Conclusion

It is important to have some criteria in order to assess the probability of a crime having been committed during an episode of epileptic automatism. The following is an amalgamation from various authors (Fenton, 1972; Gunn, 1978; Lishman, 1987):

(a) a past history of unequivocal epileptic attacks
(b) the crime is out of character with the accused's previous personality
(c) the crime is motiveless and unpremeditated
(d) EEG studies are compatible
(e) an altered state of consciousness during the event
(f) total or partial amnesia for the crime.

The case of Miss A is in keeping with these criteria. From the medical point of view, informal admission as a condition of a probation order appeared to be a satisfactory outcome, as Miss A was fully co-operative and anxious to have treatment.

Acknowledgements

I wish to thank Dr P. T. d'Orbán, Dr B. K. Toone, and Dr R. Pinto for their assistance and advice.

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British Journal of Psychiatry (1989), **155**, 249–251

Pimozide in Pathological Jealousy

ALAN BYRNE and LAKSHMI N. YATHAM

A 39-year-old man had his pathological jealousy successfully treated with pimozide. It is suggested that pimozide might be considered the drug of choice in all the monodelusional disorders.

Pathological jealousy can occur in relation to a number of conditions – chronic alcoholism, organic brain disorder, schizophrenia or affective disorder (Seaman, 1979) – or it may present as the only delusion in delusional disorder (DSM-III-R, American Psychiatric Association, 1987). The essential feature is a delusional belief that the marital partner is being unfaithful. Various forms of treatment have been

https://doi.org/10.1192/bjp.155.2.249 Published online by Cambridge University Press

tried, including phenothiazines (Mooney, 1965), behavioural therapy (Cobb & Marks, 1979), individual psychotherapy (Seaman, 1979) and family therapy (Modlin, 1963), all with limited success. We report the successful use of pimozide in the treatment of pathological jealousy, and examine the other monodelusional disorders which respond to pimozide.

Case report

Mr G, a 39-year-old man seen as an emergency in our unit following referral from his general practitioner, described 'slight' problems with his wife, as she had apparently left home for no reason a week earlier. He indicated that the relationship with his wife had deteriorated, and that if she were to leave him for good, he would commit suicide. He was admitted to the ward.

Mr G's wife revealed the true situation – she had left home because of his abnormal jealous behaviour. This had culminated in his bringing a knife to the local public house in order to protect himself from her supposed lovers. Mr G wept bitterly when questioned about his wife's history. He admitted to having 'crazy' feelings over the previous four years, imagining that his wife was being unfaithful with any man she met. He had accused her of having affairs with dozens of men, and questioned her at length about her clothes, especially her underwear. He believed she wore dramatic lingerie to excite her various lovers. Mr G, being unemployed, insisted on going everywhere with his wife, and even managed to join ladies groups to monitor her activities. The jealousy was always increased by alcohol consumption, and the incident in which he carried the knife for protection had followed moderate alcohol intake. Mrs G left the house because of threats of physical violence, which she had experienced before.

Previous psychiatric history was unhelpful, but family history revealed evidence of pathological jealousy in the patient's father. This had resulted in his forcible expulsion from the family home, and he subsequently died of alcohol-related problems at the age of 53. Of note in his previous medical history, Mr G had received treatment for a severe pernicious anaemia three years before the admission in question, and he was on maintenance vitamin B12 injections on admission. Mr G was commenced on pimozide (2 mg b.d.), and appeared to settle well. His jealous ideas became amusing to him as he gained insight into their bizarre nature and realised the unreasonableness of his accusations regarding his wife. In view of the alcohol component, he agreed to commence disulfiram to improve his chances of recovery.

Mr G was discharged from hospital after two weeks. He continues on pimozide (2 mg) and on disulfiram, and he is doing well. His wife has returned to the family home and confirms that there is now no evidence of pathological jealousy. Mr G tried alcohol once since discharge, and was deterred by nausea and flushing. He continues to do well on pimozide.

