and attacks occur spontaneously or may be induced by movement, startle, or anxiety. Sporadic and familial cases have been reported. Onset is usually during childhood, and the condition does not progress. Response to anticonvulsant therapy, including carbamazepine, and, in one case, L-DOPA (Loong & Ong, 1973) is usually excellent. EEGs and CAT scans have been recorded as normal. The pathophysiology is unknown but it has been postulated that the condition is an unusual form of epilepsy originating in the subcortical grey matter (Kinast et al, 1980). Although an initial diagnosis of hysteria has often been made (Kinast et al, 1980; Waller, 1977) associated psychiatric illness has not been clearly described except by Kertesz (1967) who described several patients with PKC as anxious or depressed and one who committed suicide.

I observed a case in which the patient was a 32-year-old man who presented in a clearly hypomanic state with cheerful mood, a variety of grandiose delusions, and pressure of speech. He denied any abnormal experiences and was reasonably orientated. A urinary drug screen was negative. Over the next 24 hours he remained much the same but on several occasions was noted to be behaving in a very odd manner. He had received phenothiazines during this time. Eventually he collapsed to the floor in what appeared to be a painful dystonic episode affecting his left side. Despite his distress he managed to convey that he suffered from PKC. This episode was relieved immediately by i.v. diazepam and a subsequent neurological referral confirmed that these episodes were consistent with the diagnosis of PKC (although one episode was terminated by a sharp command to relax). He was able to tell us that his condition was usually well-controlled on phenytoin, but that whilst trying to concentrate on his 'creative writings' he decided to omit the drug. His mental state did not entirely settle, but he discharged himself and followup has not been possible.

Despite rather inadequate information I am documenting this case for two reasons. Firstly, this rare condition has been confused with a hysterical conversion symptom, and might so have been in this case had the patient not provided the correct diagnosis. Secondly, this may be a case in which there is a co-existence of hypomania and a hypothesised right subcortical epileptic focus. It would be interesting to hear of anyone else's experience of this rare condition.

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#### References

KERTESZ, A. (1967) Paroxysmal kinesigenic choreoathetosis: an entity within the paroxysmal choreoathetosis syndrome. *Neurology*, 17, 680-690.

KINAST, M. et al (1980) Paroxysmal choreoathetosis: report of five cases and review of the literature. Pediatrics, 65(1), 74-77.

LOONG, S. C. & ONG, Y. Y. (1973) PKC: Report of Chinese cases. Neurology, 23, 749-755.

WALLER, D. A. (1977) Paroxysmal kinesigenic choreoathetosis or hysteria? American Journal of Psychiatry, 134(12), 1439-1440.

## Water Intoxication in Psychiatric Patients

DEAR SIR.

We have read with interest the article by Singh et al on "Water intoxication in psychiatric patients" (Journal, February 1985, 146, 127-131). In these four reported cases, inappropriate antidiuretic hormone (ADH) secretion might represent a contributory cause of the psychosis. We wish to report three cases, supporting the hypothesis of two forms of the syndrome of inappropriate secretion of ADH (SIADH) and of hyperdopaminergic activity.

Case 1. A 43-year-old woman, resident in a mental hospital since the age of 30 for chronic psychosis, was treated with perphenazine (16 mg daily) and levomepromazine (120 mg daily). She was admitted to a general ward for generalised seizures and coma, without any other abnormality. Serum sodium was 117 mmol/l, urea 1.6 mmol/l, serum osmolality 219 mOsm/kg, and urine osmolality 141 mOsm/kg, but ADH serum level was 2.8 pg/ml. With water restriction, total clinical and biochemical recovery occurred within a week. Ten days later, plasma and urine osmolality, serum sodium, free water clearance, and ADH values were studied in a water loading test: urinary dilution was maximal with a positive free water clearance, at sufficiently low plasma osmolality (250 mOsm/kg) and ADH release was suppressed (plasma level from 1.8 pg/ml to 1.7 pg/ml). But the urine became hypertonic to plasma prematurely when plasma osmolality increased; ADH also increased to 2.1 pg/ml.

Case 2. A 26-year-old woman was admitted for generalised seizures and coma, after having drunk eight litres of tea. She was diagnosed as having a narcissistic personality disorder and as being polydipsic for two years. She was not treated with any medication. On admission, serum sodium was 110 mmol/l, urea 1.5 mmol/l, plasma osmolality 128 mOsm/kg, but the plasma ADH level was 2 pg/ml. Her clinical and biological status improved with water restriction, and a water loading test, ten days later, revealed no abnormalities: the ADH level was correctly suppressed.

