

# Letters

## Headache and epilepsy: a case report of the unusual association of Cluster headache and epilepsy

Sir,

The possible existence of a correlation between epilepsy and migraine has been investigated by several authors. It is possible that the co-occurrence in the same subject of migraine and epilepsy is merely coincidental but some authors suggest that a migraine aura, associated with Leao's spreading depression, can provoke a seizure [1]. We describe the case of a patient with the never previously reported association between epilepsy and cluster headache.

The patient is a 51 years old male. There was no family history of headache or epilepsy. At age 42 a cluster headache was diagnosed: the aching pain was in the left periorbital, the frequency was of two clusters each year, 20 days each lasting one hour. The CT scan, Doppler sonography were within normal limits.

In 1986 the patient was admitted to our department after a episode of generalized tonic-clonic seizure with loss of consciousness and tongue biting. There was focal slowing in the left fronto-temporal region on EEG. MRI of the brain showed hyperintense periventricular lesions, more evident on the left, spinal fluid examination and CT scan were normal.

We suggest that the association between these two genetically independent disorders may be related to an increase in cortical excitability, possibly due to a supersensitivity to neurotransmitters as Van

Gelder [2] wrote about the association between migraine and epilepsy. An abnormality in the regulation of the calcium-dependent mechanisms may be speculated to underlie this anomaly. The presence of more prominent periventricular anomalies on the left on MRI is in agreement with the side of cluster headache and EEG anomalies. Further observations about this previously unreported association are necessary to confirm the hypothesis of a link between lateralized cerebral involvement and both these disorders.

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### References

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- [2] VAN GELDER N.M.: Calcium Mobility and glutamic acid release, associated with EEG abnormalities, migraine and epilepsy. In: *Migraine and Epilepsy* Andermann F. and Lugaresi E. eds. Butterworths, 1987.