

# Intermittent Distance Exotropia

Information for parents and carers



This leaflet explains a squint called Intermittent Distance Exotropia, what effect it has on the eyes and what treatment is available.

# What is Intermittent Distance Exotropia (IDEX)?

Intermittent Distance Exotropia (IDEX) (also known as a divergent squint or divergent strabismus), is a condition in which one of the eyes 'drifts' out, when looking at objects in the distance. The eyes look straight and work together when looking at near objects. It is present from early childhood but may not be noticed straightaway.

The first sign a child may have the condition can be closing one eye in bright light. It is a condition that the child will have for their whole life, although how often the 'drifting' happens may vary throughout their life.

IDEX becomes more noticeable when the affected person is tired, unwell or if they are daydreaming or have been staring at something for a long time. In adults, it can be more obvious after drinking alcohol. It can also be more noticeable when looking upwards. It can worsen in adulthood, but in some cases can also improve with age.

IDEX is rare in adults, so we know it changes, but it is hard to predict in who the condition will worsen and in who it will spontaneously improve.

## What causes IDEX?

The exact cause of IDEX is unknown, but it is likely to be caused by many different things relating to the eye muscles that are responsible for horizontal (side-to-side) movement of the eyes and the nerve supply to those muscles, as well as the shape of the eye socket. It often runs in families, suggesting it is an inherited condition.

Squints of all types are more likely in babies born prematurely, born by caesarean section, with low birth weight or with larger than average heads. Some types of squint can also be linked to having a chromosomal (genetic) defect. It is difficult to say what has caused the squint in each individual case, as there are so many factors to consider.

# Will it affect my child's vision?

During childhood, it may cause the vision in the drifting eye to worsen over time, so it is important for children under the age of 7 with IDEX to be monitored regularly by eye movement specialists (Orthoptists). If the squint occurs frequently, there is a greater risk of reduction in the individual's vision, known as amblyopia. We have a separate leaflet explaining amblyopia in more detail; please ask if you would like a copy. If amblyopia occurs, you may be asked to cover the better eye with a patch, to encourage the vision in the weaker eye to improve.

# What other effects may it have?

If the squint happens very often, it may cause the ability for the two eyes to work as a pair (known as binocular ability) to worsen over time. The Orthoptist will check your child's binocular ability at each visit to look for any change. If your child has poor binocular ability, you may notice that your child is more clumsy than average or find tasks like catching a ball more difficult.

It may also cause your child to have double vision at times. If this occurs frequently, it can affect your child's ability to concentrate in class, so treatment may be required (see below).

Having a squint can also affect the way your child looks to themselves and others. In this instance, you may wish to consider the option of treatment too. Research has shown that people with squints are more likely to have issues relating to confidence and be thought of as different to those without a squint. Adults (especially men) are more likely to have issues with their mental health if they have a squint.

# Will my child need glasses?

If your child needs glasses, it will be coincidental. This type of squint is not caused by the need for glasses; however, wearing glasses for short-sightedness (also known as myopia) or correcting any difference in the need for glasses between the two eyes may help your child control their squint better. Binocular ability is easier to achieve if vision is similar in both eyes.

## What treatment is available for IDEX?

If your child's squint is infrequent and there is no amblyopia present, no active treatment is required other than your child being monitored to ensure that the size of their squint is stable and the quality of their binocular ability remains good. This will be carried out by the Orthoptist when you visit the clinic, but it is also helpful if you can monitor the frequency of the squint at home and report your observations at your appointments with the Orthoptist. The need for glasses will be checked, usually once a year and glasses may be prescribed to see if they help before deciding on other treatment.

If your child has double vision or is showing worsening of their binocular ability over time or if your or your child's concerns regarding the look of the squint are increasing, then treatment may be required.

#### There are 4 main forms of treatment:

#### 1. Squint Surgery

This is the main form of treatment for IDEX and is the most likely to give long term correction. However, this may not be the preferred option due to the need for a general anaesthetic and potential risks and side-effects from any surgery. These include possible postoperative infection, pain and needing time off school. We have a specific leaflet 'Squint Surgery for Children' that explains this in more detail; if you would like to read this before deciding on surgery, please ask the Orthoptist for a copy.

