Dilated Pupil – Definition, Symptoms, Causes and Treatment

Many people are now a day’s suffering from this condition, it is increasing with the passage of time. The people who are interested in knowing about the Dilated Pupil, this is a best piece of information for them about different conditions of Dilated Pupils.

Dilated Pupils

Dilated Pupil is a kind of Physiological response to a stimulus that is underlined due to the Involuntary Reflex actions.

This condition is identified by the changes in the Pupil’s size.

The Light conditions act as the Stimuli for an even Pupil. The Pupil dilation can also be a case of Pupil dilation attraction, in this case the Pupil expands when it focuses the interested subject.

The Sexual Orgasm can also be a stimulus for Pupil dilation. In this case, one can suffer from dilation of Pupils due to Pavlovian response of some stimulus. This sort of Pupil’s response increases with age. Aged people suffer from 2 such conditions, the fixed Pupils and Dilated Pupils.
Types of Pupil’s Disorder

There are 2 types of Pupil’s disorder

1. Fixed Pupil.
2. Dilated Pupil.

Fixed Pupil and Dilated Pupil are known as Mydriasis. It is due to the result of an excitation of the Iris that causes an opening of Pupil’s Aperture.

Dilated Pupil is very common in children. There can be different causes of Dilated Pupils but Neurological problems are the main cause of this disease.

The dilated Pupils can be serious condition and if it is not treated in time, it can be life-threatening.

Possible physical effects of lysergic acid diethylamide (LSD)
Unilateral Dilation of Pupil

Patients may also suffer from 1 dilated Pupil. This condition is known as Unilateral Dilation of the Pupils.

Symptoms of Dilated Pupils

The symptoms of the dilated Pupils depend on the hidden causes of this disease. These symptoms are accompanied with the symptoms linked with the other symptoms of other factors that cause it. This disorder is related to the Neurological problems so; it can cause

- Nausea
- Vomiting
- Slurring of speech
- Sub consciousness
- Tachycardia
- Numbness

It can also lead to

- Lack of alertness
- Lack of consciousness
- Unresponsiveness
- Changes in Behavioral patterns
- Confusion
- Delusions
- Hallucinations
- Headache
- Eye pain
- Ophthalmologic problems

Severe cases of dilated Pupil can cause inability to control the Bowel’s and Bladder, Numbness and Paralysis.
Life threatening cases of dilation can show serious problems like Coma, Muscle weakness and Shocks.

Causes of Dilated Pupils

The dilated Pupil is caused due to the Stimulus to Light where the Pupils narrow when the Light brightens and dilates when the light gets dim.

Pupils dilate to allow the more light to enter the Eyes. It enables an individual to see the objects even in the dim light.
There are different causes which can lead to the dilated Pupil, these causes include natural, unnatural both.

**following are the causes of dilated Pupil**

- Emotions
- Fear
- Anger
- Sexual Orgasm
- attraction

Attraction may fall under the category of natural causes of dilated Pupils.

Dilated Pupils Ecstasy is also a cause of overexcitement that an individual may experience while having a strong **Libido**.

The main reason seen behind the constant dilated Pupil is the release of Oxytocin. The opposite of dilated Pupil is known as **Miosis**.

Some of the other reasons for this disorder may include **Neuropathic Disorders**, Trauma, Medications, Drugs, Poisoning and injury on Spinal Cord. All these things can lead to Neurological Problems.

**The explanation of some of the causes is below**

1. **Nervous Problems**

   The Neuropathic cause behind dilation of Pupil is the sympathetic stimulation of receptors involves the Radical muscles and Parasympathetic stimulation involves the Circular Iris muscle cause for the dilation of Pupil. The disruption of Parasympathetic Nerve Supply, Cranial **Nerve Disorder** and High Intraocular Pressure is seen as the cause of Dilation and restriction of Pupils. Complications in the Central Nervous System like **Stroke**, Epilepsy etc are seen as an important cause of dilated Pupils or Mydriasis. These Neurological problems cause dilated Pupil in 1 Eye.

2. **Trauma**

   A dilated Pupil can be caused due to any sort of Trauma like damage of Nerves controlling the activities of Iris, injury to head or Eye and **Iris Sphincter**. All these factors affect the activities of the Eyes to Light and cause fixed and dilated Pupil after Trauma.

   Damage to Ocular Nerve is responsible for the cause of Non-parallel or uneven dilation of Eyes.
3. **Toxication**

Chemical poisoning caused due to specific plants like Black Locust Tree, Benzene, Toxic Mushroom, Jimsonweed, Chloroform and Jet Fuel are responsible causing this disease.

4. **Medicines and Drugs**

Medicines and drugs taken for the treatment of different diseases can cause Dilated Pupil. It can be a side effect of any medicine. Most of these medications are the Cold and Cough medications like Decongestants, Marijuana, LSD and Cocaine etc.

**Alcohol** is a substance that can cause Alcohol Dilated Pupils.

The Decongestants like Pseudoephedrine, Amphetamines and Methamphetamines, antihistamines including Chlorpheniramine, Diphenhydramine and Fenflumarine can cause dilated Pupils.

Antidepressants like SNRs, SSRIs and MAOIs keep the Pupils dilated. Other medications may include Anticholinergics like Hyoscyamine, Scopolamine, Tropicamide and Atropine.

The Eye drops known as Mydriatics are administered to patients who undergo an Eye Test, this Eye drop can also cause dilated Pupils.

This Eye test is conducted with the administration of Anticholinergic drug known as Tropicamide.

**Other Causes of Dilated Pupil**

The life threatening causes include **Brain Aneurysm**, **Skull Fracture**, **Brain Tumor**, **Diabetes**, Stroke and Cerebral Edema. Cerebral Edema is basically the Swelling of Brain.

These cases are accountable for causing dilated Pupils and Fixed dilated Pupil.

When an individual finds 1 Pupil dilated than the other, 1 may link this condition to the 1 of these serious causes.

**Diagnosis of Pupil Dilation**

The test for the dilated Pupil is also called as Mydriasis. It is conducted with the administration of Tropicamide.

Tropicamide helps in the examination of Retinal complications and decrease in the occurrence of Ciliary Muscle Spasm.
Pupil dilation drops are used with the Antichlorogenic content. This content can cause Photophobia but it is for a short time.

Neuroanatomy helps in the diagnosis of dilated Pupil by observing the pathway and nature of Cranial Nerves.

Patients also have to go for tests like Diabetic Neuropathy. It is Slit Lamp Test, Spinal Test, Mecholyt Test, Arteriogram, A Visual Field Examination, CT scan or MRI.

**Treatment of Dilated Pupil**

The treatment of dilation of the Pupil depends on the Age, Causes, medical and other underlying diseases.

This information entails the treatment of the hidden causes which may need extra care and hospitalization.

Some patients even need the surgical treatment for treating the issues related to the Intra-Cranial Pressure and other Neurological Problems.

The treatment of dilated Pupils is also done with the drug-intake, medical supervision, Counseling, Rehabilitation and some other methods that help to take one’s proper care and to prevent the occurrence of more injuries.

Cocaine and Marijuana dilated Pupil can be treated by limiting oneself to stick to it.

The dilated Pupil is not a very serious health problem but a quick proper diagnosis and treatment is necessary for curing the hidden causes of this condition as these causes can create difficulties in one’s peaceful life