12 hours. His E.C.G. was monitored and he went into atrial fibrillation on a second occasion, reverting to sinus rhythm after six hours, again without treatment. His neurological condition showed steady improvement and he was discharged walking with sticks.

The cause of his atrial fibrillation remains obscure though toxic myocarditis is a possibility. He had no obvious chest or other infection nor evidence of ischaemic heart disease either clinically or on E.C.G.s taken before and after exertion.

"Paralysis of the heart" in neuropathy was described by Osler¹ in 1892 and tachycardia was noted by Guillaing,² Kernohan,³ and others. Davies and Dingle⁴ described five patients with Guillaing-Barré syndrome, all on respirators, who had tachycardia, one of whom showed ventricular ectopic beats on the E.C.G. Of 15 recent cases seen in this hospital, eight had a pulse rate between 120 and 160/min and half showed non-specific S-T changes in the E.C.G. This tachycardia was out of proportion to any expected rise associated with a pyrexia and tended to occur at the height of the illness.

It may be that the mortality of around 10%⁵ seen in this condition despite effective positive pressure respiration may be in part due to cardiac arrhythmias, and on the premise that these are potentially treatable E.C.G. monitoring of all patients showing a sustained tachycardia is advisable.

I would like to thank Dr. P. Millac for permission to report this case and for helpful criticism.

—I am, etc.,

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¹ Osler, W., *The Principles and Practice of Medicine*, p. 778. Edinburgh, Pentland, 1892.

² Guillaing, G., *Archives of Neurology and Psychiatry*, 1936, 36, 975.

³ Haymaker, W., and Kernohan, J. W., *Medicine (Baltimore)*, 1949, 28, 59.

⁴ Davies, A. G., and Dingle, H. R., *Journal of Neurology, Neurosurgery and Psychiatry*, 1972, 35, 176.

⁵ Miller, H., *British Medical Journal*, 1966, 2, 1219.

Public Attitudes to A.I.D.

SIR,—With reference to Dr. J. J. Slomes' interesting comments on A.I.D. (12 May, p. 366), may I point out that the refusal by the Editor of the *Jewish Chronicle* to publish an advertisement for a Jewish donor may not be at all a consequence of an "attitude" against A.I.D. but derive entirely from Jewish law. A.I.D. is perfectly permissible in Jewish law provided the donor is *not* a Jew, and therefore any non-Jewish donor will be permissible but a Jewish one will not be so. The Editor of the *Jewish Chronicle* acted in accordance with Jewish law as laid down recently in a responsum published by a leading world rabbinical authority.¹ The reasons for this ruling are not relevant here; suffice it to say that they are partly an attempt to avoid any incestuous unions.—I am, etc.,

D. PARIENTE

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¹ Feinstein, M., *Iggeret Moshe*, New York, Gros Bros., 1970.

Vitreous Surgery

SIR,—In your leading article on this subject (5 May, p. 258) you state that "the failure of chemical and drug therapy in the treat-

ment of vitreous haemorrhage" has led to the need for mechanical means of removing opaque material from the vitreous. I would like to point out that Dr. J. V. Forrester and I recently reported¹ on the treatment of vitreous haemorrhage by injection with urokinase. A diabetic patient 38 years of age showed a remarkable return to vision from perception of light to 6/36 after an injection of this enzyme. He had been virtually blind in his left eye for four years as a result of a massive intravitreal haemorrhage.

Since then we have studied another four patients and have had good results in all cases. We think that urokinase opens up an exciting new prospect in the management of vitreous haemorrhage and that chemical and drug therapy should not be completely discarded at this early stage.—I am, etc.,

J. WILLIAMSON

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¹ Williamson, J., and Forrester, J. V., *Lancet*, 1972, 2, 488.

Aetiology of Acute Glomerulonephritis

SIR,—Your leading article (14 April, p. 66) draws attention to the association between impetigo and acute glomerulonephritis. In underdeveloped countries scabies is common and may be complicated by superinfection with pyogenic bacteria. I wish to report on a series of patients with acute glomerulonephritis admitted to a mission hospital in Southern Africa.

Among 4,695 admissions between 1 June 1971 and 31 May 1972 there were 33 patients with acute glomerulonephritis; 14 (43%) were suffering from infected scabies, nine (27%) gave a history of recent upper respiratory infection, and two (6%) had impetigo. The remaining eight (24%) gave no history of recent infection, though some of them had uncomplicated scabies. There was no significant sex or age difference between the groups. The seasonal incidence in the group with septic scabies is, however, of interest; all these patients were admitted between September and March and 10 of them (71%) in the five-week period from 27 November—that is, midsummer. These patients were not all living in the same area. Patients in other groups were evenly distributed throughout the year.

