Information for patients doing convergence exercises

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Introduction
This information leaflet is a reminder of the exercises you were given at your orthoptic appointment and not a substitute for appointment attendance.

Why have I been given exercises?
Exercises are given to encourage you to converge (bring both eyes in together) towards your nose. Patients who are unable to do this easily are diagnosed as having convergence insufficiency. Symptoms of convergence insufficiency include double vision and blurred vision for near and head aches after close work.

What are the exercises?
Some or all of the following exercises may be given to you. It is important to remember to practice your exercises as instructed by the orthoptist. Exercises should be practiced frequently throughout the day, but only for a few minutes each time.

Initially it is not uncommon for you to feel some discomfort, as you exercise your eye muscles for the first few times. This is normal but it is important to persevere, as improvement will not happen without practice. If you need further guidance regarding your exercises, please contact the orthoptic department.

Exercises
Convergence using a target
Your orthoptist will give you a small ‘fixation stick’ on which you can attach letters or a small picture.
Hold the stick at arms distance and eye level.
Gradually bring the stick towards your nose, focusing on the letters (or picture) pulling your eyes inwards, watching it carefully to see at which point double vision occurs. As soon as double vision occurs, stop moving the stick and try to pull both eyes inwards to regain a single image. If this is possible, move the target closer to your nose. If it is not possible try moving the target away from you slightly and try again.

This exercise may take some effort, but try to get the target closer each time.

**Dot card**

This is a narrow piece of card. In the centre of the card you will see a line and on the line a series of dots.

Hold one end of the card to your nose and look along the line at the dot furthest from you.
Concentrate on this dot and if it appears double, gently try to pull your eyes inwards to make the end dot appear one.

You should then see two lines join at the dot making an upside down ‘V’.

Try to focus on the next dot which is closer to you. As you do this, you will see that as well as the lines meeting at the dot, they will fan out beyond it creating an ‘X’ pattern.

Try to continue focusing on the closer dots in sequence until you can complete the exercise with the dot closest to your nose.

At first you will find it difficult to change your focus but this will become easier with practice.

**Stereograms**

The stereogram card has two pictures on it, usually of two cats. You may notice that they are different, one with a tail and one with ears. Both have whiskers, but on different sides of the face so that together the images form of a complete cat. Hold the stereogram card at arms length. Introduce a pen or target, about half way between the card and your face. Try to pull your eyes in
so that you can focus on the pen and check it is single and clear (picture 1).

As you look at the pen, be aware of the cats on the card behind, but do not look directly at them. Each cat may initially appear double so that four cats are seen (picture 2). With practice, you should be able to focus your eyes so that the middle two cats merge into a single central complete cat (picture 3). It may be necessary to move the pen slightly closer or further away to achieve this.

To begin with, the central cat may be blurred. Try to adjust your focus until it becomes clear. With practice, you may even be able to do this by removing the pen as your target and focusing on an imaginary point in front of the card.
Some find this test difficult initially. If you are struggling, please do not hesitate to contact the orthoptic department.

Relaxing your eyes after exercising
It is very important to relax your eyes each time you do convergence exercises. This is done by closing your eyes for a few minutes or by looking into the distance.

How long will I need to do the exercises for?
Initially the orthoptist will review you every few weeks to monitor improvement in your convergence and to change your exercises as you progress. Most patients will complete the exercises within a few months, depending on the severity of symptoms.

Are there any alternatives to convergence exercises?
Generally it is better to try and improve convergence by exercising the eye muscles. In some cases a small prism can be fitted to the glasses to aid symptoms and this can be incorporated into glasses if appropriate.

What happens if I do eye exercises but my symptoms do not get better?
If your symptoms do not improve, then the orthoptist may book you in to see the eye doctor again.
Risks and benefits

Generally there are few risks associated with the exercises. In rare cases the exercises can provoke a convergence spasm, where the eyes become crossed and cannot easily be pulled into a straighter position. To reduce the risk of this it is important to remember to relax your eyes after doing the exercises and only do the exercises for the time advised by the Orthoptist.

Patients’ completing a course of exercises for convergence insufficiency benefit by being able to read and focus more comfortably.

The exercises I have been given

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Please use the space below to write down any questions you may have and bring this with you to your next appointment.