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Alice in wonderland syndrome

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Abstract:

Alice in wonderland syndrome is a rare type of neurological disorder leads to a group of vision disorder and a sense of emptiness and the sense of time , in this report will discuss the syndrome, its etiology and pathophysiology in different diseases .

Introduction:

The syndrome is sometimes called Todd's syndrome, in reference to an influential description of the condition in 1955 by Dr. John Todd , who was a British Consultant Psychiatrist at High Royds Hospital at Menston in West Yorkshire, Todd discovered that several of his patients experienced severe migraine headaches causing them to see and perceive objects as greatly out of proportion lead to size distortion such as micropsia (more small) , macropsia(more huge), pelopsia (more near), or teleopsia (more far), and this distortion may occur of other sensory modalities .
And usually hiding behind it a wide set of differential diagnoses (e.g. temporal lobe epilepsy, pediatric migraine, Epstein-Barr viral infection, non-specific hyperpyrexia, … etc).

Discussion :

Results from three different sources have been gathered , and they were as follows :

Sours number 1 :

It was the first study ,included a total of 6 patient , aged between 17 and 43 years old, patients experienced severe migraine headaches causing them to see and perceive objects as greatly out of proportion. They have altered sense of time and touch, as well as distorted perceptions of their own body. Although having migraine headaches, none of these patients had brain tumors, damaged eyesight, or mental illness that could have caused similar symptoms. They were also all able to think lucidly and could distinguish hallucinations from reality. But their perceptions were skewed .

Sours number 2 :

This study included of 2 patient , one of them was 9 years old he had sudden onset of strange sensations like other boy which was 6 years old ,the first boy had Migraine, but the other boy was infected by Epstein Barr viral . In the first case there were micropsia and distortion of vision, disappearance of color of objects, disturbed perception of size of left upper limb, and body length, disturbed perception of sound, mostly due to ictal electric discharge in the right tempro-parietooccipital regions, and the throbbing headache proved to be a postictal phenomena. In the second case there were disturbed perception of sound, time, body length, spatial orientation and motion, mostly due to typhoid encephalopathy, which appears as edema in MRI .

Sours number 3:

The study was about A 7-year-old girl complained of seeing objects smaller and in different colours than they were, such as seeing her mother's head green and smaller in comparison with her body. There was no personal or family history of epilepsy, migraine, or drug use . but she was infected by Epstein-Barr virus , and the level of IgG antibodies in patient was 1- 2 and that of IgM antibodies was 2-8. During the follow-up period lasting 5 months no other complication occurred and visual symptoms recovered spontaneously. She has been completely normal for 6 months.

Conclusion:

Alice in Wonderland syndrome can be the presenting manifestations in some patients with Migraine, “ Epilepsy, EpsteinBarr viral infections, Hyperpyrexia, Typhoid encephalopathy, and Psychiatric

disorders. Alice in wonderland syndrome is not an uncommon clinical picture, and it may be underestimated as a diagnostic entity. Early diagnosis carries a good prognosis. Typhoid encephalopathy may cause AIWS through affecting tempro-parietooccipital cortex. Awareness of Alice In Wonderland Syndrome (AIWS) might prevent delay in diagnosis, as appearance of AIWS must lead the clinician thinking in the way of migraine, complex partial epilepsy, infectious mononucleosis (Epstein-Barr Virus Infection), typhoid fever, …etc diagnosis and treatment.

References:

1 - Todd, John. "The syndrome of Alice in Wonderland."*Canadian Medical Association Journal* 73.9 (1955): 701.

2 - Kitchener, N. (2004). Alice in Wonderland syndrome. *Int J Ch Neuropsychiatry*, *1*(1), 107-12 .

3 - Cinbis, M., & Aysun, S. (1992). Alice in Wonderland syndrome as an initial manifestation of .Epstein-Barr virus infection. *British Journal of Ophthalmology*, *76*(5), 316.