Epileptic attack, delirium, and periodic complexes in the EEG during mianserin treatment

Tricyclic and newer antidepressants have certain undesirable effects, including an increased susceptibility to delirium, myoclonic jerks, and epileptic convulsions. Two patients had an epileptic attack during mianserin treatment followed by delirium and EEG changes presenting as slow activity with periodic complexes similar to those seen in the Creutzfeld-Jakob disease.

A 68 year old female with mild depressive symptoms treated with a low doxepine dose (35 mg/day) developed a major depressive episode during the summer of 1989 and was admitted to a psychiatric hospital. At admission she was extremely depressed (Hamilton depression rating scale score 31), but showed no neuropsychological impairment in the Mini-Mental Status Examination (MMSE score 24), and her EEG was normal. Doxepine treatment was discontinued and mianserin was introduced shortly, reaching 90 mg on the evening of July 25, resulting in a therapeutic mianserin concentration of 359 nanomoles/litre (therapeutic level 200-450 nanomoles/litre).

Two weeks after admission she had an epileptic attack, after which she showed cog- nitive impairment (MMSE score 8), had myoclonic jerks, and met the DSM-III-R criteria for delirium during the next six days. Mianserin treatment was discontinued. Since her second EEG showed generalised slowing with periodic complexes similar to those seen in CJD, she was transferred to the Department of Neurology, where laboratory results including CSF and CT of the head were normal. After the delirious episode EEG was normal, cognitive functioning restored (MMSE 25), and the myoclonic jerks disappeared. During a follow up period of six months, continuing depressive symptoms (Hamilton score 27) were observed as well as an absence of epileptic attacks, cognitive deterioration, and myoclonus.

Creutzfeld-Jakob disease often runs a rapid course and is usually accompanied by a number of neurological symptoms and signs besides dementia. Initial depressive symp- toms, epileptic fits and delirium also occur.

The pathogenesis of the EEG abnormalities seen in CJD is unknown, but the normalisation of EEG after delirium and the stable clinical picture in our patients during follow up is not consistent with CJD. EEG changes during delirium in the form of increased slow wave activity and disruption of the normal alpha rhythm has also been demonstrated. A nuxious response to mianserin in our patients is suggested despite the therapeutic plasma level in the second case.

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BOOK REVIEWS


This multi-author text, with 68 contributors, covers the entire spectrum of clinical MRI. Like many other radiological texts it is really too large and heavy. Our copy is already showing signs of wear and has been much more preferable to publish the first 12 chapters as a separate volume.

The initial sections cover the physical basis and technical aspects of magnetic resonance. These are based on the excellent monthly course organised by John Hesselink and Robert Matrany at the M.R. Institute in San Diego. They are readable, extremely well illustrated, and should be readable by almost all, understandable. Included is a chapter on clinical spectroscopy, which might better have been called "Spectroscopy for the Uninitiated" and which left us with a better understanding of its potential future clinical role.

Images in the brain and spine sections are excellent. Some illustrations in the body section are rather disappointing and are not "state of the art". This is a problem with all the MRI books. This is probably a result of the wide variety of MRI and the limited time available to publication. The editors have recognised this and include future development sections in many chapters. The musculo-skeletal chapters are superbly illustrated and written.

In some areas the clinical emphasis will seem strange to a British readership. For example, two pages are devoted to spinal cord tumours, 27 to examination of the testes and a similar number to temporomandibular joint dysfunction.

As a neuro-MR reference work this adds little to the much smaller "MRI of the CNS" by M. Brant-Zawadski and D. Norman. The chapter on normal neuro-anatomy cannot compare with "Cranial and Spinal MRI" by Daniells, Haughton and Naidich. The compact "Clinical MRI" by V. M. Runge and Mary M. Runge is preferable in this area. The editors' authoritative general reference work on clinical MRI is excellent value at £118.

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