

# Alice in Wonderland Syndrome

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## Key points:

- Introduction
- Cases
- Symptoms and Causes
- Diagnoses
- Treatment

## Introduction

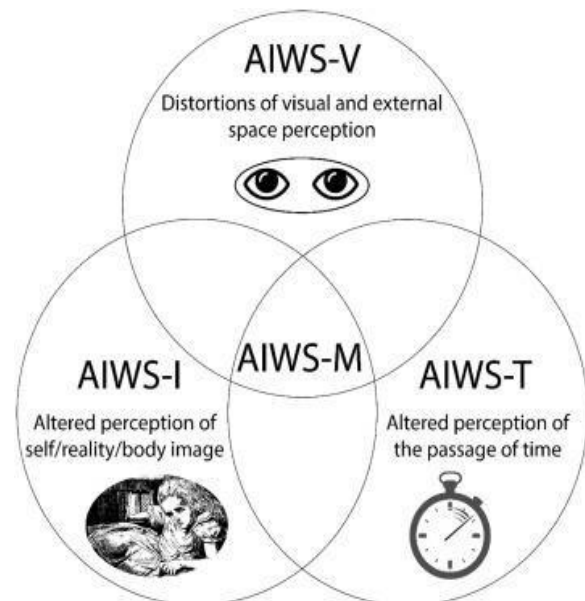
Alice in Wonderland Syndrome is a neurological disorder in which an individual inaccurately perceives their body size compared to reality along with auditory hallucinations and time perception. This syndrome was named after the main character in Lewis Carroll's famous novel, *Alice's Adventures in Wonderland* who experienced different shape and size of her body according to different scenarios.<sup>1</sup>

## Cases

A 94-year-old woman with a medical history that includes type 2 diabetes, hypertension, hypothyroidism, gastroesophageal reflux disease (GERD), and anxiety expressed her primary concern as, "I have been seeing things." Recently, she completed a course of ciprofloxacin, taking 500 mg twice daily for seven days to treat a urinary tract infection (UTI). She reported experiencing visual disturbances for the past year. The patient described several visual hallucinations, such as seeing multiple tall men in her backyard and in her room. Furthermore, she noted that objects in her backyard appeared larger than they truly were.<sup>2</sup>

A different case involves a patient with typical neurodevelopment who visited the doctor's office, reporting throbbing headaches on the left side of his head. The pain lasted for more than a day and had

been recurring for nearly two months. Before the onset of the headaches, he experienced nausea, as well as sensitivity to light and sound. He noted that his environment appeared to fluctuate in size and shape. Additionally, he observed that the fingers of his right hand seemed smaller than those on his left. The visual disturbances he experienced had been ongoing for more than a year and had become more frequent in the last few months. These distortions lasted for around 45 minutes.<sup>3</sup>



**Figure:** A Reflection on Alice in Wonderland Syndrome.<sup>5</sup>

## Symptoms and Causes

Some symptoms are as follows:

- Changes in your body perception: feeling bigger or smaller than normal.
- Feeling split into two.
- Unable to judge the passage of time.
- De-personalization: feeling like watching your own life as third person. □ Changes in distance.

It is not known why exactly why AIWS happens but possible causes include

- Mental abnormalities such as schizophrenia, Depressive disorders.
- Certain type of strokes.
- Infections are the most common cause of AIWS.
- Medications causing side effects

## Diagnoses

61% of the cases were diagnosed as neurological disorders and 26% were diagnosed as psychiatric disorders. When considering specific diagnoses, the most common were psychotic disorder (17%), migraine (14%), intoxication (14%), and epilepsy (10%).

## Treatment

In summary, it is evident that Valproate is the most frequently utilized treatment for AIWS, but it is only relevant when AIWS is linked to other neurological disorders such as headaches, migraines, or tumors. Upon research on treatment of AIWS, it is evident that Valproate (an anti-epileptic drug) is most effective.<sup>4</sup>

## References

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