

# Patient Information Convergence Weakness

# What is convergence weakness (insufficiency)?

This is a problem which develops when the patient has difficulty in focusing both eyes together on a target as it draws closer to the nose. It can cause symptoms such as double vision, blurred vision for close work, headaches and eye strain on attempting close work.

#### What is the treatment for this condition?

A series of exercises can be given by the orthoptist which aim to improve this condition and reduce the symptoms. These exercises will only help if you, the patient, perform them several times a day.

## What are the exercises?

Some or all of the following exercises may be given to you during your treatment. Results will not be immediate, and your symptoms may become a little worse as you start working your eye muscles before becoming better, as with all exercise.

# Exercise one - convergence to a near point

Take a pen or pencil and hold it out at arm's length, keeping it approximately level with your eyes. Gradually bring the target closer towards your eyes whilst watching it carefully. When the target splits into two, hold it still at this point and try to work your muscles to regain a single target. This might be difficult at first.

If you are unable to see the target properly, then you may need to move it a little further away until you can.

Orthoptic, Ophthalmology Department Russells Hall Hospital

Then start to move it closer again towards your nose. Keep repeating these steps, trying to get closer and closer to your nose while only seeing one target.

You may use a detailed target such as a picture or letters on a stick to ensure you are focusing clearly as you follow the target inwards.

The aim is to be able to pull your eyes together easily and comfortably to look at near objects.

# Exercise two – jump convergence

Take a pen or pencil and hold it out at arm's length, keeping it approximately level with your eyes. Focus on the pen and ensure it is single. Then look at a distant target beyond four metres and, whilst looking in the distance, move your pen slightly closer to your nose. Now look back at the pen again, ensuring it is single. Keep looking between the distant target and pen, each time moving the pen a little closer to your nose, but each time ensuring there is no double vision of the pen as it gets closer. If you do get double vision, move the pen back to arm's length and repeat the process.

The aim of this exercise is to enable you to change focus from near to far and back without experiencing double vision of near objects.

## **Exercise three - dot card**

Your orthoptist will provide you with a card which has a line drawn along its length with a series of dots drawn on it. Hold the short edge of the card on the end of your nose and look at the dot furthest away from you. You should see only one spot with two lines coming out of it, forming a cross. Once you have achieved that, move your eyes along the line to the next closest spot. If you can only see one spot with the cross, keep moving your eyes along the line until you can see the spot closest to your nose. At first, you may find this difficult, but gradually it will become easier as you keep repeating it.

#### Exercise four - stereo card

Your orthoptist will give you a card with two incomplete pictures on it. Hold the card at arm's length with a pen mid-way between the card and your nose. Keep looking at the pen only, but be aware of the card behind it.

The pictures on the card should each appear to be double at first, so you may see four pictures. Then as you continue to look at the pen, the two in the centre will join together and become a complete version of the two incomplete original pictures. Once you have achieved this, try and hold the position for a few moments. Keep practising and you may be able to do this exercise without the pen by pulling your eyes inwards or converging at will.

#### Remember

- Do your exercises four / five times every day.
- Do your exercises for a few minutes at a time only.
- Always relax your eyes after doing the exercises by looking into the distance for a minute or two.
- Your eyes may feel tired and sore when you begin your treatment, but this is normal so do not be discouraged. As with any new exercise, your eye muscles will ache at first but will become stronger with practice.
- During your treatment, you will be reviewed regularly by the orthoptist who will check that you are doing the exercises properly and how you are progressing.
- If you have any worries about your treatment, please ring the Orthoptic Department on the telephone number below.

**Note:** the information in this booklet is provided for information only. The information found is **not** a substitute for professional medical advice or care by a qualified doctor or other health care professional. **Always** check with your orthoptist if you have any concerns about your condition or treatment. This is only indicative and general information for the procedure. Individual experiences may vary and all the points may not apply to all patients at all times. Please discuss your individual circumstances with your orthoptist.

Orthoptic, Ophthalmology Department Russells Hall Hospital

The **Orthoptic Department** at Russells Hall Hospital: **01384 456111 ext. 3636** (8.30am to 4.30pm, Monday to Friday).

# Eye emergency, out of hours

In case of an eye emergency after the closing hours of the Eye Clinic (including weekends and bank holidays), please contact the eye doctor on call by ringing the switchboard at:

## Birmingham and Midland Eye Centre on 0121 507 4440

The doctor on call is usually based at the Eye Centre, City Hospital, Dudley Road, Birmingham. They may need to call you back, and if necessary, they will arrange for you to visit them.

We are always happy to answer any questions regarding your child's treatment. If after reading this leaflet you still have concerns or questions, please call the department on **01384 456111 ext. 3636.** 

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### For further information visit:

www.orthoptics.org.uk/patients-and-public/

## This leaflet can be downloaded or printed from:

http://dgft.nhs.uk/services-and-wards/ophthalmology/

This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.

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