1980 had been treated with lithium (Liskonum 225 mg in the morning and 450 mg at night), since when his mood had been stable. He attended regularly for follow-up.

He described a 10-day history of paranoid symptoms, with ideas of influence (vibrations in his body) and auditory hallucinations (third-person commentary). He believed that his neighbours were trying to influence him and spying on him. These psychotic symptoms occurred in the absence of mood change and in the presence of clear consciousness. He had never experienced similar symptoms in the past. At this stage diagnosis was in doubt. Lithium treatment was continued as before and trifluoperazine 5 mg nightly added.

Two days later he was admitted to the psychiatric unit after the onset of muscle spasm and opisthotonos thought to be a dystonic reaction to the neuroleptic. This settled on admission after administration of procyclidine. Paranoid symptoms also settled quickly on the day after admission. He was discharged four days later taking the same medication. At follow-up 10 days later he appeared well, with no relapse of paranoid symptoms. Here the aetiology became clear. He admitted to having abused Actifed for many years, taking one to two bottles at weekends to help him relax, and he also found that it caused pleasant perceptual changes (sounds seemed louder and colours more vivid). Two weeks before presentation he had increased his intake to two bottles a day. He denied abuse of LSD or amphetamines. The hallucinations disappeared the day after he stopped Actifed.

Comment

There have been no previous reports of paranoid psychosis due to pseudoephedrine, which is a stereo isomer of ephedrine. Pseudoephedrine hydrochloride and ephedrine are structurally closely similar in formula to methylamphetamine hydrochloride, which has been specifically noted to induce psychosis. Actifed is a proprietary medicine, freely available over the counter. Pharmacists report that it sells well and is widely used. The possibility that Actifed abuse is common must be considered.

Routine questioning on abuse of Actifed may be appropriate in new cases of paranoid illness and also for known psychiatric patients, in whom the condition is likely to be misdiagnosed.

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Low doses of factor VIII for selected ankle bleeds in severe haemophilia A

Episodes of bleeding into the ankle joints in patients with severe haemophilia respond to 7 units of factor VIII/kg as well as to 14 units/kg.¹ We treated ankle bleeding with this reduced dose except when the joint had lost all movement or when less than one month had elapsed since the last bleed into that joint, when we used 14 units/kg. We treated 201 episodes with this regimen and report our results.

Patients, methods, and results

Forty-two pupils at this college with severe haemophilia A and without inhibitors of factor VIII bled into 66 ankle joints on 201 occasions during an academic year. Factor VIII at a dose of 14 units/kg was transfused during 106 bleeding episodes, and at a dose of 7 units/kg in 95 episodes.

The affected limb was always raised until signs and symptoms began to regress, and weight bearing was eliminated in the acute stages. The presence or absence of restriction of baseline movement, stiffness or pain as a presenting symptom, history of trauma, warmth, visible swelling, and the degree of movement restriction was noted on presentation. The loss of less than 50% of baseline movement was designated grade 1 and of more than 50% grade 2. The time taken from the onset of symptoms until the start of treatment was also noted. The joints were assessed at eight and 24 hours and every 12 hours thereafter until complete resolution. Further transfusions were given at eight hours for progression of signs or symptoms and thereafter for poor prognosis.

Twenty-four of the bleeds treated with 14 units/kg (23%) required a further transfusion compared with only 10 (11%) of the bleeds treated with 7 units/kg. This difference was significant ($\chi^2=4.4$, $p<0.05$). The table shows factors associated with successful or unsuccessful treatment of bleeding episodes at the two dosage values, using retransfusion as a criterion. Differences between the proportions of bleeding episodes associated with success or failure, using a fourfold table, were not significant for any factor at the lower dose value. When the higher dose was used a significant increase in the proportion of bleeds presenting with pain ($\chi^2=6.78$, $p<0.01$) and with loss of more than 50% of baseline movement ($\chi^2=7.67$, $p<0.005$) was noted in the group of bleeding episodes treated unsuccessfully.

Number (%) of ankle haemarthroses in which various factors were present related to dose of factor VIII and success of treatment

Factors at presentation	Mean dose of factor VIII			
	7 units/kg		14 units/kg	
	Success (n=85)	Failure (n=10)	Success (n=82)	Failure (n=24)
Restriction of baseline movement	14 (16)	3 (30)	5 (6)	4 (17)
Stiffness	23 (27)	3 (30)	18 (22)	7 (29)
Pain	39 (46)	4 (40)	38 (46)	19 (79)
Trauma	23 (27)	1 (10)	14 (17)	8 (33)
Tenderness	68 (80)	8 (80)	73 (89)	24 (100)
Warmth	25 (29)	2 (20)	36 (44)	13 (54)
Swelling	61 (72)	7 (70)	72 (88)	24 (100)
Delay in treatment:				
< 1 hour	49 (58)	5 (50)	37 (45)	15 (62)
1-2 hours	28 (33)	5 (50)	32 (39)	7 (29)
2-3 hours	5 (6)		5 (6)	1 (4)
> 3 hours	4 (5)		7 (9)	1 (4)
Movement loss:				
Grade 1	60 (71)	5 (50)	40 (49)	20 (83)
Grade 2	25 (29)	5 (50)	52 (64)	4 (17)

Comment

When the ankle is not a target joint and retains some movement at presentation, bleeding may be treated with 7 units factor VIII/kg. There are no apparent predictive factors for the 10% of these bleeds needing retransfusion. Twenty-two per cent of recurrent bleeds or those causing complete loss of movement needed retransfusion despite a double initial dose of factor VIII. Pain and loss of more than 50% of baseline movement were the only two predictive factors for failure. Similar findings have been found with bleeding into the knees and elbows,^{2,3} but in addition tenderness was an indicator of poor prognosis in those joints. This sign is so common in ankle joints, presumably because of the limited joint space, that it could not be discriminatory.

Before this approach was adopted our standard dose of factor VIII for treating all ankle bleeds was 14 units/kg. The reduction of 7 units/kg for 95 bleeds occurring in one academic year saved 30 000 units of factor VIII. This is not a large amount but if repeated nationally and internationally would result in substantial conservation of a scarce and expensive resource.

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