

BRITISH MEDICAL JOURNAL

SIA/SIA

SATURDAY 28 JUNE 1975

LEADING ARTICLES

- Looking at Reorganization page 705 Nature and Nurture in Childhood Obesity page 706
Research in Dentistry page 706 Cardiac Implantation page 707 Ampicillin Rashes
page 708 Reversed Loops in the Short Gut Syndrome page 709 Adolescent Kidney
Donors page 710 Doctor's Rights page 710

PAPERS AND ORIGINALS

- Comparative Trial of Nafoxidine and Ethinyloestradiol in Advanced Breast Cancer: An E.O.R.T.C. Study
J. C. HEUSON, E. ENGELSMAN, J. BLONK-VAN DER WIJST, H. MAASS, A. DROCHMANS, J. MICHEL, H. NOWAKOWSKI, A. GORINS. 711
Controlled Clinical Trial of L-Dopa and Nafoxidine in Advanced Breast Cancer: An E.O.R.T.C. Study
E. ENGELSMAN, J. C. HEUSON, J. BLONK-VAN DER WIJST, A. DROCHMANS, H. MAASS, F. CHEIX, L. G. SOBRINHO, H. NOWAKOWSKI. 714
Intravenous Treatment with Rimiterol and Salbutamol in Asthma G. E. MARLIN, PAUL TURNER. 715
Influence of Heredity and Environment in Determination of Skinfold Thickness in Children
C. G. D. BROOK, R. M. C. HUNTLEY, JOAN SLACK. 719
Probabilistic Application of Plasma Carcinoembryonic Antigen Assay in Cancer Patients
LEONIE K. ASHMAN, J. LUDBROOK, V. R. MARSHALL. 721
Antinuclear Antibodies in Psychiatric Illness: Their Relationship to Diagnosis and Drug Treatment
EVE C. JOHNSTONE, K. WHALEY. 724
Deafness in Paget's Disease: Effect of Salmon Calcitonin Treatment
P. M. G. B. GRIMALDI, S. M. MOHAMEDALLY, N. H. Y. WOODHOUSE. 726
Myasthenia Syndrome during Penicillamine Treatment ANNA CZLONKOWSKA. 726
Duodenal Obstruction due to Abdominal Aortic Aneurysm H. M. ADAIR. 727
Side Effects due to Treatment of Hypertension with Prazosin M. J. BENDALL, K. H. BALOCH, P. R. WILSON. 727
Unusual Foreign Body in the Ear N. S. LONGRIDGE. 728

MEDICAL PRACTICE

Reorganization: The First Year

- I. Plans
Working Papers
How it Strikes a Contemporary A. PATON. 729
Run-up to Reorganization J. H. MARKS. 730
The Community Physician A. M. B. GOLDING. 732
Discussion 734
Aspects of Sexual Medicine: Some of the Commoner Sexual Disorders—I. Problems Mainly Affecting the Male
R. W. TAYLOR. 739
Outside Medicine: Thomas Gann in the Maya Ruins J. E. S. THOMPSON. 741
Any Questions? 744
Personal View B. P. RICHARDSON. 745

CORRESPONDENCE—List of Contents. 746

NEWS AND NOTES

- Medicolegal—Patents, Injunctions, and Sutures. 759
Parliament—Advertising 759
Medical Birthday Honours. 760
Medical News—Appointment of Consultants. 760

BOOK REVIEWS. 754

OBITUARY NOTICES 757

SUPPLEMENT

- The Week. 762
Annual Conference of Representatives of Local
Medical Committees. 763
Association Notices 766

CORRESPONDENCE

Ulceration of Small Intestine and Slow-release Potassium Tablets S. J. Heffernan, F.R.C.S.I., and J. J. Murphy, F.R.C.S.746	Indomethacin, Prostaglandins, and Dysmenorrhoea V. R. Pickles, M.D.; G. G. Hill, M.B.; S. J. Carne, F.R.C.G.P.749	Arthritis of Hepatitis: the Tourniquet Test R. A. Frayha, M.D., and S. Uthman, M.D.751
Computerized Tomography of Brain I. Isherwood, F.R.C.R., and others.746	Hormonal Pregnancy Tests and Congenital Malformations Isabel Gal, M.D.749	SI Units J. C. B. Fenton, F.R.C.PATH.751
Prevention of Overdoses B. M. Barraclough, F.R.A.C.P.747	Safer Cigarettes E. R. Trethewie, M.D.749	Little and Big Bellyachers J. P. Childs, F.R.C.S.752
Beta-blockers and Fibrinous Peritonitis R. P. H. Thompson, D.M., and B. T. Jackson, F.R.C.S.; I. G. E. Cunningham, F.R.A.C.S.747	G.M.C. and Indian Doctors R. T. Burkitt, F.R.C.S.750	Management of Depression G. Nicholson, M.B.752
Ocular Reactions to Beta-blockers J. R. W. Lyall, M.R.C.P.747	Immigrant Doctors Farzana Ali.750	Screening Methods for Covert Bacteriuria in Schoolgirls Rosalind M. Maskell, B.M.752
Anaphylactoid Skin Reaction Following Intradermal Secretin H. W. Baenkler, M.D., and others.747	Alternatives to the Fluoridation of Water Winifred M. Sykes; D. Jackson, D.D.S.750	Pay Beds and Professional Freedom R. S. Murley, F.R.C.S.752
Myocardial Infarction and Metabolism L. H. Opie, M.D.748	Inhibition of Ristocetin-induced Platelet Aggregation by Haemaccel Jeanne Stibbe, M.D., and E. P. Kirby.750	Junior Hospital Staff Contract P. J. Wyld, M.B.; E. B. Nye, M.R.C.O.G.; H. P. Henderson, M.B.752
Abortion (Amendment) Bill M. Sim, F.R.C.P.ED.; N. A. Chisholm, L.R.C.P.ED.748	Tests for Lactose Malabsorption in Adults? G. L. Metz, M.B., and others.751	Mrs. Castle's Conference Katherine M. Venables, M.B.753
Psychiatry in Russia Susanne Shafar, M.R.C.PSYCH., and others.748	Humidification of Inspired Air L. B. W. Jongkees, M.D.751	Economies in the Health Service D. M. J. Burns, F.R.C.S.753
		Practice Premises D. M. Wilks, M.B.753
		A.R.M. Agenda: Item 168 D. Lynch, M.R.C.G.P.753