Case 3. A 55-year-old woman, resident in a psychiatric hospital for 11 years because of chronic psychosis, was treated with pipamperone (160 mg daily) and levome-promazine (75 mg daily), and had tardive dyskinesia. She was admitted for generalised seizures and coma, after having drunk large quantities of water: serum sodium was

116 mmol/l, urea 2.1 mmol/l, serum osmolality 242 mOsm/kg; the plasma ADH level was not determined. Water restriction resulted in clinical and biological improvement.

In the first two cases, the results were consistent with water intoxication secondary to psychogenic polydipsia, with a resetting of the ADH osmostat (Caron et al, 1977; Robertson, 1980; Singh et al, 1985); the plasma ADH level was inappropriately high for the plasma osmolality. In the third case, the finding of concentrated urine suggested the classic form of SIADH. Our three cases confirm that there are two distinct forms of SIADH-the classical and an atypical one. It can occur in different mental illnesses, with or without the use of neuroleptics. Measuring the plasma ADH level on admission and during a water-loading test ten days later can distinguish between an inappropriate secretion of ADH with a resetting of the osmostat, or a mild form of SIADH (Rosenbaum et al, 1979). Our third case, of a patient with tardive dyskinesia and polydipsia, may confirm the hypothesis of hyperdopaminergic activity (Smith & Clark, 1980).

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## References

CARON, J. C., CAPPOEN, J. P., CHOPIN, Cl., LEFEBVRE, J. & WAROT, P. (1977) Les intoxications par l'eau après accès polydipsique. Revue Neurologique, 133, 485-495.

ROBERTSON, G. L. (1980) Psychogenic polydipsia and inappropriate antidiuresis. Archives of Internal Medicine, 140, 1574.
 ROSENBAUM, J. F., ROTHMAN, J. S. & MURRAY, G. B. (1979)

Psychosis and water intoxication. Journal of Clinical Psychiatry, 40, 287-291.

SINGH, S., PADI, M. H., BULLARD, H. & FREEMAN, H. (1985) Water intoxication in psychiatry. *British Journal of Psychiatry*, 146, 127-131.

SMITH, W. O. & CLARK, M. L. (1980) Self-induced water intoxication in schizophrenic patients. American Journal of Psychiatry, 137, 1055-1060.

# Lithium in Severe Depression

DEAR SIR,

Lithium in combination with tryptophan and a monoamine oxidase inhibitor may be useful in the treatment of chronic or resistant depression (Barker & Eccleston, 1984). Lithium has also been shown to have acute antidepressant activity comparable to imipramine (Worrall et al, 1979). We have recently seen a case of recurrent unipolar depressive illness of psychotic intensity which would appear to respond

only to lithium but not to ECT or to combinations of antidepressant drugs.

The patient, a 60-year-old man of good work record, no family psychiatric history and no evidence of physical illness or intellectual impairment had an episode of depression seven years ago which responded to a course of ECT. Three years ago he became depressed again with biological depressive symptoms and delusions of guilt and unworthiness. There was no response to six months' treatment which included two courses of ECT, adequate trials of amitriptyline, dothiepin, mianserin and nomifensine, and of phenelzine used singly and in combination with amitriptyline. Eventually lithium alone was tried and he made a rapid and complete recovery after two weeks.

On follow-up his recovery was maintained but later the lithium was discontinued at his own request due to weight gain. He relapsed and was readmitted. Lithium was withheld due to the patient's reluctance. He remained unresponsive for a year to ECT, various tricyclics used singly and in combination with a monoamine oxidase inhibitor (in this instance tranylcypromine) as well as sleep deprivation. Finally lithium was again tried (to achieve a serum level of around 0.7 mmol/l at 12 h post-dose) and he showed a rapid and complete response which began after about two weeks.

It has been suggested (Abou-Saleh & Coppen, 1983) that the *prophylactic* effect of lithium is more marked in patients with high Newcastle scores (i.e psychotic depressives). If this applies also to the *acute* antidepressant effect, as this case suggests, then perhaps a trial of lithium is a reasonable alternative to ECT in certain severely depressed patients who are either unresponsive or unsuitable for electrical treatment or other antidepressant drugs.

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## References

ABOU-SALEH, M. T. & COPPEN, A. (1983) Classification of depression and response to antidepressant therapies. *British Journal of Psychiatry*, 143, 601-603.

BARKER, W. A. & ECCLESTON, D. (1984) The treatment of chronic depression: an illustrative case. *British Journal of Psychiatry*, 144, 317-319.

WORRALL, E. P., MOODY, J. P., PEET, M., DICK, P., SMITH, A., CHAMBERS, C., ADAMS, M. & NAYLOR, G. J. (1979) Controlled studies of the acute antidepressant effects of lithium. British Journal of Psychiatry, 135, 255-262.

## Suicidal Behaviour and Child Abuse

DEAR SIR.

Having read with interest the paper on the risk of child abuse among mothers who attempt suicide by