

changes may occur independently of any neuro-endocrine process i.e. from starvation although may still be an integral part of a psychiatric disorder. Furthermore it emphasises the importance of blood biochemistry in understanding the clinical picture and may strengthen the argument for routine biochemical investigations in psychiatric patients.

ALISTAIR BURNS

Bethlem Royal Hospital,
Monks Orchard Road,
Beckenham, Kent BR3 3BX

References

- CRAMMER, J. L. (1959) Water and sodium in two psychotics. *Lancet*, *i*, 1122-6.
- GAMBLE, J. L., ROSS, G. S. & TISDALL, F. F. (1923) The metabolism of fixed base during fasting. *Journal of Biological Chemistry*, *57*, 633-95.
- SANDEK, C. O. & FELIQ, P. (1976) The metabolic effects of starvation. *American Journal of Medicine*, *60*, 117-26.
- ZILVA, J. F. & PANNELL, P. R. (1978) *Clinical Chemistry in Diagnosis Treatment*. 2nd edition. London: Lloyd-Luke.

PATTERNS OF CARE FOR THE DEMENTED

DEAR SIR,

The paper by Christie and Train (*Journal*, January 1984, **144**, 9-15) made several salient points about the provision of in-patient beds for the demented elderly. They also presented data showing that the provision of day care and/or "holiday" admissions prior to the final admission had no significant effect on the patients' ultimate length of stay in hospital. From this they concluded that "treatment, or what might more appropriately be described as support for patients and relatives is shown to have had no effect in reducing the duration of terminal hospitalisation".

While this may be so, it is not a logical conclusion on the basis of the data presented. Day care places and holiday admissions were not allocated on a random basis, and were thus presumably a reflection of perceived greater need. Most commonly the greater need would be that of the demented patient's relatives, rather than of the patient herself. Given that the more stressed and/or "help-seeking" relatives tend to be the recipients of this sort of assistance, one could view the fact that the "treated" patients do not require longer final hospitalisations as evidence that day care and holiday admissions are doing just what they ought to be doing i.e. providing sufficient support to enable stressed relatives to cope with a demented dependant at home for as long as their less stressed counterparts.

JOHN M. EAGLES

University of Aberdeen,
Clinical Research Centre,
Royal Cornhill Hospital,
Aberdeen AB9 2ZH

DEXAMETHASONE SUPPRESSION TEST PREDICTS RESPONSE TO NOMIFENSINE OR AMITRIPTYLINE

DEAR SIR,

The dexamethasone suppression test (DST) has recently attracted considerable interest among biological psychiatrists. While its specificity for the diagnosis of endogenous or primary depression has not been confirmed fully it is conceivable that it could have application as a tool for the exploration of neurotransmitter dysfunctions in the limbic-hypothalamic system. A pathological (i.e. positive) DST might be secondary to either a decrease of noradrenergic activity (van Loon *et al*, 1971) or increased cholinergic activity within the central nervous system (Garver & Davis, 1979). Data on the involvement of serotonin on ACTH release are contradictory.

Using the DST as a peripheral indicator we investigated the possibility of a central noradrenergic-cholinergic imbalance in subgroups of depressed patients (Janowsky *et al*, 1972).

In 43 depressed inpatients the DST was performed. Subsequently, a group ($n = 23$) of DST positive and a group ($n = 20$) of DST negative depressives were treated for 28 days under double blind conditions with either nomifensine (150-300 mg/day), a noradrenaline (NA) potentiating drug, or amitriptyline (150-300 mg/day) a NA potentiating and potent anticholinergic compound.

DST positive depressives responded favourably to amitriptyline, but not to nomifensine. Conversely, DST negative depressives responded favourably to nomifensine but less well to amitriptyline. (Table).

TABLE

Clinical response in depressed patients with pathological (+) and normal (-) dexamethasone depression test (DST) treated with amitriptyline and nomifensine. Response is defined as decrease of Hamilton Depression Rating scale global score by 50 per cent within 28 days

	DST		Response	
	<50%	>50%	<50%	>50%
Amitriptyline (n = 20)	+	2	8	8
	(n = 10)	20%	80%	80%
	-	5	5	5
	(n = 10)	50%	50%	50%
Nomifensine (n = 23)	+	8	58	58
	(n = 13)	62%	38%	38%
	-	3	7	7
	(n = 10)	30%	70%	70%