Paroxysmal sleep events in childhood

Diagnostic evaluation of abnormal movements in sleep covers up to 40% of all video-polysomnographic (v-PSG) examinations evaluated in our Sleep lab in the past 15 years. The main categories were parasomnias and abnormal movement disorders in sleep and their differentiation from epilepsy. Childhood NREM parasomnias are regarded as a common and usually benign disorder. Our findings showed a considerable percentage of perinatal risk factors and developmental comorbidities (motor coordination delay, dysphasia, learning and/or behavior disorder) in the affected children. Stereotypic behavior in abnormal developmental movements in sleep (bruxism, rhythmic movements) was also found to be a common feature of NREM parasomnias. Therefore, a disorder of sleep maturation can be supposed to have a role to play in the clinical manifestation of childhood NREM parasomnias. REM parasomnias, mainly REM behavior disorder, are frequently under diagnosed conditions in children. A connection with childhood narcolepsy will be mentioned. The diagnostic difficulties can sometimes arise from abnormal movements in sleep. Benign neonatal sleep myoclonus as well as rhythmic movement disorder can sometimes be mistaken for epileptic involvement. Bruxism is very common in children which can exceptionally be a sign of temporal lobe epilepsy. Epileptic discharges related to arousal instability and periodic leg movements have been described too. Abnormal movements can be connected also with childhood cataplexy attacks. A typical “cataplectic facies” with repetitive mouth opening, tongue protrusion and drooping eyelids appearing close to the disease onset in young children is a frequent feature. These abnormal movements include also positive as well as negative myoclonic jerks affecting the neck and upper extremities. Difficulties in distinguishing some paroxysmal motor events in sleep will be discussed, a series of diverse video-recordings will be shown and a general account of the history and clinical examination together with v-PSG analysis will be presented.

Biography

Sona Nevsimalova has devoted the greatest part of her life to Sleep Medicine. She has published over 200 scientific papers, 5 monographs and 30 monographic chapters. Her main interest is focused on narcolepsy and childhood sleep disorders. She received many scientific awards (including one from the American Academy of Neurology) and honorary prizes for her research, and participated in the Scientific Committees of the ESRIS and WASM. At present, she is the Vice-President of the Czech Sleep Society, and President of the Czech Society of Child Neurology. She has organized several International Congresses, the main organizing effort is now focused on the World Sleep 2017 to be held in Prague.

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