

Poster presentation

REM behavior disorder (RBD): demographic, clinical and laboratory findings in 18 cases

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Background

REM behavior disorder (RBD) is a rare parasomnia and very often is misdiagnosed. It is characterized by the intermittent loss or impairment of REM sleep atonia and by the appearance of elaborate motor activity associated with vivid dream-enacting behaviors.

Materials and methods

A group of subjects in whom the clinical history fulfilled the diagnostic criteria for REM behavior disorder (RBD) of the criteria of American Sleep Disorders Association and Sleep Research Society (1997) described here were identified in our sleep unit between March 2000, and June 2007.

18 patients, (12) men and (6) women with a mean age of 70.5 ± 11 years. They all had a history of dream-enacting behaviors with a mean duration of 5.5 ± 9.5 years. Behaviors included talking (100%), shouting (78%), punching (74%), gesturing (63%) and kicking (65.3%). 15 subjects fell out of bed and 11 suffered lacerations in the face.

The frequency of episodes is variable, occurring once every 2 weeks to 4 times nightly for consecutive nights, and often increases over time.

Patients were interviewed regarding their sleep habits and underwent full PSG. The clinical evaluation of the patients consisted of a neurological examination, an interview

with him/her, and an interview with his wife/husband. They also underwent a full laboratory and biochemical evaluation like a complete blood count, test of thyroid function e.t.c. As well as an E.E.G, a brain MRI and psychometrics tests (B.D.I, M.P.P.I).

Results

4 patients diagnosed as idiopathic RBD and one of them developed Parkinson disease 9 years after appearing of RBD symptoms and 4 patients also suffered from sleep apnea. 9 patients who their MRI showed multi - infarcts lesions and 4 patients also suffered from sleep apnea. 5 patients suffered from drug-induced RBD (fluoxetine, paroxetine, mirtazapine, amadadine). 1 patient who suffered from neurinoma of right acoustic nerve.

On polysomnography, the atonia that normally accompanies REM sleep is disrupted by periods of sustained increased tone, increased phasic muscle activity, or both. Simple as well as complex coordinated movements of the extremities occur during REM sleep, whereas periodic and aperiodic movements of the extremities may occur during NREM sleep.

Conclusions

Diagnosis was delayed to our patients from 1 year to 14 years. Symptomatic RBD associated with several neurological disorders such as cerebrovascular diseases, or co-

occur with neurodegenerative disorders such as Parkinson's disease and drug-induced cases.

Extensive neurological evaluations in humans suffering from both idiopathic and symptomatic forms have not identified specific lesions; however, findings in some patients suggest that diffuse lesions of the hemispheres, lesions in the pontine territory, or primary brain-stem lesions may result in the RBD.

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