

uterine bleeding.<sup>1</sup> It would be interesting to see if the results of our investigation could be related to these cases.—We are, etc.,

N. K. BHIDE  
S. T. GOGTE

Department of Pharmacology,  
All-India Institute of Medical Sciences,  
New Delhi, India

1. Shiroakar, V. N., in *Review of Research Work in India on Intra-uterine Contraceptive Devices*, ed. K. R. Laumas, pp. 109, 110. New Delhi, Indian Council of Medical Research, 1969.
2. Oskoui, M., *Archives Internationales de Pharmacodynamie et de Therapie*, 1968, 175, 223.
3. Jacobsson, B., and Nilsson, I. M., *Scandinavian Journal of Haematology*, 1969, 6, 386.

### Canavan's Disease and Spongiform Encephalopathy

SIR.—Your leading article (19 August, p. 433) reviewing conditions associated with spongy brain describes in some detail the autosomal recessive Canavan's disease but refers only to intoxication—namely, experimental hexachlorophane poisoning in animals. In this regard the recent epidemic in France of probable talc powder intoxication is relevant in that the 90 or so reported cases manifested signs consistent with what is thought to be hexachlorophane toxicity.

Since April of this year some babies who had been treated for diaper rash allegedly with contaminated powder sustained progressively anorexia, extensor spasms, signs of decerebration, coma, and death. Results of extensive investigations were unremarkable but at necropsy massive oedema of myelin, predominantly in the deeper parts of the cortex and brain stem, with widespread cystic changes were found—that is, signs and pathology almost identical with those of Canavan's disease.

It is possible therefore that the inborn error in Canavan's disease is a defect somewhere along the metabolic pathway of a common extrinsic factor, which after a degree of exposure to that factor results in over-production of an intermediate that is toxic in excess to myelin. Notwithstanding, your fleeting reference to a toxic aetiology in animal experiments and its relegation to the bottom of the list should be reviewed. Indeed toxicity should be more often suspected as a cause of morbidity than it is.—I am, etc.,

H. PRATT

Australian Embassy,  
Paris

### Inappropriate Secretion of ADH

SIR.—Your leading article (26 August, p. 489) discussing the pathophysiology of the syndrome of inappropriate secretion of antidiuretic hormone states that the treatment of patients with the syndrome is by fluid deprivation and treatment of the underlying aetiology. This suggestion is probably based on the finding that (hypertonic) saline infusion does not alleviate the hyponatremia because of prompt renal elimination of the sodium ion.<sup>1</sup> However, if coma is the direct consequence of hyponatremia and water retention the physician faced with a comatose patient may wish to consider a form of therapy other than passive fluid restriction. Might not the use of peritoneal dialysis provide a rational alternative? Using normal saline as the dialysing fluid it should be possible to accelerate water elimination and

restore sodium balance, thereby hastening recovery.—We are, etc.,

J. SACK  
M. A. SPERLING

Harbor General Hospital,  
Torrance, California, U.S.A.

1. Bartter, F. C., and Schwartz, W. B., *American Journal of Medicine*, 1967, 42, 790.

### Australia Antigen and Pulmonary Tuberculosis

SIR.—A high incidence of Australia antigen (Au/Ag) has been reported among lepromatous patients,<sup>1</sup> those with Down's syndrome,<sup>2</sup> and among drug addicts<sup>3</sup> as well as in patients with other chronic diseases. We have tested patients in a sanatorium for pulmonary tuberculosis for Au/Ag by cross-over electrophoresis and have compared the findings with those in patients newly-admitted to the sanatorium, patients in a general hospital, and healthy blood donors. The results are shown in the Table.

