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## Editorial

# A riddle of ‘Alice in wonderland pattern in children’- A rare neurological disorder

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Alice in Wonderland pattern is a neurological condition that causes perceptual disturbances and includes sight, touch, and time. Another name for Alice in Wonderland pattern (AIWS) is Todd's pattern. It's rare condition that temporarily changes how the brain perceives goods. An English psychiatrist called John Todd named the pattern in 1955. The name comes from Lewis Carroll's book, Alice's Adventures in Wonderland, in which the protagonist, Alice, gets situations similar to those that do with this condition. AIWS can affect people at any age, but disquisition suggests that it mainly occurs in children and adolescents' which can affect the way a person perceives their sight, hail, touch, sensation, time. The most common visual distortions are micropsia, in which a person sees objects as lower than they are, and teleopsia, where objects appear further down than they are in reality. There are three main orders of AIWS, which differ according to the type of perceptual complaint.<sup>1</sup>

### The orders are

1. Type A, where conditions are somesthetic, or sensitive
2. Type B, which affects visual senses
3. Type C, which is a mix of types A and B

The state that type A follows the original description of AIWS, which involves people feeling as though their body corridor are changing size.

Type B causes further visual distortions of the girding terrain.

### Person with Type B AIWS may witness

1. Micropsia, where objects appear too small.
2. Macropsia, where objects appear too big.
3. Metamorphopsia, where aspects of shapes, analogous as height and range, appear inaccurate.
4. Pelopsia, where objects appear too close.
5. Teleopsia, where objects appear further down than they are A person with Type C AIWS can perceive both the image of their own body and that of other people or goods around them to be changing.

According to a 2012 study, there are more cases of Type B in immature individualities and farther cases of Type C in grown- ups.

### AIWS Etiologies

#### Headaches

1. Migraine
2. Abdominal migraine
3. Cluster headache
4. Pressure type headache

HANDL pattern of flash headache and neurological poverties with cerebrospinal fluid Lymphocytosis Epilepsy

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1. Temporal lobe
2. Epilepsy
3. Anterior lobe Epilepsy

#### *Infectious diseases*

1. Epstein-Barr virus
2. Cocksackie B virus
3. Cytomegalovirus
4. Influenza A virus
5. Mycoplasma
6. Varicella-zoster
7. Typhoid encephalopathy
8. Lyme neuroborreliosis
9. Streptococcus pyogenes (scarlet fever and tonsillitis)
10. Parainfective vasculitis

#### *Cerebrovascular diseases*

1. Intraparenchymal haemorrhagic stroke
2. Ischemic stroke
3. Cavernous angioma
4. Robin Hood syndrome
5. Pituitary infarction

#### *Other organic brain diseases*

1. Acute disseminated encephalomyelitis
2. Glioblastoma

#### *Psychiatric disorders*

1. Depressive disorder
2. Cotard Syndrome
3. Capgras Syndrome
4. Schizophrenia
5. Schizoaffective disorder

#### *The symptoms of AIWS depend on its type and the person it affects*

They may include:

1. Distorted body image
2. Altered perception of time
3. Metamorphopsia
4. Distorted perception of size

#### *Symptoms that accompany an occasion may include*

1. Feverish symptoms
2. Migraine occurrences
3. Epileptic seizures that affect only part of the brain

#### *Tests for diagnosing AIWS may include*

1. Neurological and psychiatric discussion to assess internal status
2. Routine blood testing
3. MRI reviews to give an image of the brain
4. Electroencephalography (EEG), which tests electrical exertion in the brain and can help croakers identify epilepsy
5. Clinical assessments

#### **Treatment and Operation**

The course of treatment for AIWS depends on the underpinning cause.

Still, croakers may suggest managing migraine through diet and preventative drug. If migraine is the source of the condition. still, if epilepsy is causing the symptoms, a croaker may define antiepileptics. However, they may offer antiviral agents, If an infection is responsible.

