

TST results seem to be closely related in depression but not in other psychiatric disorders. Both endocrine tests are dependent on intact limbic-hypothalamic function involving several neurotransmitter systems (Carroll, 1982; Loosen & Prange, 1982), so it is tempting to suggest that major depression might imply a specific limbic-hypothalamic dysfunction, common to the regulation of both the adrenal and the thyroid axis. Further investigations are needed to explore this phenomenon.

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- WINOKUR, A., AMSTERDAM, J., CAROFF, S. *et al* (1982) Variability of hormonal responses to a series of neuroendocrine challenges in depressed patients. *American Journal of Psychiatry*, **139**, 39–44.
- (1) The study was carried out on patients who were receiving medication which affects cortisol output and, consequently, the DST. It is stated that 'The great majority were taking therapeutic doses of psychotropic drugs including tricyclic antidepressants, phenothiazines, lithium carbonate and benzodiazepines . . .' Lithium has been shown to increase cortisol levels (Platman & Fieve, 1968). Benzodiazepines, on the other hand, lower them (Beary *et al*, 1983) and can normalize the DST (Nuller & Ostroumova, 1980). There is, however, a more fundamental criticism of studies which include medicated patients. Psychotropic drugs, by definition, alter mental state (and thus the classification of patients into sub-groups of depression such as 'neurotic' or 'endogenous'). In medicated patients, therefore, it is not really possible to draw conclusions about the relationship between the results of the DST and mental state—even if the medication does not actually affect the DST. This drawback applies to many studies in this field (e.g. Carroll & Davis, 1970; Brown & Shuey, 1980; Carroll *et al*, 1981; Asnis *et al*, 1982).
- (2) There must be doubt about the reliability of the self-administered Leeds General Scale (Snaith *et al*, 1976) in severely depressed patients, especially those with retardation or psychotic features. The other scale which was used, the MADRS (Montgomery & Asberg, 1979) has only one subscale, 'Inner Tension', which relates to anxiety, and other features of anxiety, notably the somatic symptoms, are not measured.

Fuller understanding of the relationship between anxiety and the DST must await studies on drug-free patients, using reliable instruments for measuring mental state.

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#### DEXAMETHASONE SUPPRESSION TEST

DEAR SIR,

Dr Saleem (*Journal*, February 1984, **144**, 181–4) reports that 48% of 59 depressed patients had abnormal suppression on the dexamethasone suppression test (DST), a finding in line with previous studies. However, the conclusions he draws about the relationship between abnormal suppression and anxiety may not be justified for the following two reasons:

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#### BODY IMAGE DISTURBANCE IN ANOREXIA NERVOSA

DEAR SIR,

The denial of thinness in the face of severe emaciation is a striking, clinical observation of many patients with anorexia nervosa. This observation has led to a series of ingenious and careful studies which have attempted to demonstrate, empirically, a disturbance of body image in this disorder. These experiments have held out the hope that here is an important piece of psychopathology which can be investigated objectively, even measured with an interval scale.

Unfortunately, the straightforward results of the initial study of Slade and Russell (1973) have not been consistently replicated. It has become recognized that a host of variables (e.g. age, weight, the apparatus used, the instructions given) may influence the results (Garner & Garfinkel, 1981). Now Touyz *et al* (1984) have shown that with their group of patients and with their techniques, patients with anorexia nervosa as a group differed from the controls in the extent of variability of their body size estimates.

When doing research, investigators go to great lengths to ensure that their measurements are reliable and valid. Blind ratings are attempted and it is sometimes crucial that raters have no knowledge of the hypothesis being tested. We appear, however, to be rather lax in applying similar standards for patients when this might be necessary. It may be particularly important when patients suffer from a condition like anorexia nervosa which is reputed to be associated with denial and inconsistency. Patients with anorexia

nervosa are usually intelligent and well read and it is a reasonable assumption that most would be aware of the hypothesis being tested when they are subjected to body image experiments. What sort of confidence can be placed in their ratings? Perhaps these ratings bear a closer relationship to their attitudes to treatment or the experimenter than to their perception of their bodies. Some patients like to please, others are less well disposed. Factors like these could explain the extent of variability noted.

Body image experiments in anorexia nervosa are probably a good example of how confusing the results can be when the object being examined happens also to be a subject who knows what is being examined and why. Progress in this field must be limited unless this difficulty is taken into account.

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#### AGORAPHOBIA AND HYPERTHYROIDISM

DEAR SIR,

A twenty-eight year old West Indian female patient presented with severe agoraphobia. Systemic enquiry and physical examination indicated probable hyperthyroidism. Appropriate serum samples were sent for biochemical analysis, but the results were within the normal range. The tests were repeated and the original results confirmed. The patient was then successfully treated with a combination of behaviour therapy, psychotherapy and a monoamine oxidase inhibitor. Eleven months later the patient deteriorated psychiatrically and demonstrated unequivocal signs of excess thyroid activity, which were amply confirmed on biochemical tests. Successful treatment of the hyperthyroidism again led to an abatement of the psychological symptoms. The initial failure of the biochemical indices to confirm the history and physical findings presumably arose because the normal values encompass a small proportion of false negatives.

Non-specific anxiety, irritability and emotional