Correspondents are urged to write briefly so that readers may be offered as wide a selection of letters as possible. So many are now being received that the omission of some is inevitable. Letters should be signed personally by all their authors.

Ulceration of Small Intestine and Slow-release Potassium Tablets

SIR,—We noted with interest the recent paper on oesophageal ulceration and stricture associated with Slow-K therapy by Drs. A. D. Howie and R. W. Strachan (26 April, p. 176), and a letter describing a case of mouth ulceration with slow-release potassium by Dr. B. R. McAvoy (19 October 1974, p. 164). Because of the widely held view that Slow-K does not cause the small intestinal ulceration and stricture associated with other forms of potassium therapy, we should like to report two cases of small bowel ulceration and stricture in patients on Slow-K.

(1) A 73-year-old woman with a history of congestive cardiac failure had been treated for three months with digoxin, Lasix, and Slow-K. She was admitted with small bowel obstruction. At laparotomy an ulcer stricture of the terminal ileum was found and resected. The patient made a satisfactory recovery.

(2) A 65-year-old man with congestive cardiac failure after a myocardial infarct had been treated for four weeks with digoxin, Lasix, and Slow-K tablets. He was admitted with subacute intestinal obstruction, which subsequently became acute and required laparotomy. An ulcer stricture of the terminal ileum was found and resected, and the patient had an uneventful recovery.

The use of slow-release potassium tablets has been urged in the belief that it is the rapid release of potassium over a short segment of intestine, which is the factor precipitating mucosal ulceration and subsequent stricture formation. While this is undoubtedly true it must follow that the local concentration of potassium is the critical factor and that even the slow-release form, when held for any reason at one site, may reach a sufficient concentration to cause ulceration. As this is the third site of mucosal ulceration (mouth, oesophagus, and

now small intestine) to be reported in the *B.M.J.* in recent months it would seem that great care should be exercised in the prescription of slow-release potassium, and that patients on Slow-K should be watched for the symptoms of ulcer stricture.—We are, etc.,

SEAN J. HEFFERNAN

Mater Misericordiae Hospital,
Dublin

JAMES J. MURPHY

Royal City of Dublin Hospital,
Dublin

Computerized Tomography of Brain

SIR,—We note with interest the leading articles (10 May, pp. 295 and 300) "Non-invasive Investigations of the Brain" and "And Now the Whole Body." It has been our experience over the past two years with computerized tomography of the brain (E.M.I. scan) that this revolutionary technique has changed the pattern of radiological investigation and the clinical management of patients with neurological disorders. As a method of visualizing the brain and the pathological processes affecting it it is unparalleled by any other radiological method. Its non-invasive character, outpatient capability, and accurate demonstration of normal and abnormal tissues are indeed major diagnostic advantages.

Conventional neuroradiological procedures are now less often required, with consequent economy of inpatient facilities. Our experience in the department of neuro-radiology at the Manchester Royal Infirmary of the changing patterns of investigation for

space-occupying lesions is summarized in the table contrasting two equivalent time periods in 1972 and 1974. It is noteworthy that the total number of patients attending the department has increased by 50%.

	1974	1972
Computer tomography		
Inpatients	590	—
Outpatients	410	—
Angiography	259	318
C.S.F. pathway investigation	141	207
Isotope brain scan		
Inpatients	87	383
Outpatients	56	184
Totals { Inpatients ..	1077	863
Outpatients ..	466	184

In addition to these major advantages, however, it is important to stress the unique measuring capability of the equipment. Measurements recently carried out in our departments indicate that the method is much more sensitive to changes in tissue which accompany disease states than other conventional radiological techniques. Variations in density of one part in 1000 over a region of about 1 cm³ can be detected. Numerical display of data allows accurate measurement of x-ray absorption coefficients which are related to the mean electron density and atomic number of tissue. Changes of one part in 500 in the atomic number of tissue is just detectable for blocks of tissue 1 cm³. This change corresponds approximately to the difference in atomic number between intracellular and extracellular fluid. These changes are at present just within the limits of detection, though it may well prove possible in the future to detect changes in sodium-potassium flux.

A preliminary study has been undertaken exploiting the precision of the E.M.I. instrument in the quantification of bone mass and bone mineral concentration. Modification of the head device to obtain a cross-section of the wrist has enabled a reproducibility of 0.2% in bone mineral concentration of