BRITISH O. S. DEPT. OF AGRICULTURE NATIONAL AGRICULTURAL LIBRARY RECEIVED SEP 25 1971 PROCUREMENT SECTION 1971

LEADING ARTICLES

Human Prolactin page 201 A Kidney from the Family page 202 Psychogeriatric Care page 202 Pseudomonas Chest Infection page 203 Epiglottitis in Adults page 204 Rickets in the Premature Baby page 205 Reflux and Hernia page 205 Masking of Syphilis page 206

PAPERS AND ORIGINALS

Attitudes and Long-term Adjustment of Patients Surviving				
M. DOBSON, A. E. TATTERSFIELD, M. W. ADLER, M. W. MCNICOL				
Testosterone Therapy for Anaemia in Maintenance Dialysis				
STANLEY SHALDON, KARL M. KOCH, FRITZ OPPERMANN, WOLF D. PATYNA, WILLIAM SCHOEPPE				
Comparative Double-blind Trial of Cephalexin and Ampicil	·			
J. A. DAVIES, J. E. M. STRANGEWAYS, R. G. MITCHELL, L. J. BEILIN, J. G. G. LEDINGHAM, J. M. HOLT				
			Plasma Prolactin Activity in Inappropriate Lactation	
			ISABEL A. FORSYTH, G. M. BESSER, C. R. W. EDWARDS, LYNN FRANCIS, RITA P. MYRES	
Pulmonary Tuberculosis Due to B.C.G. J. MARKS, P. A. JENKINS, G. S. KILPATRICK, H. C. ENGBAEK, B. VERGMANN				
Research into Psoriasis—The Last Decade SAM SHUSTER Therapeutic Conferences Atrial Fibrillation—I. Vocational Training V—Bridgend and Northampton Any Questions?				
CORRESPONDENCE 245	OBITUARY NOTICES			
BOOK REVIEWS	SUPPLEMENT			
NEWS AND NOTES	Special Conference of Representatives of Local			
	Medical Committees			
Parliament—Mentally Handicapped				
Epidemiology—Meningococcal Infections				
Medical News	Association Notices 44			

CORRESPONDENCE

Correspondents are asked to be brief

Analgesics in Terminal Disease Cicely M. S. Saunders, M.R.C.P., and Dame Albertine L. Winner, F.R.C.P	Antibiotic Sensitivity Testing J. H. Hewitt, M.SC	Corneo-scleral Suture Catherine Maddox, M.B
---	---	---

Analgesics in Terminal Disease

SIR,-We would like to endorse Dr. P. B. Schofield's plea for a more liberal atittude to the giving of analgesics (26 June, p. 773). Too often we admit patients from both hospital and home who have severe pain which has not been adequately relieved. We would, however, like to point out that it is usually of benefit to have some kind of time schedule, albeit a rather relaxed one. Our own feeling is that we should give the patient a dose which will be sufficient to control his pain for a slightly longer time than the interval between regular drug rounds. This should prevent pain from occurring at all and will also prevent clock watching. We find it is important to combine our analgesics, narcotic or otherwise, with a mild tranquillizer in most cases. This helps to control the reactive element of pain and may thus reduce the dose of analgesics. We may still sometimes need to be bold in the doses we use but we do not find we have problems of tolerance and dependence on this regimen.

Although we do not normally leave narcotic analgesics by the bedside we frequently leave drugs of other groups. This is valuable in giving patients some control of their medication and in giving them something in reserve. It sometimes seems to help the sudden pain on movement common with bone metastases rather better than an increase in the routine dose of the stronger drug.

May we emphasize the importance of recognizing and trying to understand the various components of pain. Much of it can be controlled by measures other than the use of analgesics alone if we will only listen to the patient's story. The listening itself can be therapeutic and relieve the anxiety and depression, which are often so marked. Suitable medication for this is frequently needed.

We have deliberately omitted any discussion of the pain relief from nerve blocks, cytotoxic drugs, steroids, and the control of infections, which may still be useful when the time for palliative radiotherapy, internal fixation, or other more active measures is over. Terminal pain can be regarded as an illness in itself and there is need for more teaching in its proper diagnosis and treatment.—We are, etc.,

CICELY SAUNDERS ALBERTINE WINNER

St. Christopher's Hospice, London S.E.26

Halothane Hepatitis

SIR,—Professor W. W. Mushin and his colleagues (3 July, p. 18) present a statistical study to support the hypothesis that repeated halothane anaesthesia may cause liver damage. They conclude that "halothane should if possible be avoided in patients who have had it before, particularly if this was within the previous four weeks." This statement from such an authoritative source must give rise to considerable concern. For this reason, and

because of the possible medicolegal implications of their conclusion, careful scrutiny of the material presented is mandatory.

Their paper reports a statistical comparison of three groups of patients; a general surgical population, 54 patients reported to the Committee on Safety of Drugs, and 74 patients recorded in the literature. These latter two groups had developed post-operative jaundice after repeated halothane

anaesthesia. On a point of detail, Figures 2 and 3 relate to Committee on Safety of Drugs and literature reports and are limited to a 10-year period. It is misleading, therefore, to include in Figure 1 a large group of patients (23% of the total) who had received an anaesthetic more than 10 years previously—almost certainly in the prehalothane era.

Professor Mushin and his colleagues draw attention to the fact that halothane "now forms a part in nearly 90% of all general anaesthetics." The data obtained from the Committee on Safety of Drugs covers the period 1964-69. Inquiry1 establishes that up to the present time, 126 reports of jaundice related to anaesthesia have been received by the Committee on Safety of Drugs, of which only 103 pertain to halothane—a reminder that postoperative jaundice is not peculiar to halothane. It would seem, therefore, that the appropriate control for the two groups of jaundiced patients should be patients subjected to multiple non-halothane anaesthetics, and it is questionable whether it is valid to use a "general surgical population" for this purpose.

This consideration apart, the recommendation that repeated halothane should be avoided is based on the finding of an "excess" of jaundiced patients who had had a previous halothane anaesthetic within four weeks. Professor Mushin and his colleagues base their study on the hypothesis that "halothane hepatitis" is caused by sensitization, and therefore no clinical details of the Committee on Safety of Drugs patients are provided. However, the crux of the matter is whether the jaundice of these patients was unexplained. It must be recalled that the United States National Halothane Study² reported 82 cases of fatal postoperative hepatic necrosis, but the expert panel decided that an adequate explanation, other than anaesthesia, existed for all but nine of these.