

# Home exercises to improve Convergence Insufficiency

Orthoptic department

**If you need this leaflet in another format, eg. large print or a different language, please ask a member of staff.**

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## Relaxation

It is important to relax your eye muscles after exercising. The eyes may feel uncomfortable following the exercises, and this is to be expected as the muscles you are strengthening are not used to working so hard. However, there are ways to help the eyes feel more comfortable.

- Do not practise for longer periods than advised by the orthoptist
- After the exercises, make sure you rest your eyes either by closing them for one minute or by looking out of the window into the distance.

## Your treatment plan

- Smooth convergence
- Dot card
- Stereogram

For ..... minutes at a time

..... times a day

followed by relaxation

Next appointment in .....

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Ref: 08-16-111  
Review: 07/18

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## Your orthoptist has diagnosed you with a Convergence Insufficiency

When looking at an object close-up, the eye muscles will pull both eyes smoothly inwards towards the nose. Under normal circumstances, this occurs without effort and allows for comfortable use of binocular vision (both eyes) whilst doing close work.

Weakness of these eye muscles can cause problems in using both eyes together at close range, and may lead to symptoms such as:

- headaches
- eye strain
- blurred vision
- double vision

This is called Convergence Insufficiency

This leaflet gives basic instructions; variations on these, plus how frequently and for how long the exercises should be done will be advised by your orthoptist.

### Smooth convergence

With your head straight, slowly and smoothly pull the target towards your nose, making sure it stays single. As soon as the target goes double, stop moving it, but continue to look at it and use your eye muscles to "pull" the two double images back together to make the target single again. The sensation you will feel is one of going 'cross-eyed'.

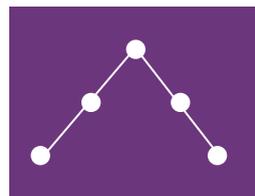
If you can make the stationary target one again, then continue to pull it towards you until it doubles again. Repeat the process of stopping, using your eyes to make the target single, and then proceeding as before. When you are unable to make it single, try

taking the target back a short distance until it becomes one and start again. You will need to work hard in the area where it doubles, as this will improve and strengthen the convergence weakness.

### Dot / letter card

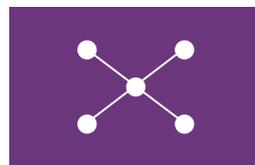
Hold the card lengthways touching the end of the nose, angled downwards slightly so you can see all the dots.

Look at the dot furthest away and try to see it as one - all the other dots should appear double and fan out towards you.



When you can see this dot singly, hold it as one and count slowly to ten.

Once you can do this, look at the next dot along and make it single by gently pulling in the eyes together. Again, hold it for a count of ten. All the other dots will make a cross through the dot you are looking at.



Continue up the line of dots towards you, making sure each one is single and hold each one for a count of ten.

If you cannot make a dot single, go back to the previous dot and try again.

## Stereograms

Stereograms all work in the same way, by exercising convergence and focusing separately. It can take some practice to learn how to do them correctly.

1. Hold the stereogram at arm's length and hold a pen in front of the card.
2. Concentrate on the tip of the pen.
3. Slowly move the pen towards you.
4. Watch the pen tip all the time but be aware of the two stereogram pictures in the background.
5. As the pen is positioned approximately half way towards your nose, the two split images overlap, to form a third image.

### Stereogram example

