

WHAT IS HOLMES-ADIE SYNDROME?

Holmes-Adie syndrome is a rare condition affecting 5 in every 100,000 people.

Holmes-Adie syndrome (HAS) is a neurological disorder that affects the autonomic nervous system. This condition is characterized by one eye with a pupil that is larger than normal and constricts slowly in bright light, along with the absence of deep tendon reflexes, most commonly in the Achilles tendon. Both the eye and tendon reflex issues may start on one side of the body before progressing to the other side. Although HAS is not life-threatening or disabling, the loss of deep tendon reflexes is permanent.

01 | Causes

The exact cause of HAS is unknown in most circumstances, but it is believed that most cases are a result of inflammation or damage to the ciliary ganglion in the brain, a cluster of nerve cells found in the eye sock just behind the eyes. Similar nerve damage to the dorsal root ganglion at the root of spinal nerves could result in a loss of deep tendon reflexes. Inflammation or nerve damage could arise from:

- Tumors
- Infection
- Traumatic injuries
- Autoimmune complications

02 | Symptoms

The most common symptom of HAS is an abnormally enlarged pupil in one of the eyes that does not constrict very much, or at all, in response to direct light. Symptoms in the affected eye can include:

- Blurred vision
- Impaired vision
- Trouble with depth perception
- Light sensitivity or the presence of "light glares"

Additional symptoms that a person may experience are:

- Headaches
- Pain in the face
- Mood swings
- Excessive sweating on one side of the body
- Cardiovascular abnormalities

03 | Treatments

Treatment for HAS depends on the symptoms the person is experiencing. Prescription glasses or a modification in a patient's prescription may help compensate for vision loss in the affected eye, while sunglasses can help with a sensitivity to light. Eye drops can also be prescribed to help constrict a pupil that has become too dilated.

For more information on Holmes-Adie syndrome and supportive resources, please visit [optometrists.org](https://www.optometrists.org).

Did You Know?

Holmes-Adie syndrome affects females more often than males by a ratio by some estimates of 2:6:1 for cases where the cause is unknown.

References

<https://www.ninds.nih.gov/health-information/disorders/holmes-adie-syndrome>

<https://rarediseases.org/rare-diseases/adie-syndrome/>

<https://www.optometrists.org/general-practice-optometry/>

<https://www.brainfacts.org/diseases-and-disorders/neurological-disorders-az/diseases-a-to-z-from>