

LETTER TO EDITOR

Genetic Aspects of Alice in Wonderland Syndrome: Letter to the Editor

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The term "Alice in Wonderland Syndrome" was named after the children's book *Alice in Wonderland* by Lewis Carroll and coined by John Todd as a possible, but not essential, concomitant of migraine and epilepsy [1-6]. Carroll suffered from migraine himself; it is believed that his experiences with the condition served as inspiration for the hallucination-like effects described in his work. In addition, Carroll's narrative has been discussed as a description of a trip following consumption of mind-altering drugs. In one of the most famous sequences in the book, Alice changes size by biting off pieces from different sides of a mushroom. However, there is no evidence of drug use by Lewis Carroll. Alice in Wonderland syndrome leads to changes in the perception of one's surroundings. These changes include both micropsia and macropsia (everything appears reduced or enlarged), as well as altered auditory perception, altered tactile perception, and altered sense of time. The syndrome is particularly common in children. Attacks are often shorter and may also be completely painless, although accompanying symptoms such as nausea, vomiting, and sensitivity to light and sound are more pronounced. Neurological deficits may occur, so that the affected child begins to hallucinate. He or she perceives his or her body as larger or smaller and/or begins to see "fantastic images." The changes in perception can severely affect affected individuals, causing them to become disoriented and "unable to find their way around." In extreme cases, falls and other accidents may occur. The perceptual disturbances can lead to Alice in Wonderland syndrome being confused with other mental disorders or misinterpreted as "craziness" [7].

The origin of Alice in Wonderland syndrome is to date unknown. AIWS has often been accompanied with migraine, head or eye trauma, viral encephalitis or EBV-infection. Time distortion is often described in patients with AIWS [8,9]. Time running to slow or to fast are well-known features in seizures of Alice in Wonderland syndrome [8,9]. In the literature, most often, mother and son are conflicted with these visual impairments [8,9]. A genetic origin must be supposed, because more and more familial cases were published in the recent past [8,9].

Further research in this interesting field of visual impairment is important and necessary, and to collect more cases of Alice in Wonderland syndrome in the future, especially familial cases with similar visual disturbances.

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