

Duane's Retraction Syndrome

Duane's syndrome is a rare eye condition where one or sometimes both eyes do not move to the left or right fully and the eyelids may open and close as the eyes try to turn.

In rare forms of Duane's syndrome there can also be other problems, for example with the person's hands.

What causes it?

There are six muscles on the outside of each eyeball which allow us to turn the eye in all the directions we want to look. To move the eyes, the brain sends electrical signals along nerve fibres to the muscles. These nerve fibres and muscles develop before we are born.

Duane syndrome is caused by a 'miswiring' of the nerves and eye muscles. Nerve fibres that should have connected to one muscle do not develop properly, causing that muscle not to work so the eye cannot move in one direction. Nerve fibres become connected to the wrong muscle so that the eye may get pulled backwards into the socket which makes the eyelids look as if they are closing and opening, or it will cause the eye to shoot up and down, when it turns in and out.

How the world looks to you

For most people, Duane's syndrome does not cause any problem with vision. In some cases, people may notice double vision some of the time or, rarely, most or all of the time.

How you look to the world

The condition is usually not noticeable when you look straight ahead. Other people might notice that one eye does not move to one side, that you have a squint (the eyes do not point straight) some of the time, or that you look like you're winking when you look in some directions. Some people with Duane's may turn their head to the side to see better.

How can the doctor tell?

The orthoptist and the doctor will be able to diagnose Duane's syndrome simply by watching how your eyes move when trying to look in different directions.

Getting it sorted

In the eye clinic, the orthoptist will check from time to time to make sure vision develops normally. Although most people will have normal vision, sometimes glasses are needed to get



the best possible vision. Young children sometimes need to wear an eyepatch for a few hours a day to make sure the Duane's eye doesn't become lazy (poorer sight). Usually nothing else is needed to treat Duane's syndrome.

If the condition causes a lot of problems, such as having to turn your head a lot, a noticeable squint even when looking straight ahead or your eyes shoot up and down a lot, doctors can do an operation to improve the eyes. They cannot however make the eye movements normal, because the problem is in the signaling from the brain to the eye muscles and this cannot be put right even with an operation.

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Moorfields Direct telephone helpline
Phone: 020 7566 2345
Monday-Friday, 8.30am-9pm
Saturday, 9am-5pm
Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)
Phone: 020 7566 2324/ 020 7566 2325

Email: moorfields.pals@nhs.net
Moorfields' PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs

