Letters to the Editor

Dear Sir

We read with the interest the recent article by Whiteford et al. (1) in which they found no relationship between dexamethasone nonsuppression and negative symptoms in schizophrenic patients. We feel that certain methodologic issues in this study specifically and the literature on the dexamethasone suppression test (DST) in schizophrenia in general merit closer scrutiny. In this study, all patients were receiving some neuroleptic drug, which possess varying amounts of anticholinergic activity (2), and additionally half the patients (19 of 40) were also receiving anticholinergic medication. Cholinergic mechanisms play an important role in the regulation of the hypothalamic-pituitary-adrenal axis and increased cholinergic activity is associated with CRF release and dexamethasone nonsuppression (3). Consequently, anticholinergic agents would interfere with results of the DST.

Furthermore, patients in this study were in subacute/chronic phase of the illness and the overall rate of DST nonsuppression was found to be 22%. This is in contrast to rates of 71% (4) and 48% (5) found in unmedicated schizophrenics in the acute phase of illness. Medication status and phase of illness are thus important variables that influence the rates of dexamethasone nonsuppression in schizophrenic patients and possibly affect the association of this finding with negative symptoms.

We performed a valid 1 mg DST in 20 schizophrenic inpatients (meeting RDC and DSM-III criteria) at medication-free baseline and after about 4 weeks of treatment with neuroleptics (6). Patients were rated for positive and negative symptoms on the BPRS subscales and SANS respectively, and for depressive symptoms on the Hamilton Depression Rating Scale at both timepoints. Seven of the 20 patients (35%) were nonsuppressors at baseline, but all of them had become suppressive following 4 weeks of neuroleptic treatment. DST nonsuppression was not related to depressive symptoms. DST nonsuppression was associated with: a) presence of baseline negative symptoms that remitted during hospitalization; b) acuteness of current psychotic episode; and c) good response to treatment.

Thus, DST nonsuppression was associated with negative symptoms only in the acute phase of the illness and predicted a better outcome. We have proposed that muscarinic hyperactivity may be the pathogenetic basis of negative schizophrenic symptoms (7) and that cholinergic activity increases in a homeostatic attempt to restore dopaminergic/cholinergic balance in the limbic system, this balance having being disrupted by the increased dopaminergic activity that attends a psychotic exacerbation in the acute phase of the illness. Thus, DST nonsuppression in schizophrenia may reflect muscarinic hyperactivity, which is associated with negative symptoms in the acute phase of the illness and better clinical outcome (as the increase in cholinergic activity reflects a homeostatic attempt to restore dopaminergic/cholinergic balance). Although this hypothesis is speculative, it is consistent with various observations and merits further investigation.

Medication status and phase of assessment may account for the marked discrepancies in the literature with regard to the rates of dexamethasone nonsuppression in schizophrenia (with rates varying from 0–71%), variable association of this finding with negative symptoms, and the prognostic significance of this finding.

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Dear Sir

Ref: Hwu H-G, Yeh E-K, Chang L-Y. Prevalence of psychiatric disorders in Taiwan defined by the Chinese Diagnostic Interview Schedule. Acta Psychiatr Scand 1989:*79*:136–147.

In this article, the authors stated that (page 146, left column) "...a finding *replicated* by another independent study in Taiwan (24) using a *different* study method." I think the word *replicated* has been used wrongly since: 1) The methods, as they have clearly pointed out, are quite different between their work and my own study; 2) Both of these studies were conducted during 1982–1985; 3) My work was published slightly earlier than theirs (1, 2).

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