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# Alice in Wonderland syndrome: A rare neurological manifestation with microscopy in a 6-year-old child

#### Dear Sir,

Alice in wonderland syndrome (AIWS) describes a set of symptoms with alteration of body image. An alteration of visual perception is found in that way that the sizes of body parts or sizes of external objects are perceived incorrectly. The most common perceptions are at night. The causes for AIWS are still not known exactly. Typical migraine, temporal lobe epilepsy, brain tumors, psychoactive drugs of Epstein-barr-virus infections are causes of AIWS. AIWS has no proven, effective treatment. The treatment plan consists of migraine prophylaxis and migraine diet. Chronic cases of AIWS do exist.

A 6-year-old child, male, presented at our department because of the visual perception objects are far away and smaller due to microscopy. Especially in the evening in around 15–20 min, these false perceptions occurred. Magnetic resonance imaging of the brain was negative. Epstein–Barr virus-virus serological testing was negative. H1N1 and antibodies against borrelia burgdorferi were also not present. Electroencephalogram was without pathological finding. A symptomatic treatment was initiated.

The foremost symptom of the Alice in Wonderland syndrome (AIWS) is an altered body image.<sup>[1]</sup> The person

observes sizes of parts of the body wrongly. More often than not, the head and hands seem disproportionate, and in general, the person perceives growth of various parts rather than a reduction in their size. Another most significant symptom of the AIWS is that the patient perceives the sizes of various other objects inaccurately.<sup>[2,3]</sup> The trademark symptom of AIWS is migraine. The individual loses a sense of time. For him, time seems passing either at a snail's pace or passing too swiftly. Some people experience strong hallucinations; they may visualize things that are not there and may also get the wrong impression about certain situations and events. Furthermore, like the visual perception gets warped, so does the auditory and tactile perception. Facts about the AIWS are still quite ambiguous; actually, not many physicians know about the disorder. Typical migraine (an aura, visual derangements, hemi-cranial headache, nausea, and vomiting) is an important cause and associated feature of AIWS.<sup>[4-8]</sup> Temporal lobe epilepsy is another causal factor. Brain tumors may trigger temporary AIWS. AIWS is relatively common in children. Cases of acute disseminated encephalomyelitis with AIWS are known.<sup>[9]</sup> AIWS has no proven, effective treatment, but treatment programs for the probable causes of the condition are employed to bring about relief. Chronic cases of AIWS are quite untreatable and must wear out, eventually. A person suffering from the disorder may have distortions and hallucinations several times during the day, and the manifestations may take sometime to subside. Justly, the individual may get terrified, anxious and panic-stricken. These manifestations are not detrimental or dangerous, and in all likelihood will fade over a period of time.

Cases of AIWS with the use of montelukast,<sup>[10]</sup> a mast cell stabilizer, are described. Moreover, the association with Lyme disease, mononucleosis and H1N1-influenza infection are known.<sup>[11-15]</sup> Further studies concerning this association are yet not ruled out.

In general, the treatment plan consists of giving migraine prophylaxis, (anticonvulsants, antidepressants, calcium channel blockers and beta blockers). Following a migraine diet regimen affords immense relief.

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