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University Hospitals of Leicester

Eye exercises to improve convergence insufficiency

Department

Information for Patients

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What is convergence insufficiency (CI)?

Convergence is the ability to pull both eyes in towards your nose at the same time. This helps you to look at objects that are close to your face.

Convergence insufficiency (CI) is when the ability to pull the eyes in is weak or absent.

What are the symptoms of CI?

CI can cause symptoms such as:

- headaches
- double vision when looking close up
- blurred vision
- a feeling of eye-strain.

How is CI treated?

Exercises can help to treat CI. These build up the muscles that pull your eyes in.

This leaflet explains how to do different eye exercises.

Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk Your orthoptist will:

- tell you which exercises you should do
- tell you how often to do them and for how long
- regularly check your progress, either in person or over the phone.

The most difficult part of doing eye exercises is remembering to do them regularly, and continuing to do them for the advised length of time.

Do not do these exercises unless advised and supervised by an eye care professional.

Do the exercises have any side-effects?

Symptoms of CI may become worse after starting exercises. This is much like starting to exercise any weak muscle. Some mild worsening of your symptoms can be a sign that you are doing the exercises correctly. If you have any severe symptoms after beginning the exercises then stop until you have spoken to your orthoptist.

It is important to relax your eyes for a few minutes after finishing the exercises. This can be done by closing your eyes, or focussing on something in the distance, such as out of a window.

Smooth (pen) convergence

- Hold a small target, such as the tip of a pen or a lolly stick with a picture on it (or even your finger!) at arm's length and focus on the tip.
- Make sure the target is single, and as clear as possible.
- Slowly bring the target closer to your face. Make sure that you are focussing on the tip all the time, and try to keep the target single.
- As soon as the target starts to split into 2, stop moving it. Try to make it single again.
- If you can make it single, continue to move it slowly closer. Stop again if it becomes double and go back to the previous step.
- If you cannot make the image single, then move the target slowly away until you can make it single, then slowly start bringing it closer again.
- When you have got the target as close as you can whilst keeping it single, hold it and try to keep it single for about 10 seconds.
- Relax your eyes as described previously.

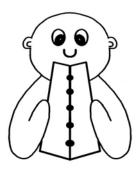
Jump convergence

- Hold a small target, such as the tip of a pen or a lolly stick (or even a finger!) at arm's length.
- Hold the target in a position where there is also an object in the distance (across the room or out of a window) directly behind it.
- Look at the near target and make sure it is single. Look at the distance target, and make sure that is single. It is normal for the near target to be double when you look in the distance, and the distant target to be double when you look at the near one.
- Look back and forth between the 2 targets a few times. Make sure each time that the target you are looking at is single.
- Whilst looking at the distant target, move the near one slightly closer to your eyes. Repeat looking back and forth a few times.
- Keep bringing the near target closer until you can no longer make it single.
- Relax your eyes as described earlier.

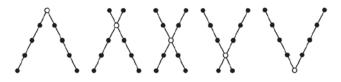
Dot card

- You will be given a card to use by your orthoptist.
- Hold the card with 1 end touching your nose.
- Look at the furthest dot and try to make it single the other dots will probably be double, this is normal. They should form an upside-down "V" shape.
- Now look at the next dot towards your nose and make it single. The dots in front and behind it will appear double, making an "X" shape, with the dot you are focussing on at the centre.
- Continue to work your way through the dots getting closer to your nose. Try to keep each dot single for about 5 seconds as you go through the dots.





• As you look at each dot you should see the following shapes:

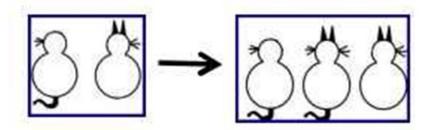


- If you cannot make a dot single, then go back to the previous dot and try again. The aim is to be able to get comfortably to the nearest dot.
- Relax your eyes as described before.



Stereograms

- You will be given a stereogram card by your orthoptist. This will have 2 similar pictures on it. Often 2 cats, or 2 patterns of circles.
- Hold the card at arm's length.
- Hold a pen (or your finger) just in front of the card, in the middle.
- Look at the tip of the pen and bring it slowly closer to your eyes. Try to focus on the pen and keep it single, but be aware of the pictures in the background. You should notice the images on the card start to become double.
- As you move the pen closer, you will eventually see 4 pictures instead of 2, and then as it comes closer still, the 2 centre pictures should slowly overlap.
- Adjust the position of the pen until the 2 centre pictures are completely on top of each other and appear as 1. You should now see 3 pictures. The centre picture will be of a complete cat, or a 3D arrangement of circles



- You may find it difficult to make yourself aware of the images on the card at the same time as focussing on the pen. Keep practising!
- When you manage to see the 3 images, focus on the centre 1. It is likely to be blurry. Try to make it as clear as you can, and hold this for 10 seconds.



- Once you can do this without too much difficulty, see if you can take the pen away whilst maintaining the centre image. If possible, hold this for 10 seconds.
- Relax your eyes as explained before.

Questions

If you have any questions about the exercises you have been told to do, please contact the orthoptic team on the contact number below, or ask your eye specialist when you visit the hospital.

Important

Please let us know if you cannot come for your appointment. Trust policy states that you should be discharged if you miss an appointment.

Contact details

Orthoptic department, Leicester Royal Infirmary Tel: 0116 258 5277

Further information

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To find out more about what an orthoptist does, please have a look at the British and Irish Orthoptic society website: <u>www.orthoptics.org.uk</u>

اگر آپ کو یہ معلومات کسـی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔ علی هذه المعلومات بلغةٍ أُخری، الرجاء الاتصال علی رقم الهاتف الذي يظهر في الأسـفل જો તમને અન્ય ભાષામાં આ માફિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

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If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk

Leicester's Hospitals is a research active trust so you may find research happening on your ward or in your clinic. To find out about the benefits of research and become involved yourself, speak to your clinician or nurse, call 0116 258 8351 or visit www.leicestersresearch.nhs.uk/ patient-and-public-involvement