## Correspondence

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## DANTROLENE FOR NEUROLEPTIC MALIGNANT SYNDROME

DEAR SIR,

With reference to a recent letter from Dr Rosemarie V. Cope (Journal, August 1983, 143, 202-3) which drew attention to the Neuroleptic Malignant Syndrome (NMS), it was stated that there is no specific treatment for this condition apart from supportive measures. There are however a number of reports in the literature on the successful use of dantrolene sodium in such cases (Delacour et al, 1981; Goekopp and Carbaat, 1982). The drug is normally given by the intravenous route, and the recommended dose is 2-3 mg/kg (Hall, 1980). Delacour et al (1981) report rapid muscular relaxation and return to normal temperature with this treatment, and the recovery time may be as little as one hour (Boules et al, 1982).

The reported mortality rate of NMS is 20 per cent (Caroff, 1980) and the risk of death or irreversible brain damage is thought to be related to the duration of the hyperthermic syndrome (Caroff, 1980). With supportive treatment such as cooling with ice or routine intensive care, it may take forty-eight hours or longer to return the temperature to normal (Goekopp and Carbaat, 1982). So the use of intravenous dantrolene should improve the outlook in this condition.

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## DEMENTIA AND THE ABNORMAL DEXAMETHASONE SUPPRESSION TEST (DST)

DEAR SIR,

Balldin et al (Journal, September 1983, 143, 277), in showing abnormal DST results in "Alzheimer's disease" and multi-infarct dementia, have confirmed other recent reports (Spar and Gerner, 1982; Raskind et al, 1982) that a proportion at least of demented patients reveal this implied impairment of the hypothalamo-limbic system function. In doing so they have disputed the view, put about by earlier reports, that an abnormal DST helped distinguish between depressive illness and dementia.

However, the restricted nature of these recent conclusions needs to be pointed out. In trying to establish the presence of abnormal DST in dementia, they were naturally at some pains to see that the demented patients they were investigating were free of depression. Roth (1978) has shown that depression, when present, is an early feature in both Alzheimer's disease and multi-infarct dementia. In excluding depression, it is possible that demented patients at a later stage of their illness were studied in relation to DST. This can, indeed, be shown to be the case. In the 3 studies quoted above, the patients with "parenchymatous" dementia (the term Alzheimer's disease is avoided as in none of the studies was the diagnosis established by histology) had a mean duration of dementia, among those responding abnormally to DST, of 4.6 years, 4.75 years and 7.7 years respectively. This is impressive survival for a collection of cases of pre-senile and senile dementia where mean survival could have been expected to be around 5-6 years. Moreover, far from being in a terminal phase of their illness, the patients exhibited a wide range of severity. Balldin et al say, "(the) subjects showed a range of dementia from mild to severe, which suggests that some were at a rather early stage of the disease"; Spar and Gerner's (1982) data show that though the abnormal DST cases were at a later chronological stage of the illness (4.75 years) compared to the normals (3.75 years), their mental test scores were comparable and exhibited a wide range; Raskind et al (1982) cases were "severe" but the mean duration of illness was over 7 years.