Duane’s Syndrome

Information for patients, parents and carers
This leaflet explains the condition of Duane’s syndrome, how it affects eye movements and eye co-ordination, and whether any treatment is advisable.

What is Duane’s syndrome?

This is an eye movement disorder which is congenital. This means that you are born with this condition. It can affect one eye or both eyes. It normally affects whether you can look from one side to the other (horizontal eye movement). The left eye is more commonly affected and Duane’s syndrome is more common in females.

What causes Duane’s syndrome?

There are a few different theories on 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 eye 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.
Does Duane’s syndrome affect vision?

Usually not, unless you also have a squint or already need glasses.

If you have Duane’s syndrome you might find that you change the way you hold your head to help you to see to the side. You might turn your face to one side to make up for your limited eye movement. This also helps you to see with binocular vision (the ability to use both eyes together and achieve 3D vision).

What is the treatment?

Children with Duane’s syndrome will need to have regular Orthoptic reviews until around 7 years old. This is to make sure that their vision remains good in each eye and that they can still use their eyes together without a problem. However, they will not ‘grow out’ of this condition.

Generally, there is no treatment for this condition. This is because related symptoms are uncommon and the majority of people with Duane’s syndrome are comfortable and can make up for their lack of eye movement with a slight change to how they hold their head. If you also have a squint or need glasses we will discuss with you whether you need any further treatment for the Duane’s syndrome.

If you find that you are having to make a big change to the way you hold your head to help you see and this is causing you problems, or if you also have a squint which you are concerned about, then we might recommend a treatment. We can use small attachments to a pair of glasses called ‘Fresnel prisms’ or, in some cases, we might offer you an operation.
Is there any other help?

Information for parents:

If your child is changing their head posture to help them to see more clearly, please allow them to do this and do not try to correct it or encourage them to hold their head straight.

The teachers at school should be advised if your child finds it difficult to look to one side due to Duane’s syndrome. The teacher might want to think about where the best place would be for your child to sit in class to help them with this. It would be better for your child to sit in the centre of the classroom or in a position that helps them to direct their eyes to their more ‘normal’ side.

Should you have any questions or need more information please speak to the Orthoptist or Ophthalmologist at your next clinic visit.

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call 01865 221 473 or email PALSJR@ouh.nhs.uk