Patients	Number Tested	Au/Ag Positive
Pulmonary tuberculosis (old patients)	427	45 (10.5%)
Pulmonary tuberculosis (new patients)	143	4 (2.7%)
General hospital	1,000	2 (0.2%)
Blood donors	1,200	2 (0.14%)

The higher proportion of Au/Ag carriers among patients with long-standing pulmonary tuberculosis compared with the new patients is statistically significant ( $P < 0.025$ ). The difference between new tuberculosis patients and general hospital patients and blood donors is also significant ( $P < 0.001$ ). This high incidence of Au/Ag among pulmonary tuberculosis patients could be due to a higher risk of contamination during prolonged stay in hospital or to an unknown immunological disorder, or both.—We are, etc.,

J. M. MARTINEZ-V  
J. GUARDIA  
J. VILASECA  
E. BUENDIA  
J. CIVIL  
R. BACARDI

Autonomous University,  
Barcelona, Spain

1. Blumberg, B. S., and Melartin, L., *Archives of Internal Medicine*, 1970, 125, 287.
2. Nordenfelt, E., Kaij, K., and Ursing, B., *Vox Sanguinis*, 1970, 19, 371.
3. Rittner, Ch., Schwinger, E., Stockhausen, F. G., and Dufkova, J., *Vox Sanguinis*, 1970, 19, 280.

### Gentamicin in Urinary Infections

SIR.—I note that the promotional literature of both the makers of gentamicin still recommends a dose of 40 mg eight-hourly for the treatment of urinary infections. Such doses would achieve levels in the urine satisfactory for treating simple cystitis, but the type of resident organisms one has in mind when using this agent—for example, *Pseudomonas* and *Klebsiella-Enterobacter* species—is not usually associated with uncomplicated infections. It would be wise, as indeed I am sure it is in all urinary infections, to use a dose giving adequate tissue levels.

As I have previously stated,<sup>12</sup> patients with pseudomonas in the urinary tract often carry it at other sites, including the bronchi and skin surfaces. In these locations a 40-mg

dose will produce negligible concentrations of gentamicin, serving only to select for resistance. For these reasons, and because I think there is far more danger of under-treatment with this drug than of toxicity, I wonder whether the time has not come to abandon the eight-hourly, 40-mg dose for urinary tract infection. The adoption of an eight-hourly, 80-mg dose of gentamicin for such infections in patients of average body weight and normal renal function would seem appropriate.

It is, of course, highly desirable that the dose should in fact be more accurately weight-related. In life-threatening infection 5 mg/kg body weight in divided doses is the minimum dosage level and even higher doses may be justified. Even in renal failure the first dose and probably the entire first day's treatment need not be reduced, though after this serum estimations will be required to control treatment.—I am, etc.,

J. H. DARRELL

Royal Postgraduate Medical School,  
London W. 12

1. Darrell, J. H., and Waterworth, Pamela M., *British Medical Journal*, 1967, 2, 535.
2. Darrell, J. H., and Waterworth, Pamela M., *British Medical Journal*, 1969, 3, 141.

### Call the Doctor

SIR.—Dr. J. S. W. Little (30 September, p. 831) clearly misunderstands the objectives of the yellow form issued to visitors to the United Kingdom.

The first is to alert the doctor who may be called to the fact that the visitor may be incubating some exotic infection, such as malaria, cholera, or smallpox. Secondly, imported smallpox cases are frequently admitted to general hospitals pending diagnosis. It is hoped that the yellow card, by suggesting that a visit be asked for, will reduce the number of primary contacts and lead to immediate admission to an isolation or smallpox unit, whichever is appropriate.—I am, etc.,

W. G. DAVIDSON

Regina, Saskatchewan,  
Canada

### Serum and Urine F.R.-Antigen in Renal Disease

SIR.—Since we<sup>1</sup> first realized the possible importance of the study of fibrin products in renal disease much work has been done that enables me to clarify some of the points raised by Dr. J. D. Briggs and others (14 October, p. 82).

Firstly, though it is true that fibrin products are raised in any type of shock, and might not be excreted if oliguria ensues, yet of course acute renal failure itself arises in the course of shock. Intravascular coagulation in acute renal failure indicates a very poor prognosis.<sup>2</sup> Its real importance is, therefore, in the analysis of how far the acute renal failure syndrome itself can be seen as the result of microthrombosis within the kidney. That fibrin can be found in the renal glomeruli and in the peritubular capillaries has been confirmed.<sup>3</sup> Radiofibrinogen studies in humans<sup>4</sup> and animals have been used to show that increased fibrinogen catabolism and fibrin deposition in the kidneys continues in the early days of anuria, in particular in cases of acute renal failure due to