those patients who developed quinidine-like effects during treatment (Young et al, 1985).

Taken together, our own preliminary findings and those of Kutcher et al suggest that further study of hydroxylated metabolites of tricyclic antidepressants is warranted in geriatric patients. Their contribution to toxic and therapeutic effects, and to changes in neurobiological measures during treatment, are open to further investigation; these issues might be studied to advantage in elderly patients.

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References

BERTILSSON, L., MELLSTROM, B. & SJOQVIST F. (1979) Pronounced inhibition of noradrenaline uptake by 10-hydroxymetabolites of nortriptyline. *Life Sciences*, 25, 1285-1292.

YOUNG, R. C., ALEXOPOULOS, G. S., SHAMOIAN, C. A. & KUTT, H. (1984) Heart failure associated with high plasma 10-hydroxynortriptyline levels. American Journal of Psychiatry, 141, 432–433.

—, —, — & — (1984) Plasma 10-hydroxynortriptyline in elderly depressed patients. Clinical Pharmacology and Therapeutics, 35, 540-544.

—, —, — & — (1985) Plasma 10-hydroxynortriptyline and ECG changes in elderly depressed patients. American Journal of Psychiatry, 142, 866-868.

Diagnostic Value of Schneider's First Rank Symptoms in Schizophrenia

SIR: Kurt Schneider (1959) claimed that certain "first rank symptoms" (FRS) were pathognomonic of schizophrenia in the absence of organic brain disorder. Recent investigations have argued against this assertion, but most of the studies have considered FRS collectively and the value of individual symptoms has not been explored much. The frequency of FRS in schizophrenics ranges from 28–72% (Mellor, 1982). This variation is probably due to differences in the diagnostic criteria used and methods employed in eliciting FRS.

We conducted a pilot study based on fifty consecutive admissions to evaluate the prevalence and diagnostic implications of FRS. All the patients, irrespective of their diagnosis, were interviewed by one of the authors (MG) for the presence of FRS as early as possible after admission. The findings were recorded on a questionnaire specially prepared for the study and based on Mellor's definitions of the FRS. The patients were later seen by the first

author (HDC) to confirm the findings and diagnosis. Diagnostic labels were given according to DSM-III (1980).

The distribution of 50 patients (23 males, 27 females; age range: 21-86 years) according to the diagnostic categories was as follows: schizophrenic disorders 24; psychotic disorders not elsewhere classified 6 (schizophreniform disorder 2, brief reactive psychosis 1, schizoaffective disorder 1, atypical psychosis-schizophrenia onset after age 45, 2); affective disorders 9 (mania 2, major depression recurrent 4, atypical depression 1, dysthymic disorder 1); organic mental disorders 3; anxiety disorders 2; adjustment disorders 5; and personality disorders 2. FRS were present in 26 patients distributed as follows: schizophrenic disorders 17; psychiatric disorders not elsewhere classified 4; affective disorders 2; organic mental disorders 2; and personality disorders 1.

The analysis of data on schizophrenics with FRS produced the following results. (a) The majority of patients with schizophrenia had 2 or more symptoms, maximum 9 symptoms; only 3 had 1 symptom each. (b) The symptoms more commonly reported (in order of frequency) were: 'made' affect (11), thought insertion (10), thought broadcasting (9) and voices arguing (7). (c) Auditory hallucinations were reported by half the patients, the commonest being voices arguing, but always accompanied by a symptom of passivity. (d) 16 patients with schizophrenia had one or more passivity experiences. (e) Delusional perception was reported only by 3 patients. (f) The commonest association between any two symptoms was between thought insertion and thought broadcasting.

The findings suggested that FRS, though observed in other disorders at times, were much more common among schizophrenics. Passivity phenomena were the commonest. Auditory hallucinations alone were of no diagnostic value. Similar observations were made in patients with schizophreniform disorder and schizophrenia after the age of 45.

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References

AMERICAN PSYCHIATRIC ASSOCIATION (1980) Diagnostic and Statistical Manual of Mental Disorders, 3rd Ed. (DSM-III). Washington, D.C.: American Psychiatric Association.

MELLOR, C. S. (1982) The present status of first-rank symptoms. British Journal of Psychiatry, 140, 423-424.

Schneider, K. (1959) Clinical Psychopathology. Engl. Transl. New York: Grune & Stratton.