Depending on the type of IDEX your child has, surgery may be performed on one or both eyes. This will be discussed with you and the Consultant performing the surgery.

One surgical procedure is sufficient in approximately 60% of cases but may need to be repeated at some point either in childhood or later in life.

#### 2. Occlusion (Patching) Treatment

Research has shown that covering one eye with a patch for a few hours each day helps the eyes to work together better when not wearing it. It helps to overcome the brain's tendency to ignore the squinting eye, known as suppression. This is only helpful in some children and is only effective long term in a small number of cases but is worth considering if surgery is not your preferred treatment, as it is a safe treatment with a very low risk of side-effects or harm.

In most cases, it is recommended that a patch is worn for 3 hours per day for a period of 2 to 6 months. For some people, the improvement will be maintained over many years but in most cases the squint will come back over the following year and surgery may then be suggested.

#### 3. Minus Lens Therapy

This treatment involves manipulation of your child's need for glasses, using lenses for myopia (short sight), also known as minus lenses, to stimulate the eyes to focus. For some children, this can help them to control their squint better. In clinic, the Orthoptist will put minus lenses in front of your child's eyes and see if they reduce the size of their squint. The treatment will only be considered if the squint is significantly better controlled with the lenses and they don't cause any reduction in your child's vision. The glasses will be checked every 6 months with the aim of reducing by one or more lens strength each time, until your child is able to control their eye movement with no extra minus lenses. If the lenses cannot be reduced or if the squint returns once minus lenses are no longer being prescribed, then squint surgery may be required.

There is some research to suggest that children who undergo this treatment may have an increased risk of developing myopia (short sight) in the future or may have a form of myopia that progresses faster than they would have had without this treatment. However, there is also research suggesting there are no long-term risks. It is therefore up to the parents and carers of the child if they would like to consider this treatment. The Orthoptist and Optometrist will discuss the risks associated with myopia with you before starting this treatment.

#### 4. Orthoptic Treatment

The Orthoptist may suggest your child does some exercises to improve their ability to pull their eyes in when looking towards their nose. This isn't usually effective at treating IDEX, as this is worse for distance viewing, but may be given after surgery to improve their binocular ability, if needed.

Similarly, prisms (special types of lenses that help bring the images of the two eyes closer together) can also be used to treat squint but are most effective when the squint is quite small, and this is not the case for the majority of people with IDEX. Again, they are more likely to be used after surgery, if needed.

# How long will my child need to be monitored for?

If the squint is well-controlled and there is no amblyopia, then your child may be discharged from the care of hospital outpatient team at around 5 to 6 years of age. If this is not the case then they will continue to be treated and monitored until the squint is stable, controlled without symptoms or cosmetically acceptable.

# What is the best age to consider squint surgery?

Squint surgery can be done at any age, but it is best to wait until the child is old enough to have their squint measured accurately, as this determines how much surgery is done and to which muscles. It is also better to repeat the measurements over a minimum of 3 visits to ensure the squint is stable, again to ensure that the right amount of surgery is done.

Surgery at an earlier age would be considered if the squint was poorly controlled when they are looking at near objects as well as distance objects and your child was at risk of losing their binocular ability.

There is some evidence to suggest that the eyes are more likely to work together better in the long-term if vision is equal at the time of surgery, so any treatment for amblyopia should ideally be completed first.

You may have concerns about the appearance of your child's squint, or be worried they will get teased by other children. Teasing of each other generally starts around the age of 6 or 7 years old, so you may wish to consider this when thinking about when to discuss surgery with your child. Alternatively, you may prefer to wait until your child is old enough to decide for themselves if they would like squint surgery.

There is no upper age limit to having squint surgery, the person just needs to have good enough health to be considered for a general anaesthetic and have been tested to make sure their squint is suitable to be corrected with surgery.

## **Further information**

Additional information about squint can be found on the following websites:

#### **NHS website:**

www.nhs.uk/conditions/squint

#### **Squint Clinic:**

www.squintclinic.com

## How to contact us

If you have any questions, please speak to the Orthoptist at your next visit. If you are concerned and would like an answer sooner, please telephone the Orthoptic Department:

Telephone: **01865 234 567** and listen to the option for Orthoptics Monday to Friday, 8.30am to 4.30pm

### **Further information**

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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