after 10 days. The rash was diagnosed as Stevens-Johnson syndrome, due to *M pneumoniae*.

M pneumoniae causes up to 20% of community-acquired pneumonia,[1] and children are especially susceptible. The main presentations are respiratory (75% of reported cases) but rashes and CNS manifestations have also been reported. In Stevens-Johnson syndrome associated with *M pneumoniae*[2,3] the rash probably results from hyperaemia of small blood vessels of the skin; exudate disrupts cell layers, leading to vesicles and bullae, and if blood escapes with the exudate there will be a purpuric element. The mechanism of this association is still obscure. An autoimmune reaction cannot be ruled out, and the CNS manifestations could also be due to antibody cross-reacting with the nerve tissue. This happens with *M pneumoniae* induced haemolytic anaemia[2,4,5] where non-specific IgM interacts with I antigen of red blood cells. Other mechanisms for CNS pathogenicity are the production of a neurotoxin or direct invasion of nervous tissue. Usually there is complete recovery from skin and CNS manifestations, but persisting nystagmus, deafness, or partial paralysis have been reported.

These two cases show that *M pneumoniae* should be considered in cases of meningoencephalitis and serious rashes, especially when the 4-yearly epidemic is in progress. The first case demonstrates the value of taking a family history and reminds us that a close family contact may cause infection.

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Psychiatric illness associated with "ecstasy"

SIR,—Dr Schifano (Nov 23, p 1335) describes chronic atypical psychosis associated with long-term abuse of MDMA ("ecstasy"; 3,4-methylenedioxymethamphetamine). We describe a case of severe depression with suicidal ideation developing soon after a few doses of MDMA. The patient came from the same area of northern Italy as Schifano's.

A 23-year-old man with no personal or family history of psychiatric disorder and no history of psychoactive substance dependence had taken one tablet of MDMA on four occasions, 2–3 weeks apart, 3 months before coming to our psychiatric outpatient clinic. After all four doses he had experienced mild transient euphoria, followed the day after by dysphoria for 2 or 3 days. On the day after the fourth dose he became persistently and severely depressed, with loss of energy, weight, and interest in all activities, decreased appetite, psychomotor retardation, hypersomnia, diminished ability to concentrate, and suicidal ideation. No delusions or hallucinations were present. His depression interfered with his work, social activities, and relations with others. This clinical picture had lasted for 45 days when he was examined at our clinic. His 21-item Hamilton rating scale for depression score was 34. Treatment was started with cognitive psychotherapy and oral S-adenosyl-L-methionine (SAM) 800 mg daily, and he gradually improved.

The absence of any history of psychiatric disorder plus the timing suggest a causal link between MDMA and a major mood disorder in this case. Whereas the case of chronic psychosis described by Schifano developed during 4 years of MDMA use our patient had serious depression syndrome soon after a few doses of MDMA. The possibility of severe and lasting psychiatric sequelae to the sporadic use of MDMA requires more attention by mental health professionals. MDMA damages CNS serotonin neurons in non-human primates,[1] and dysfunction of the central serotonergic system has been variously associated with depression and with suicidal and/or impulsive aggressive behaviour.[2] Other published cases of associations between MDMA and major psychiatric disorders are: three cases of chronic paranoid psychosis,[3] one of recurrent acute paranoid psychosis,[4] and three of panic.[5]

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Verapamil and hair colour change

SIR,—I was fascinated by Professor Sever's report (Nov 9, p 1215) of a patient with hypertrichosis on verapamil. I have a female patient, aged 65 years, who has been hypertensive since 1981. In her 20s her hair became prematurely grey and over the subsequent years she was happy with this.

She moved to our area in 1988 when she was taking a combination of nifedipine ('Adalat Retard') and bendrofluazide for hypertension. She was overweight and her blood pressure was not properly controlled. Over the next eighteen months there were several changes in her antihypertensive medication until in June, 1990, hypertension was controlled by a combination of captopril (25 mg twice daily), bendrofluazide (2·5 mg once daily), and verapamil slow-release (240 mg daily). She is a model patient since she also lost a considerable amount of weight, which probably played a part in reducing her blood pressure.

In June–July, 1991, she first noticed a colour change to the front part of her hair. This has persisted and increased and she now has at least 7·5 cm of frontal hair changing back to its original colour. This hair seems coarser than before and because it is such a striking black, it appears dyed.

I wonder whether these changes have anything to do with slow release verapamil?

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Eosinophilia with clozapine

SIR,—The psychotropic agent clozapine is an atypical antipsychotic drug that is claimed to have a low tendency to induce acute extrapyramidal reactions. After its introduction in Finland in 1975, there were 17 reported cases of agranulocytosis, of which 8 were fatal.[1,2] Since these occurred in an estimated total of only 3000 recipients, clozapine was withdrawn from the market in several countries. In the meantime clozapine has proved effective in the treatment of refractory schizophrenia, and has again been registered in several countries. We report a patient in whom leucocytosis and eosinophilia developed while he was on clozapine, and which recurred after rechallenge.

A 30-year-old man with schizophrenia was on long-term oral treatment with promethazine 75 mg daily, dexetimide 0·5 mg daily, atenolol 50 mg daily, penfluridol 40 mg weekly, and chlordiazepoxide 25 mg occasionally. Early in November, 1990, he was started on clozapine 200 mg daily because of refractory schizophrenia. One week before this, haemoglobin and leucocyte values were normal and a differential count was unremarkable (figure). Laboratory investigations were normal nine days after starting treatment, but seven days after this slight leucocytosis and