Chronopathological forms of magnesium depletion with hypofunction or with hyperfunction of the biological clock.

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Abstract

The main mechanisms of the chronopathological forms of magnesium depletion associate a low Mg intake with various dysregulating biorhythms. The differentiation between forms with hyperfunction and forms with hypofunction of the biological clock is seminal and the main marker is the production of melatonin (MT). The clinical forms of the various patterns of the chronopathological forms of Mg depletion may be central or peripheral. The clinical forms with hyperfunction of the biological clock (marker: increase in MT) may associate diverse expressions of nervous hypoexcitability: depression (i.e. Seasonal affective disease); cephalalgias nocturnal, without photophobia (i.e. cluster headaches); dyssomnia LASPS (advanced sleep phase syndrome) particularly; asthenia and myalgias (i.e. fibromyalgia, chronic fatigue syndrome). The main comorbidity is found with depressive states. The therapy relies on classical bright light phototherapy, sometimes associated with psychoanaleptics. The clinical forms with hypofunction of biological clock (marker: decrease in MT) may associate various signs of nervous hyperexcitability (HEN): anxiety (from generalized anxiety to panic attacks); cephalalgias diurnal with photophobia (mainly migraine); dyssomnia [DSPS (delayed sleep phase syndrome) particularly, jet lag, night work disorders, age related insomnia, sometimes with inappropriate behaviour; photogenic epilepsy, generalized or focal; some clinical forms of chronic fatigue syndrome and fibromyalgia. The main comorbidity is between migraine and epilepsy. The treatment relies on the diverse forms of darkness therapy, possibly with the help of some psycholeptics: anxiolytics and anticonvulsants. The indications of chromatotherapy remain to be validated.

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