

## Side-dependent primary headache: right migraine and left cluster headache. A case of cluster migraine or the coexistence of two different primary headache?

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*Migraine and cluster headache are distinct primary headaches, with different diagnostic criteria. Sometimes patients present characteristics of both primary headaches, but either do not fully meet criteria for both disorder or have sufficient symptoms and signs to allow both diagnoses. This condition is variably described as migraine-cluster, cyclical migraine, clustering episodes of migraine, cluster with aura or atypical cluster.*

Case report: 32 years old woman, complaining of two different kinds of headache.

First type: very intense **left-sided** temporo-orbital pain, lasting 2 hours each attack, two attacks per day, for a period of 1-4 weeks in summer and autumn. It is always accompanied by ipsilateral eye tearing, conjunctival injection, agitation and restlessness. Frequently associated with nausea, phonophobia and mild photophobia. Occasionally visual aura is present. This headache fits criteria for **cluster headache**, with aura.

Second type: pulsating head pain, always **right-sided**, accompanied by nausea, photophobia and phonophobia, almost always preceded by a visual aura. It is the most frequent headache, occurring about 3 days per month. This disorder fits criteria for **migraine** with aura

Topiramate 100 mg per day obtained a significant reduction in frequency of the migraine-type right headache and prevented two consecutive cluster periods.

*Distinct anatomic substrates and physiologic processes underlie migraine syndrome and cluster headache. In our patient, aura may be able to activate, depending on the side affected, the cluster headache pathway or the migraine pathway, determining the coexistence of both primary headaches.*

*On the other side, the case could be coded as cluster migraine, a debated and ambiguous entity, whereas the cluster attacks manifested also some symptoms typical of migraine and were prevented by a usual migraine prophylaxis.*

Applebee AM, Shapiro R. *Cluster-migraine: does it exist?* Curr Pain Headache Rep.2007 Apr;11(2):154-7. Headache Classification Subcommittee, International Headache Society. *The international classification of headache disorder, 2nd edition.* Cephalalgia. 2004; 24 (Suppl 1): 44-54.