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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 PCO₂. 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