

Double Vision (Diplopia) and care of Fresnel prisms

Orthoptic Department
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Other formats

If you need this information in another format such as audio CD, Braille, large print, high contrast, British Sign Language or translated into another language please contact the PALS desk on 01271 314090 or at rduh.pals-northern@nhs.net.

What is diplopia?

Diplopia is the medical term for double vision.

Why do I get diplopia?

Each eye is controlled by six muscles; they are designed to work as a coordinated pair. If one of the muscles becomes weak, your eyes are no longer able to work as a pair this can result in diplopia (double vision). Double vision can also occur in one eye however this is less common and has many different causes.

Why is my diplopia variable?

The type of diplopia varies depending on which muscle or muscles have been affected. It can be horizontal, vertical, tilted or a combination of all three. It can be present for near and/or distance or just in one direction of gaze.

What happens now?

You will be seen in the Orthoptic Department by the orthoptist. Orthoptists are part of the eye team who are trained in assessing double vision. Following this assessment, the orthoptist will try to relieve your symptoms where possible and will monitor progress or recovery over time.

You may also be seen by one of the ophthalmologists who may request further investigations to try to establish the cause of the double vision.

Driving and double vision

You **MUST** contact the DVLA immediately if you have double vision if you drive a motor vehicle, regardless of whether the double vision has been joined together with a prism or eliminated with a patch. Failure to inform the DVLA can result in a financial penalty. We cannot inform the DVLA on your behalf.

You can inform the DVLA by completing an online form using the link at the bottom of this leaflet or by filling in a V1 form which can be printed from the DVLA website.

How can I eliminate the diplopia?

This can be achieved by using a prism. A prism can be attached to your own glasses or plain glasses to join the diplopia. These prisms are called Fresnel prisms.

Sometimes it is not possible to join the diplopia, so it may be necessary to cover one eye to eliminate the second image. This will improve comfort and safety. It will not damage the eyesight or alter the cause of the problem but it will affect your depth perception.

Fresnel prisms

This is a temporary treatment which can easily be adjusted if your diplopia changes. The prism is a plastic sheet which is cut to fit your own glasses. The prisms have a smooth side and a bumpy side. The smooth side attaches to the inside of your lens using water. Once dry they rarely fall off.

Advantages of a Fresnel prism

Eliminates diplopia and allows comfortable vision. It can easily be changed if your diplopia changes over time.

Disadvantages of a Fresnel prism

Can blur vision and cause distortion; straight lines can appear bent. Some people are aware of light splitting into rainbows.

Cleaning my Fresnel prism

The rough side of the prism is exposed and tends to collect dust, grease and make-up and may need to be cleaned. Using a gentle stream of water and a soft brush the prism can be cleaned without removing it. Brush gently in the same directions as the lines on the prism. If it is dirty with grease or make-up then a small amount of washing up liquid can be used.

Removing and replacing the prism

If the prism falls off or you need to remove it for cleaning, it can be replaced easily:

1. It is essential that the lines on the prism are in the same direction as when the prism was fitted by the orthoptist and that the prism is replaced on the same lens.
2. Whilst holding the glasses in shallow water or under a gently running tap, press the smooth side of the prism to the inside of the correct lens of your glasses.
3. Remove the glasses from the water, check the lines on the prism are correctly positioned then squeeze out the air bubbles.

Permanent prisms

If your diplopia and prism remain stable over a period of time (usually a minimum of 6 months), it might then be possible to incorporate the prism into your glasses. This eliminates the lines and distortions caused by the Fresnel prism.

Further information

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Useful website:

British and Irish Orthoptic Society
www.orthoptics.org.uk

Squint Clinic
www.squintclinic.com

DVLA – Driving and double vision
guidelines
www.gov.uk/diplopia-and-driving

PALS

The Patient Advice and Liaison Service (PALS) ensures that the NHS listens to patients, relatives, carers and friends, answers questions and resolves concerns as quickly as possible. If you have a query or concern call 01271 314090 or email rduh.pals-northern@nhs.net. You can also visit the PALS and Information Centre in person at North Devon District Hospital, Barnstaple.

Have your say

Royal Devon University Healthcare NHS Foundation Trust aims to provide high quality services. However, please tell us when something could be improved. If you have a comment or compliment about a service or treatment, please raise your comments with a member of staff or the PALS team in the first instance.

Tell us about your experience of our services. Share your feedback on the Care Opinion website www.careopinion.org.uk.

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