in a patient with rheumatoid arthritis M. HARRIS, R. M. RASH, AND I. W. DYMCK	963
Leukaemic reticuloendotheliosis: A morphological and immunological study of four cases D. G. HAEGERT, J. C. CAWLEY, R. D. COLLINS, R. J. FLEMANS, AND J. L. SMITH	967
Morphological abnormalities in lymphocyte mitochondria associated with iron-deficiency anaemia J. H. JARVIS AND A. JACOBS	973
The effect of age upon the coagulation system P. J. HAMILTON, MARY ALLARDYCE, D. OGDON, AUDREY A. DAWSON, AND A. S. DOUGLAS	980
The elution of <sup>99</sup> Tc <sup>m</sup> from red cells and its effect on red-cell volume measurement A. FERRANT, S. M. LEWIS, AND L. SZUR	983
The pre-albumin fraction: A useful parameter in the interpretation of routine protein electrophoresis R. I. HARRIS AND J. KOHN	986
An evaluation of low voltage counterimmunoelectrophoresis for the detection of hepatitis-B antigen (HB Ag) E. O. CAUL AND P. C. ROBERTS	990

	<i>Page</i>
A case of acute measles meningoencephalitis with virus isolation D. R. PURDHAM AND P. F. BATTY .....	994
Bacterial flora of the appendix fossa in appendicitis and postoperative wound infection D. A. LEIGH, KATE SIMMONS, AND EDELGARD NORMAN .....	997
Progress towards agreement in reports of antibiotic sensitivity R. H. GEORGE .....	1001
Implementation of a British computer system for laboratory data handling C. H. GRAY, A. D. HIRST, P. J. N. HOWORTH, T. P. LOCKE, B. MELLOR, AND M. WALTER .....	1005
Training and career appointments in the pathological sciences in the United Kingdom D. N. BARON .....	1013
Micro method for manual analysis of true glucose in plasma without deproteinization B. B. BAUMINGER .....	1015
<i>Technical method</i>	
Assessment of amoebiasis: serodiagnosis by immunofluorescence with lyophilized entamoebae J. C. COX AND R. C. NAIRN .....	1018
Book reviews .....	1020
Notices .....	1020