## 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 (both eyes) vision 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 and double vision —this is called Convergence Insufficiency.



These are basic instructions; variations on these, plus how frequently and for how long exercises should be done will be advised by your orthoptist.

#### **Smooth Convergence**

With your head straight, slowly and smoothly bring the target towards your nose, making sure it stays single. As soon as the target becomes double, stop moving it, but continue to look at it and use your eye muscles to 'pull' the two 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 single again, then continue to pull it towards you until it again doubles. 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 single again and start the exercise again.

You need to work hard in this area where it doubles, as this will improve your convergence weakness.

#### **Dot Card**

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

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



When you can see this dot as a single dot, continue to hold your focus and **count slowly to 10**. Once you can do this, move your gaze to the next dot along and ensure it remains single by gently pulling in the eyes together. Again, hold it for a count of 10.

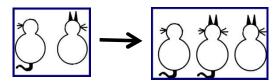


Continue shifting your gaze up the line of dots towards you, ensuring each one is single and that you can hold each one for a count of 10. If you cannot make a dot single, go back to the previous dot and try again.

#### **Stereograms**

Stereogram's all work in the same way, by exercising convergence and focusing separately— and it can take some practice to learn how to do them correctly!

- 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 2 stereogram pictures in the background.
- 5. As the pen moves the stereogram, images should each appear to split apart.
- 6. When the pen is positioned approximately half way towards your nose, the 2 split images should appear to overlap to form a 3<sup>rd</sup> image.



#### 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 of helping the eyes feel more comfortable:

- Do not practice for longer periods than advised by the Orthoptist.
- After the exercises, make sure you rest your eyes either by closing them for 1 minute or by looking out of the window into the distance

#### **Contact details**

TorbayAndSouthDevonFT

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### PATIENT INFORMATION

# Home Exercises to Improve Convergence Insufficiency



Orthoptic Department (01803) 655122