been divergent opinions regarding the interpretation of the cause of the clinical picture. It has been suggested that these patients have persistent neurological after-effects of acute lithium neurotoxicity (Donaldson & Cuningham, 1983; Schou, 1984). A detailed analysis of the patients described by Cohen & Cohen reveals that all were on high doses of lithium carbonate (1165 mg/day to 1800 mg/day). The maximum serum lithium ranged from 1.48 mmol/litre to 2.45 mmol/litre during the acute phase of lithium toxicity. All four patients were female. A preponderance of females has been reported in patients with persistent neurological sequelae of lithium (Donaldson & Cuningham, 1983; Schou, 1984), unlike NMS (Shalev & Munitz, 1986).

Moreover, each of the four patients was left with permanent brain damage (two became grossly demented, two had persistent dyskinesias). NMS, despite a mortality rate of 20%, is an acute condition and generally regresses without sequelae. Shalev & Munitz (1986) reviewed 120 patients with NMS and could identify only four with permanent sequelae. In one of these, permanent brain damage was probably due to brain anoxia during ECT given in the course of NMS and not due to the condition itself. In contrast to this, I have identified 48 patients with long-lasting sequelae of lithium intoxication (either alone or in combination with other drugs) in the literature.

Although there is controversy about lithium/haloperidol interaction (Cohen & Cohen, 1974; Frankel & Spring, 1982) it is well established that lithium intoxication at times resolves leaving persistent neurological sequelae (Donaldson & Cuningham, 1983; Schou, 1984). Since NMS is only a descriptive term, superficial resemblance may be seen with any other descriptive syndrome, e.g. lethal catatonia and some cases of lithium neurotoxicity.

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Gilles de la Tourette's Syndrome in Down's Syndrome

SIR: Karlinsky *et al* (*Journal*, May 1986, **148**, 601–604) speculate on a possible causal link between these two conditions. They appear to have neglected a more straightforward aetiology for the Tourette's syndrome.

It is reported that the patient developed seizures at the age of 24 years. Age-related epilepsy, with an onset in adult life, is a well recognised complication of Down's syndrome (Veall, 1974; Tange, 1979). The patient was being treated with carbamazepine two years later, at the onset of the Tourette's syndrome. Carbamazepine has recently been recognised as one of a number of pharmacological compounds (including dextroamphetamine, methylphenidate, and other adrenergic agents) which may precipitate tics, (Gualtieri & Evans, 1984). This tends to fit in with the dopaminergic theory of Tourette's syndrome, mentioned by the authors of the paper. Although, as they also point out, tics may be missed in people with mental retardation, there is as yet no clearly established link with any particular syndrome.

Precipitation of the tics by carbamazepine may account for the late onset of Tourette's syndrome in this patient, and seems a more likely explanation than those proposed by the authors. It is an iatrogenic complication of which psychiatrists should be aware.

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Mianserin and Blood Dyscrasias

SIR: It is with some concern that I note that manufacturers of mianserin (Norval, Bencard and Bolvidon, Organon) have written to the profession in the UK advising of changes in the Data Sheet concerning bone marrow depression and blood dyscrasias, the changes having been instituted at the insistence of the Committee on Safety of Medicines. The essential change is that a full blood count is recommended every four weeks during the first three months of treatment. This action follows concerns highlighted in a recent CSM update (1985).

There appears to be confusion between a drug-related depression in the white cell count and drug-

induced agranulocytosis. Many psychotropic drugs are known to be able to produce changes in the white cell count. Tricyclic antidepressants, phenothiazines, and carbamazepine are all recognised as being able to depress the white cell count. Lithium, on the other hand, is associated with a leucocytosis. On the whole these findings are benign, usually incidental results with no clinical manifestations, and reverse on cessation of the drug (Kaplan & Sadock, 1985). Agranulocytosis with the features of opportunistic infection, however, is a more serious condition, commoner in older females and arising 4–6 weeks after initiation of therapy, which in the case of chlorpromazine can carry a mortality of 30% (Kaplan & Sadock, 1985). This condition arises very quickly and appears unpredictable; thus many authorities believe that routine blood counts are unhelpful and that the doctor should rely on the associated symptoms and signs (Kaplan & Sadock, 1985; Gregory & Smeltzer, 1983).

Actual numbers of patients with these drug-related adverse events are extremely difficult to ascertain. The criteria for reporting a finding as a particular reaction are themselves usually idiosyncratic, depending on the physician's expertise, and there are few guidelines provided to standardise such reports. These problems are compounded by a methodology that is essentially anecdotal, with no control groups. Thus comparisons are difficult and often misleading, with doctors being more likely to report events with newer drugs than with older established compounds. Perhaps the most clinically iniquitous practice, however, is that the reports appear to be acted upon in isolation and out of the context of the overall risk-benefit ratio of the particular drug, and it is the overall mortality from exposure to the drug that should be considered.

Combining data from the Office of Population Censuses and Survey for England and Wales for 1982–84 with similar data from the General Register Office for Scotland over the same period, there were 1029 deaths in which tricyclics either alone or in combination were implicated. This compares with 55 in which mianserin either alone or in combination were implicated. Even allowing for the difference in rates of prescription, the overall mortality associated with mianserin is substantially less than with the tricyclics. Considering deaths resulting from antidepressant drug overdoses alone, the differences are especially striking, with mianserin accounting for only 15 such fatalities per million patients compared with 388 per million for the tricyclics and bridged-tricyclics (Leonard, 1986).

Practising geriatric psychiatry in Canada, I am restricted to using toxic and problematical antidepressants in the elderly which themselves can produce serious blood dyscrasias. For example, with amitriptyline 83 cases were reported in Britain between 1964 and 1981, with 18 deaths (Clink, 1983).

Therefore, it is far from clear that amendments to the Data Sheets for mianserin will achieve an improvement in the treatment or outcome of depressed patients. Routine blood monitoring is not likely to detect the uncommon event of a blood dyscrasia, and may well confuse the picture further as there are no controlled data with which to compare results of such testing. The likely outcome is that many doctors will be put off using mianserin, especially in patients who are particularly at risk from the tricyclic antidepressants such as the elderly. Ironically, the CSM may be contributing to increasing the risks of treatment.

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Psychological Complications Following a Mis-diagnosis of Deafness

SIR: The differential diagnosis between hysteria and organic illness is important and fraught with pitfalls. Emphasis has been placed on ensuring that organic conditions are not mis-diagnosed as hysterical with consequent delay in treatment (Slater, 1965); however, it has also been recognised that protracted physical investigations and delay in psychiatric referral may worsen the prognosis for true hysterical symptoms (Goodyer, 1981).

Hysteria in childhood is uncommon, and is reported as not occurring in children under five years of age (Goodyer, 1981). We report a case of chronic hysterical deafness presenting at the age of two years with delay in the exclusion of any organic pathology until the age of fourteen years.