



Patient Information

Double Vision and Care of Prisms

If you gradually or suddenly become aware that you can see two images of the same object and it disappears when either eye is covered then you have a condition known as double vision (diplopia). This leaflet will help you understand why this may have developed and how the Ophthalmologist and Orthoptist can help.

Why do I get double vision?

The eyes are moved using six muscles surrounding each eye. From birth the eyes are designed to work as a co-ordinated pair, so that only one image is seen. If one of the muscles becomes weak or has something restricting the movement, the eyes are unable to work as a pair and double vision occurs.

Why do the two images change position as I move my eyes?

Diplopia can be horizontal, vertical, tilted or a combination of all three. It can be present at near and/or distance, or just in one direction of gaze. The two images can be close together or far apart and change position as you look from left to right or up and down. The double vision varies according to which muscle or muscles are defective. Sometimes it is possible to turn or tilt the head to bring the two images together giving single vision with a head posture.

What happens now?

The Ophthalmologist (eye doctor) will try to establish the reason the muscle has become weak and this may require further investigations such as blood tests or CT/MRI scans.

You will also be referred for an Orthoptic assessment. This is an examination that will try and determine where the problem lies. The Orthoptist will try to relieve the symptoms where possible and monitor the progress or recovery over time.



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How long will my double vision last?

The time taken to recover from double vision varies from a few weeks to several months, in some cases up to a year. Many people make a full recovery, but some people find that although the double vision improves it does not disappear completely. Unfortunately, we are unable to predict if individuals will make a full or partial recovery or how long that recovery process will be.

How can we help your double vision?

This can be done in two ways:

Eliminating one image

Sometimes it may be necessary to cover one eye to eliminate the second image especially if the two images are wide apart or tilted. This will provide comfort and safety for as long as necessary. This will not alter the cause of the problem and will not damage the eyesight in anyway, but it will affect your depth perception.

Joining the double vision using a prism

A temporary plastic prism called a **Fresnel Prism** can be used to bring the two images together so that single vision is restored. It consists of lots of tiny prisms made up into a thin flexible plastic sheet that can be attached to the inside of your spectacle lens. If you do not wear spectacles, we can fit the prism to 'Plano' spectacles with no prescription in them. The Orthoptist will decide what strength prism is needed. It is better to use this temporary type of prism initially, rather than have it incorporated into your spectacle prescription, because the strength can easily be adjusted as your condition improves and/or stabilises. The disadvantage is that it may temporarily reduce your vision or cause some distortion because you are looking through a plastic film.

Your Fresnel Prism

- Has a smooth side and a rough side
- Will appear to have faint vertical or horizontal lines across it
- The lines will be positioned vertically to bring images together that are side by side
- The lines will be positioned horizontally to bring images together that are one above the other

Cleaning your Fresnel Prism

The rough side of the Fresnel is exposed so it tends to collect dust and may need to be cleaned. This diagram shows where the dust can collect.





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- Use a gentle stream of water and a very soft brush in the direction of the lines
- Pat or blot dry with a soft lint free cloth
- If the prism becomes dirty with make-up or grease, it may need to be removed and cleaned in the same way with a small amount of washing-up liquid

Replacing the Fresnel Prism

If you need to remove the prism or it falls off, it can be replaced quite easily.

1. Detect the rough and smooth surfaces of the prism.
2. It is essential that the lines be in the same direction as fitted by the Orthoptist.
3. Lay the spectacles in shallow warm water and press the smooth side onto the inside of the lens. Check the lines are correctly positioned and straighten if necessary while the lens is still wet.
4. Press out all the air bubbles and ensure the Fresnel prism is entirely within the frame or air bubbles will appear when it dries.
5. Dry gently with a lint free cloth or leave to air dry.
6. Contact the Orthoptic Department if you have any problems refitting your prism.

Permanent Prisms

If your double vision does not fully resolve and a prism is still required to maintain single vision, a permanent prism can be incorporated into your spectacle prescription without the disadvantages of the lines and distortion. The Orthoptist will advise when you are ready for permanent prisms by monitoring your condition to ensure it has remained stable for at least six months and is unlikely to change.

You must not drive if you have double vision.

You must inform the DVLA that you have double vision. You can be fined by the DVLA for not telling them about a condition that affects your ability to drive and your insurance may be invalid. Usually you will be permitted to drive if the temporary prisms correct your double vision or you have adapted to monocular vision using an occlusive eye patch.



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Further information and on-line/downloadable forms to report your condition can be found at:

Website:

DVLA: www.gov.uk/health-conditions-and-driving Tel 0300 790 6806

www.nhs.uk/conditions/double-vision

Contact Details:

**Orthoptic Department,
Great Western Hospitals NHS Foundation Trust,
Swindon Wiltshire
SN3 6BB
Telephone/answerphone: 01793 604702
Monday - Friday 8am – 5pm**

Smoking will not be permitted on any NHS site in England. Smoking will not be permitted within any of our buildings or anywhere outside on our sites. Smoking facilities will not be provided. Please be considerate of others when vaping in hospital grounds.

This information sheet is available to order in other languages and formats. If you would like a copy, please contact us on 01793 604031 or email gwh.pals@nhs.net

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