Discussion

This patient's presentation is typical of pathological jealousy, where there is often a serious threat to the life of the spouse. This case meets the DSM-III-R criteria for a diagnosis of delusional disorder, jealous subtype. It is unlikely that the pernicious anaemia was causally related, as the morbid jealousy antedated the anaemia and did not respond to replacement therapy.

DSM-III-R subtypes delusional disorders as somatic, jealous, erotomanic, grandiose, persecutory and non-specific. Monosymptomatic hypochondriacal delusional psychosis seems to fall into the somatic category, and it is now well established that pimozide, a diphenyl-butyl-piperidine, is very effective in the treatment of this form of disorder (Munro, 1982). Dorian (1979) was the first to report the successful treatment of pathological jealousy with pimozide. Since then, two other reports have been published (Pollock, 1982; Munro, 1984), and in both response to pimozide was felt to be excellent. Erotomania, another subtype of delusional disorder, has also been shown to respond to pimozide (Munro *et al*, 1985).

Kendler *et al* (1985) argued that delusional disorders are quite separate from schizophrenic disorders, based largely on family studies which usually show no excess of schizophrenia in the relatives of probands with delusional disorder. The absence of a family history of schizophrenia and the positive family history of pathological jealousy in our case tend to support this view. This area would benefit from further exploration in well designed studies.

We suggest that pimozide might be considered the drug of choice in pathological jealousy and all the monodelusional disorders.

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British Journal of Psychiatry (1989), **155**, 251–253

A Chinese Classic Phenylketonuria Manifested as Autism

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A 12-year-old Chinese boy had a diagnosis of infantile autism at infancy that was finally confirmed as classic phenylketonuria at adolescence. This treatable inborn metabolic disease should be investigated in cases of apparent autism, especially where mass neonatal screening of inborn metabolic diseases has not been established.

Autism is a heterogeneous disease. The aetiology is still unknown, but biochemical dysfunction is likely to be of importance (Ritvo & Freeman, 1984). Classic phenylketonuria is an autosomal recessive disease, the victims suffering mainly from mental retardation (Tourian & Sidbury, 1983) which, if detected early enough, and treated properly, can be prevented (Colombo *et al*, 1980). Phenylketonuria manifesting as autism has been mentioned in the literature (Friedman, 1969), but has received little attention in the differential diagnosis of autism.

Phenylketonuria in Chinese has been reported in Taiwan (Hsiao *et al*, 1984) and mainland China (Liu & Zuo, 1986). The incidence in Chinese neonates, around 1/16 500, is similar to that in Caucasian children.

Case report

In April 1982, we carried out screening for congenital metabolic defects in mentally retarded children in Taiwan (Hsiao *et al*, 1984). A boy, attending a special private school for the handicapped, was found to have blood phenylalanine greater than 1200 μmol/l (normal < 120 μmol/l) in primary screening by Guthrie's bacteria inhibition assay (Guthrie & Susi, 1963). Repetition of the screening test and further confirmatory tests by a fluorometric method (Tocci, 1982) supported the screening result of hyperphenylalaninaemia. Serum phenylalanine and tyrosine were 1815 μmol/l and 61 μmol/l, respectively. The urinary ferric chloride test was positive. Gas chromatography for the analysis of urinary organic acids (Hsaio *et al*, 1985) showed abnormally high concentrations of phenylpyruvic acid, phenylacetic acid, phenyllactic acid, and 2-hydroxyphenylacetic acid, which are abnormal metabolites of phenylalanine. Urinary pterins were determined by high-performance liquid chromatography (Niederwieser *et al*, 1982), and the ratio of biopterin to biopterin plus neopterin was 76% (reference range: 53.3–75.8%). Therefore atypical phenylketonuria caused by tetrahydrobiopterin deficiency was excluded. The boy was confirmed to have classic phenylketonuria.

In February 1983, when the diagnosis of phenylketonuria was confirmed, the boy was 12 years old, 145 cm tall, and 34 kg in weight, which is normal according to Chinese norms. His hair was brown, which is rare in normally black-haired Chinese. He had no physical handicaps. The boy

https://doi.org/10.1192/bjp.155.2.249 Published online by Cambridge University Press