

## What is Duane's Syndrome?

Duane's Syndrome is an eye movement disorder which is present from birth and can affect one or both eyes.

Patients with Duane's Syndrome have difficulty rotating one or both eyes outward and/or inward.

## Are there any other features?

- **Strabismus (squint)** – the eyes may be misaligned when looking straight ahead.
- **Amblyopia (lazy eye)** - If a squint is present, this may result in reduced vision in the affected eye.
- **Eyelid narrowing**– the affected eye may appear narrower than the other.
- **Head turn** to one side– to keep the eyes in a straight position.
- The eye may appear **to shoot upwards or downwards** when looking to the side.

## What is the cause of Duane's Syndrome?

There are six muscles that surround each eye and are responsible for rotating each eye into different positions. Each muscle is controlled by one of three nerves within the brain.

There are a few different theories regarding what causes Duane's syndrome but generally there is thought to be a 'mis-wiring' of two different nerves. Each of these nerves usually work the eye muscles that control horizontal movement. The eye muscles may be quite normal, but because they are not receiving the correct messages from the nerves, they cannot move the eye fully in a certain direction.

The restriction of eye movement will not change over time.

## Does Duane's syndrome affect vision?

Duane's Syndrome may affect vision if there is an associated squint or a need for glasses. If vision is reduced in one eye, patching treatment may be necessary to improve this.

## Treatment

Children with Duane's syndrome will need to have regular Orthoptic reviews until around 7 years old. This is to ensure that their vision remains at a good level in each eye and that they can still use their eyes together as a pair without a problem.

Generally, there is no treatment for Duane's syndrome. This is because associated symptoms are uncommon and the majority of people with Duane's syndrome are comfortable and adapt to the lack of eye movement by adapting a head posture.

**PATCHING** – may be needed if vision is reduced in one eye. This may occur if the patient has a constant turn in the eye.

**GLASSES** – in some cases may be needed however they will not be related to or improve the Duane's condition.

**SURGERY**– Surgery is rarely required for Duane's syndrome unless there is a significant squint in the straight-ahead position or a head posture which is causing discomfort. Your Orthoptist will advise you on this.

## FURTHER INFORMATION

Squint clinic- other types of squint

[http://www.squintclinic.com/videos/type\\_of\\_squint/other\\_types\\_of\\_squint/duanes\\_syndrome/](http://www.squintclinic.com/videos/type_of_squint/other_types_of_squint/duanes_syndrome/)

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## PATIENT INFORMATION

# Duane's Syndrome



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