

INFORMATION FOR PATIENTS

Fresnel prisms (temporary prisms)

This leaflet explains what a Fresnel prism is, how it works and how to look after it.

What is a Fresnel prism?

Fresnel prisms are a thin transparent plastic material which creates a prismatic effect. This means it reflects light in a way which joins the two images when double vision is present. They are placed directly onto the lens of your glasses. The prisms have special grooves to bend the light, these can be seen on the diagram below.



(View of prism from the side)

The plastic is cut by the orthoptist to the shape of the glasses and placed on the back surface of the lens. It is fixed on by a layer of water between the glasses and the prism. It is placed on the lens with the lines and grooves going in a particular direction, depending on the type of double vision.

The prism is usually fitted on one lens of the glasses, in front of the eye with the weakest vision.

Occasionally a prism may need to be fitted to both lenses of the glasses.

Caring for the prism once you get home

It is common for dust particles to gather between the grooves. This has the effect of blurring the vision.

When the prism needs cleaning it can be done either by:

- 1) Leaving the prism on the glasses and just rinsing with water and soap/ washing up liquid. This is particularly effective if a soft nailbrush or toothbrush is moved along the lines of the prism.
- 2) Peeling the prism off and rinsing the back (the smooth side) and the front with soapy water. A soft nailbrush or toothbrush can be used to clean between the grooves. To re-apply the prism, rinse it thoroughly, clean the glasses lens, and place a pool of cold water on the inside of the lens. Press the prism onto the water, squashing out any air bubbles and checking the lines are going the same direction as before. Gently dry the glasses and prism.

Advantages of fresnel prisms

Fresnel prisms are used on a temporary basis, as the strength of the prism may need to be altered on a regular basis as the double vision changes. The orthoptist will monitor which strength of prism is appropriate and alter the prism accordingly.

If the use of the prism controls your double vision for a minimum of six months, an optician can usually incorporate prisms into glasses. This is desirable as the fresnel prism can blur the vision slightly.

The orthoptist will advise your optician when this can be done and what strength and type of prism is needed.

Please remember

Smoking can discolour the prism.

The prism breaks up light so you might notice colours around the edges of objects.

Contact details

If you have any queries about your treatment please contact the Orthoptic Department:

- **Email:** Sfh-tr.orthoptics@nhs.net
- **Urgent orthoptic queries:**
 - Telephone: 07768615247, Monday to Wednesday, 8am-4pm
 - Telephone: 07825866704, Thursday to Friday, 8am-4pm
- **For appointment booking/cancellation:**
 - Telephone: 01623 672383.

Further sources of information

NHS Choices: www.nhs.uk/conditions

Our website: www.sfh-tr.nhs.uk

BIOS website: www.orthoptics.org.uk

Patient Experience Team (PET)

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.

External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them.

If you require a full list of references for this leaflet, please email sfh-tr.patientinformation@nhs.net or telephone 01623 622515, extension 6927.

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