It would therefore appear that acute glomerulonephritis secondary to a pyoderma, and especially septic scabies, may in some areas be very common.—I am, etc.,

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Dogs and Transmission of Toxoplasmosis

SIR,—*Toxoplasma gondii* oocysts from naturally infected domestic cats (Prof. S. Pampiglione and others, 5 May, p. 306) would seem to be of importance epidemiologically¹⁻³ and can remain viable in soil for long periods.^{1,4} In several standard texts and papers the dog (in which *T. gondii* infection is also common) is implicated as a possible source of human toxoplasmosis. This, in the light of present knowledge, is misleading, and it should be stressed that formation of oocysts of *T. gondii* is known only in

domestic cats and some wild felids.^{5,6} They are not shed by dogs (not even when immunosuppressive drugs are used⁷) or various other vertebrates that have been given toxoplasmosis experimentally.^{8,9} Nor has *T. gondii* been isolated in excretions or secretions of dogs successfully infected orally with oocysts.⁷ Thus there is as yet no evidence for droplet infection, and the family dog would not appear to be important in the transmission of toxoplasmosis to man.

The primary source of infection in the case of dogs is probably raw meat containing tissue cysts. Filth flies have been shown to carry *T. gondii* oocysts and can contaminate food for up to 48 hours after contact with infected faeces¹⁰ (contrary to popular belief, in nature faeces are often only partially covered with soil by the cat after being excreted). Many dogs are in the habit of snapping at flies and frequently succeed in catching and eating them. The significance of this in the transmission of canine toxoplasmosis remains to be determined.

As discussed elsewhere in a review of the symptoms, transmission, prevention, and treatment of toxoplasmosis,¹¹ human infections are usually acquired (1) transplacentally, (2) by the ingestion in raw meat of microscopic tissue cysts, or (3) by the inadvertent ingestion of oocysts, either directly or via transport hosts such as flies and cockroaches. In addition, accidental infection of laboratory workers with *T. gondii* (some cases being illustrative of transmission by wound contamination) and transmission of toxoplasmosis by leucocyte transfusion have been reported. There is a risk of transmitting *T. gondii* by normal blood transfusion.¹¹—I am, etc.,

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¹ Fleck, D. G., Chessum, B. S., and Perkins, M., *British Medical Journal*, 1972, 3, 111.

² Peterson, D. R., Tronca, E., and Bonin, P., *American Journal of Epidemiology*, 1972, 96, 215.

³ Wallace, G. D., Marshall, L., and Marshall, M., *American Journal of Epidemiology*, 1972, 95, 475.

⁴ Ruiz, A., Frenkel, J. K., and Cerdas, L., *Journal of Parasitology*, 1973, 59, 204.

⁵ Janitschke, K., and Werner, H., *Zeitschrift für Parasitenkunde*, 1972, 39, 247.

⁶ Jewell, M. L., Frenkel, J. K., Johnson, K. M., Reed, V., and Ruiz, A., *American Journal of Tropical Medicine and Hygiene*, 1972, 21, 512.

⁷ Kühn, D., Oppermann, W. H., Rödel, H., and Centurion, H., *Berliner und Münchener tierärztliche Wochenschrift*, 1972, 85, 309.

⁸ Draper, C. C., Killick-Kendrick, R., Hutchison, W. M., Siim, J. C., and Garnham, P. C. C., *British Medical Journal*, 1971, 2, 375.

⁹ Miller, N. L., Frenkel, J. K., and Dubey, J. P., *Journal of Parasitology*, 1972, 58, 928.

¹⁰ Wallace, G. D., *American Journal of Tropical Medicine and Hygiene*, 1971, 20, 411.

¹¹ Markus, M. B., *South African Medical Journal*. In press.

Isolation in the Control of Dysentery

SIR,—I refer to Dr. H. G. Easton's letter (31 March, p. 798) and wish to express my general agreement with the views stated.

The reference to "patients" in my paper (17 March, p. 669) should have been qualified by the addition of "in hospital" as this was the context in which the statement was made. I accept that it is desirable that patients with mild symptoms be managed at home, provided that the attending doctor regards the family as the infected unit and takes appropriate precautions, especially in respect of members of the household who may, by virtue of their occupation or activi-