According to a 2016 methodical review, croakers infrequently define antipsychotics because, despite the nature of the pattern, there's no psychosis in AIWS. Antipsychotics can also increase the chances of epileptic exertion, conceivably making a person's condition worse.<sup>2</sup>

#### **Alice in Wonderland Syndrome and Covid-19: A Report of Three Cases**

Alice in Wonderland Syndrome and Covid- 19 A Report of Three Cases The first case was an 11- time-old boy, preliminarily healthy, that was admitted to Paediatrics Emergency Room (PER) after passing three occurrences of visual marvels which he described as follows “ I saw peoples ’ heads veritably big and their body’s veritably small and also the contrary way ”; in one occasion he described black lines and blotches coincidentally with the changes described. Complaints lasted about 5 twinkles and also faded. He denied former occurrences of similar instantiations, as well as particular and familiar history of epilepsy or migraine. When asked about former infections, parents reported that their child had been infected with SARS- CoV- 2 the week before the first occasion. During COVID- 19, the child reported having high fever, heave, diarrhoea, and rhinorrhoea, but without any need for inpatient care. Physical test showed no changes, videlicet neurological focal poverties. latterly, an electroencephalogram (EEG) and glamorous resonance imaging (MRI) were performed that also showed no changes. occurrences spontaneously faded after a week, and a final opinion was established as AIWS associated with SARS- CoV- 2 infection. The alternate case was a 7- time-old boy, preliminarily healthy, that was admitted to PER with visual changes and the complaints were described as follows “ I see people from far down ” and “ people get their hands veritably big; his mama said that although he

showed some fear and got alarmed, there was no signs of associated depersonalisation “It lasted a many twinkles, he got spooked, we (the parents) stayed with him for about 15 twinkles to calm him down and it went down”. Symptoms generally started 20- 30 twinkles after falling asleep. In the original occurrences he also complained of temporary transitory headaches located to the temporoparietal region. He denied former analogous occurrences, as well as particular and familiar history of epilepsy or migraine. Physical test showed no changes, videlicet neurological focal poverties. When asked about former infections, the mama reported that symptoms beginning coincided with the opinion of SARSCoV- 2 infection. After PER discharge, complaints sluggishly bettered. After 10 days, occurrences fully faded, and he no way had any analogous complaints. An EEG was latterly performed, which didn’t show any specific ferocious exertion, thus establishing AIWS associated with SARS- CoV- 2 infection as the final opinion. The third case was a 6- time-old boy, preliminarily healthy, that went to a private medical office appointment with perceptive visual changes that initiated during SARS- CoV- 2 infection, lasted a many twinkles, and that were described as follows “I saw effects that were far down and also came closer” and “I saw people’s heads small”. No history of any analogous event in the history has been linked. He’d been preliminarily checked in an Ophthalmology appointment, without changes. He denied particular and familiar history of epilepsy or migraine. He wasn’t submitted to any reciprocal examinations and AIWS associated with SARS- CoV- 2 infection opinion was established. In several clinical follow- up consultations, no analogous complaints were mentioned again.<sup>3</sup>

## Conclusion

Alice in Wonderland pattern is a rare complaint that causes disorientation and distorted perception. It features

dislocation to the way in which a person perceives their senses and body image, other effects around them, or the end of time. The pattern substantially affects children, but symptoms can begin at any point in life. Treatment isn’t direct but relies on relating and treating underpinning causes. The criteria for opinion remain unclear, as experimenters don’t yet understand numerous aspects of the pattern. They need to carry out further studies before they can determine whether an effective, direct treatment is possible.

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## Conflict of Interest

None.

## References

1. Farooq O, Fine EJ. Alice in Wonderland Syndrome: A Historical and Medical Review. *Pediatr Neurol*. 2017;77:5–11.
2. Mastria G, Mancini V, Vigano A, Piero VD. Alice in Wonderland Syndrome: A Clinical and Pathophysiological Review. *BioMed Res*. 2016;p. 8243145. doi:10.1155/2016/8243145.
3. Available from: <http://www.aliceinwonderlandsyndrome.net>.

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