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Correspondence

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The Editor, British Journal of Psychiatry, 17 Belgrave Square, London SW1X 8PG

TRYPTOPHAN OVERDOSAGE

DEAR SIR,

Egan and Hammad (1976) added L-tryptophan to the previous treatment of five depressed male patients and four of them became sexually disinhibited. Two further cases are reported here in which sexual excitement and florid paranoid symptoms followed tryptophan treatment.

Case 1: C.P.M., aged 52, has been depressed, lethargic and periodically violent all his adult life and in hospital for the past 13 years. He once interfered sexually with his 11-year-old daughter. He has not responded to ECT, to tricyclic or MAOI antidepressives, or to major or minor tranquillizers. He is pale and unhealthy looking, intelligent, hypertensive and overweight, but thinks he is starving. In July 1976 he was constantly too inert and degraded to leave the bed he had soiled with his incontinence. In desperation trytophan tablets 6 g daily were started together with phenelzine. He got no better, but early in December (now with added clomipramine 50 mgm t.d.s. and lithium carbonate 500 mgm b.d.) he improved dramatically and soon resumed his hospital working routine. In January 1977 he started trying to trap and sexually molest the ward sister. In February he became fiercely paranoid (never having been seen or recorded as paranoid before), alleging a conspiracy between his wife, who divorced him 20 years ago, and his GP, and threatening to murder the latter. The sexual behaviour disappeared within days after stopping the tryptophan, but he remained paranoid until the clomipramine was stopped and haloperidol 3 mgm b.d. was given. He then slid back into his former state; lithium and clomipramine failed to reverse this and he is now (July 1977) back on tryptophan tablets 2 g daily. The remission came after four months on tryptophan and the side effects after six months on the top dose. He refused it intermittently in the middle two months (he disliked the powder form), so his total intake is uncertain but he must have ingested more than 742g.

Case 2: B.S., aged 42, unmarried, has been depressed since the age of 15 when his father died. He gradually became too lethargic to get up and go to work. He was first admitted when aged 36. He had exposed himself from his bedroom window to a woman in the house opposite and felt both guilty and paranoid. Over the years he received the same range of treatments as the previous patient and soon lost his paranoid ideas, but he remained as shy and inadequate and depressed and pale-faced as ever. On occasional week-end leave he drove his aged mother to despair by taking to his bed and refusing to come downstairs. He would not return to hospital and had to be fetched. In November 1976 tryptophan 6 g daily was started, and within a week he was a new man. Progress was gradual, but uninterrupted and spectacular after such a long illness. The dose was reduced to 3 g daily in February 1977. He left hospital in April but attended daily. On the last day of May he declared his love for a nurse (normal enough for many another man, but not for this one) and came out quite abruptly with a whole collection of ideas of reference. Within three weeks of stopping tryptophan he had lost all his symptoms but was sliding back into his former state. He received 963 g tryptophan in 7 months.

According to Keele and Neil (1961) the features of deficiency of an essential amino acid are loss of appetite, fatigue and nervous irritability. Both my patients showed fatigue and nervous irritability as their presenting symptoms, with depression less prominent. Both had notably pale faces without the tan acquired by most of their fellows. Both improved while on tryptophan after many years of unremitting illness. Both had an abnormal sexual incident in their history. Both became amorous and floridly paranoid after receiving about 800–1,000 g tryptophan in 6–7 months and quickly lost these symptoms when it was stopped. However, I have three other patients who have shown less change and no adverse effects while on tryptophan: over 2,000 g in 15 months, 1,140 g and 900 g in 6 months, respectively.

These cases have been reported to the Committee on Safety of Medicines and to the manufacturers of 'Optimax', Messrs E. Merck Ltd, who kindly helped me to find the previous report by Egan and Hammad.

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ERGOTAMINE TARTRATE IN THE TREATMENT OF NARCOLEPSY

Dear Sir,

Amphetamine and its related compounds have long been used in the drug therapy of narcolepsy. However, although they have proved effective in treating sleep attacks they have not been so effective in treating REM sleep-related manifestations such as cataplexy, hypnagogic hallucination and sleep paralysis. On the other hand, it was shown by Akimoto *et al* in 1960 that imipramine is markedly effective in treating these conditions, and at the same time it was disclosed that these manifestations are derived from REM sleep abnormalities (Hishikawa *et al*, 1966; Suzuki, 1966; Guilleminault *et al*, 1976).

We have recently encountered two cases of narcolepsy in which manifestations such as sleep attacks, cataplexy, hypnagogic hallucination and sleep paralysis were markedly improved with ergotamine tartrate only (Cafergot tablets, each containing 1 mg of ergotamine tartrate and 100 mg of anhydrous caffeine; Sandoz, Basel and Sankyo Co., Tokyo) and Bellergal tablets (each containing 0·1 mg of bellafoline, 0·3 mg of ergotamine tartrate, and 20·0 mg of phenobarbitone, Sandoz, Basel and Sankyo Co., Tokyo).

Case 1. A woman aged 48 had typical narcolepsy which had evolved at the age of about 23. This patient had been treated orally with 6 tablets daily of methylphenidate hydrochloride (each tablet containing 10 mg of the agent) for the preceding several years; however, because of gradual acquirement of tolerance, two or three sleep attacks had been occurring every week. In our out-patient clinic she was treated with 3 mg daily of ergotamine tartrate and 5 tablets daily of Cafergot, and each treatment resulted in a marked improvement in the manifestations within several days.

Case 2. A 23-year-old student had typical narcolepsy which had evolved at the age of about 15. This patient had been medicated with 6 tablets daily of methylphenidate hydrochloride for the preceding several years. However, because the effect of the medication had been gradually reduced, the patient was additionally medicated with 3 tablets daily of Cafergot in the out-patient clinic. This additional medication caused the manifestations to be markedly improved. In this case the medication with Bellergal and also that with ergotamine only were tried, and proved effective.

In both these cases there occurred no particular changes in the background patterns on the EEG after the medication, compared with the patterns before the medication: thus the medication probably acted to inhibit REM sleep. In two cases of periodic somnolence medication with Cafergot improved the manifestations. Ergotamine tartrate, which has been used as a drug with an angiotonic action, may be considered the treatment of choice in narcolepsy with acquired tolerance to the routinely used drugs. A study is in progress in our Department of the CNS actions of ergotamine tartrate in narcolepsy.

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RESPIRATORY VENTILATION

Dear Sir,

We note with interest the letter of Mitchell-Heggs *et al* (*Journal*, July 1977, pp 108–9). We, Damas Mora *et al* (1976), were anxious to draw attention to the fact that mood affects respiratory ventilation and hence arterial PCO_2. Our intention was to make research workers cautious, as this could complicate chemical comparisons of psychiatric patients and controls (Damas Mora *et al*, 1977).

We concede that technical inadequacies limit precise quantification, but feel that dog bites man requires less evidence than the converse. We certainly do not understand why our critics feel we are opposed