A Creutzfeldt-Jakob like syndrome due to lithium toxicity.

Sir: Smith and Kocen recently reported two patients with a Creutzfeldt-Jakob like syndrome due to lithium toxicity. We report two additional subjects with a lithium induced organic brain syndrome with myoclonus and pseudoperiodic EEG discharges. In one case a confusional state appeared during maintenance therapy (lithium carbonate, 450 mg daily with serum level always in the normal range before hospitalisation), while in the other case organic brain syndrome with choreo-athetoid movements and action myoclonus was associated with elevated serum levels (2.6 mEq/l). In both cases a complete clinical and EEG recovery occurred. Clinical and EEG features are summarized in the table.

Although there are several reports regarding lithium toxicity on the central and peripheral nervous system, 2-7 to our knowledge action myoclonus 8 and periodic-like complexes have rarely been reported. 9

Our cases confirm that a Creutzfeldt-Jakob like syndrome may be due to lithium toxicity. In psychiatric patients toxic conditions such as barbiturate intoxication, withdrawal states and psychotropic drugs overdosage 9 must be always considered in the pathogenesis of periodic EEG discharges even when clinical features and EEG suggest a diagnosis of Creutzfeldt-Jakob disease.

Our data clearly confirm the diagnostic value of serial EEG records in the differential diagnosis between toxic encephalopathy and Creutzfeldt-Jakob disease. 10-12

A PRIMAVERA
G BRUSA
MG POETA

Department of Neurology
University of Genoa
Via De Toni 5
16122 Genoa
Italy

Transient feelings of compulsion caused by hemispheric lesions in three cases

Sir: The description by Ward 1 of transient feelings of compulsion caused by hemispheric (frontal) lesion is reminiscent, as emphasised by the author, of the old and important problem of the organic basis of a trouble generally considered as purely psychological in nature.

Encephalitic lethargica yielded number of observations with obsessive-compulsive trouble (OCT), suggesting an implication of the basal ganglia which are predominantly altered in this disease. OCT in Gilles de la Tourette disease is similarly suggestive.

Recently, in patients who had suffered from an anoxic encephalopathy, and who developed OCT, we discovered bilateral basal ganglia lesions. No other brain damage was shown by CT and MRL. 2-4 Two other cases have been also reported. 5

Another point of interest is that this trouble was included in a general neuropsychological pattern suggesting the functional implication of frontal lobes. 8

This leads back to the conclusion of Ward, suggesting a role of the frontal lobe disturbances in the occurrence of OCT.

D LAPLANE
Groupe Hospitalier Pitié-salpêtrière,
47, boulevard de l’Hôpital,
75651 Paris,
Cedex 13

References

Table Features of the two cases

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (yr)</td>
<td>59</td>
</tr>
<tr>
<td>Sex</td>
<td>F</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Manic-depressive psychosis</td>
</tr>
<tr>
<td>Lithium therapy:</td>
<td>dosage duration</td>
</tr>
<tr>
<td>blood level</td>
<td>2-6 mmol/l</td>
</tr>
<tr>
<td>Neurological examination</td>
<td>Confusional state, myoclonus of face, arms and legs, athetoid movements</td>
</tr>
<tr>
<td>EEG</td>
<td>Periodic-like complexes at 0.5-1.5 Hz Clinical and EEG normalisation in 4 weeks</td>
</tr>
<tr>
<td>Follow-up</td>
<td></td>
</tr>
</tbody>
</table>

*na: lithium was discontinued a few days before hospitalization.
Transient feelings of compulsion caused by hemispheric lesions in three cases.
D Laplane

*J Neurol Neurosurg Psychiatry* 1989 52: 423
doi: 10.1136/jnnp.52.3.423-a

Updated information and services can be found at:
http://jnnp.bmj.com/content/52/3/423.2.citation

**Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Notes**

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/