

inherited element is only one of the components in its causation, it is worth speculating about the other cause, so that the appropriate experiments can be carried out. Three possibilities stand out.

Firstly, an autoimmune disease analogous to Hashimoto's disease of the thyroid (but if so, why does diabetes occur in patients on high doses of steroid?). Secondly, damage to the pancreas by infection, perhaps by a virus (as with mumps, but infection has, in fact, been very rarely reported). Thirdly, poisoning by a metal such as zinc or cadmium (analogous to Wilson's disease due to copper poisoning). I have some evidence from radioactive zinc studies that diabetics retain more of a dose of zinc than their spouses used as controls. I would like to suggest that experiments on the naturally occurring diabetes of dogs might be helpful. I expect that our veterinary colleagues could easily find cases of recently diagnosed diabetics and it would not be expensive to try the effect of a zinc-free diet and zinc-free water with chelation treatment to remove any metallic poisoning from the pancreas.

The inheritance of diabetes in dogs should certainly be investigated as it seems likely to be similar to the disease in humans.—I am, etc.,

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**Continuous Ventilation and Oedema**

SIR,—Dr. J. T. Styles and others (29 August 1970, p. 522; 14 November, p. 431) observed marked water retention in a patient with myasthenia gravis treated with prolonged continuous mechanical ventilation. The use of a subatmospheric expiratory phase of 10 cm of water below ambient pressure resulted in a loss of oedema over a period of 6-8 weeks.

May I respectfully draw attention to the article entitled "Pulmonary complications and water retention in prolonged mechanical ventilation."<sup>1</sup> Nineteen of the 100 patients studied developed water retention. Restriction of water intake and diuretic therapy produced a prompt improvement. Although mechanical ventilation without a subatmospheric expiratory phase was continued, repeated water retention was not observed.—I am, etc.,

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<sup>1</sup> Sladen, A., Laver, M. B., and Pontoppidan, H. *New England Journal of Medicine*, 1968, 279, 448.

**Follow-up of Patients from an Intensive Therapy Ward**

SIR,—I was interested to read the article on "Subjective Follow-up of Patients from a Surgical Intensive Therapy Ward" by Dr. P. B. Hewitt (12 December, p. 669), particularly the conclusion that most of the patients did not find intensive care disturbing. I have also been occupied on a similar study, and would agree that most patients remember very little of their intensive care experiences, and even when they do their memory is often unreliable when compared with actual events. Dr. Hewitt states that a

large percentage of her patients were post-operative cardiopulmonary bypass cases, and therefore had benefited from preoperative preparation and explanation for the intensive care interlude. Non-cardiopulmonary-bypass intensive therapy admissions do not have this benefit of preparation, and often find themselves plunged into an atmosphere of mechanized confusion when they first become aware of their surroundings; and these patients do show initial agitation, apprehension, and panic, but in my experience these patients can be satisfactorily managed by sedation, confident reassurance, repeated explanation, semihypnotic suggestion, kindness, and sympathy.

In a subjective survey of 263 consecutive patients discharged alive from a multidisciplinary intensive therapy unit<sup>1</sup> it was found that 58% of cases accepted their intensive care experiences without any untoward effect and were quite happy to talk about it. A further 27% were unable to recollect ever having been in an intensive therapy unit. A smaller group, 10%, admitted having dreams, sometimes nightmares, recurring for varying periods of time following discharge. The remaining 5% could not be interviewed for various reasons.—I am, etc.,

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<sup>1</sup> Schroeder, H. G., *Anaesthesia*, 1971, in press.

**Relapsing Prostatic Cancer**

SIR,—Mr. J. D. Fergusson's "Current Practice" articles on cancer of the prostate (21 November, p. 475, and 28 November, p. 539) prompts us to recall our therapeutic experience<sup>1</sup> with androgens with radioactive phosphorus for patients who subsequently relapse.

Using the method of the American workers who introduced this method,<sup>2</sup> we have administered a two weeks' course of therapy with testosterone, adding <sup>32</sup>P (1.8 mCi a day from day 7 to day 12) to patients who have become resistant to oestrogens and the effects of castration. Of our patients, 22 have been treated so far and 18 of them have experienced some degree of remission, with the disappearance of pain and favourable changes in bone metastases (see Table). At the beginning of our experience two patients in very poor condition died during exacerbations of pain, fever, and (in one) hypercalcaemia. This syndrome may be seen in the initial phases of treatment but when it occurs during testosterone treatment it may be prevented from developing by giving the isotope earlier. The treatment may be repeated at an interval of a few months.

*Incidence of Side Effects and Remissions*

	Total
Nos. of Cases treated	22
Exacerbation of pain at the beginning	13
Haematological tolerance	21
Remissions (of varying degrees)	18
	1
	18

The 18 remissions we obtained varied from two to eight months, and the serum acid phosphatase levels fell or rose in parallel with the clinical state. Despite some of the risks of this treatment we feel that it can delay the fatal outcome and can frequently give a valuable remission in these patients with metastatic disease, which was described in Mr. J. D. Fergusson's article (p. 540) as "probably the

most difficult problem. . . ." Moreover, our policy is now to give this combined treatment not only to terminal patients but also at a very early stage, a few weeks after orchidectomy, because in a period when most neoplastic deposits have already been reduced to a minimum, we hope that this hormonal-isotopic "cell kill" may get nearer to the actual eradication of the cancer.

For these earlier patients so far it is not possible to evaluate our results in terms of remission, non-remission, or cure and these will come only from a long period of follow-up.—We are, etc.,

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<sup>1</sup> Grigoletto, E., Fiorentino, M., Pizzi, G. B., and Vangelista, R., *Twentyfourth Congress of "Società Italiana di Radiologia Medica e Medicina Nucleare,"* 25 April, 1970, Palermo.  
<sup>2</sup> Maxfield, J. R., Jr. Maxfield, J. G. S., and Maxfield, W. S., *Southern Medical Journal*, 1958, 51, 320.

**Geriatric Day Hospitals**

SIR,—Your leading article on "Geriatric Day Hospitals" (16 January, p. 130) draws attention to the value of the day hospital as an essential part of a comprehensive hospital geriatric service, and rightly emphasizes its diagnostic and therapeutic role and the importance of the full rehabilitation team. The leading article on "Hospital Costing" (same issue p. 127) recommends that the efficiency of an acute hospital should be measured by the number of discharges and deaths—that is, the cost per inpatient case, and also states that by reducing the length of stay more patients can be treated at a lower cost per case.

In his book *The Geriatric Day Hospital*,<sup>1</sup> Professor J. C. Brocklehurst has given comparative figures of total attendances at day hospitals throughout the country, rather than the total numbers of new admissions (or discharges and deaths), which provides an index of the real activity of the department concerned. A large total number of attendances with relatively few new patients is more characteristic of a day centre.

We consider that the same criteria mentioned in the leading article on hospital costing should equally well be applied to rehabilitation departments, either inpatient or day hospital. This was emphasized in a report prepared for the then Ministry of Health on day hospital costing<sup>2</sup>, when the higher cost of one day hospital compared with another was queried. It was found that in the day hospital with twice the higher costs per total number of attendances the cost per new attendance was approximately a third that of the other. It is unfortunate that the Department of Health still appears to be using the total number of attendances as a yardstick for the financing of annual running costs of day hospitals, which really only provides an index of the sum of the number of patients the day hospital building can take and the numbers of days a week the unit is open. In a recent guidance to regional hospital boards the Department of Health suggested that financing should be based on the formula of £200 per 100 attendances. This policy can only result in encouraging the tendency to run a day hos-