What is refraction?
Refraction is a test to determine what strength glasses your child needs. It involves shining a light into your child’s eyes. To prepare for this, you will need to put cyclopentolate hydrochloride drops in your child’s eyes.

Why does my child need cyclopentolate hydrochloride drops before refraction?
Cyclopentolate hydrochloride eye drops dilate (enlarge) the pupil of the eye and temporarily paralyse the muscles inside the eye so that the doctor/optometrist can examine the back of the eyes. One drop should be used in each eye 40 minutes before the appointment.

What is the benefit of using cyclopentolate hydrochloride eye drops before refraction?
The benefit of the cyclopentolate drops is that they enable the doctor/optometrist to make an accurate reading from your child’s glasses test (refraction).

What are the risks of using cyclopentolate hydrochloride eye drops?
• Side effects are not common but include temporary irritation of the eye such as stinging when the drops are put in, increased pressure within the eye and allergic reactions.
Information and advice for parents and carers
Orthoptics & Optometry

Cyclopentolate hydrochloride eye drops (1 drop) before refraction

Orthoptics & Optometry

- The drops should not be used if your child is allergic to cyclopentolate hydrochloride or their eyes are inflamed (red and painful).
- The drops cause blurred vision for up to 24 hours after using the drops, making close work difficult. It is important that you make your child’s school/nursery and other carers aware of this.
- For a more detailed list of possible side effects please read the manufacturer’s leaflet that comes with the drops.

What are the risks of not using the drops?
If your child does not use the drops, the refraction test cannot be performed.

Are there any alternatives?
Cyclopentolate hydrochloride drops will give the most accurate results from the glasses test (refraction) for your child. It is possible that there may be an alternative but this would depend on your child and would need careful discussion with the orthoptist as it would give a less accurate result.

How to use the drops
1 drop should be put in each eye, 40 minutes before the appointment.

1. Wash your hands.
2. Tilt your child’s head back slightly and gently pull down the lower eyelid of the eye.
3. Put one eye drop into the outside corner of the eye.
4. Close the eye and gently press your finger against the inner corner of the eye for at least 1 minute. This is called punctal occlusion and stops the cyclopentolate escaping down the tear duct and being absorbed into the circulation where it could affect other parts of the body. Repeat for the other eye.
5. Wash your hands to remove any residues.

Precautions when using cyclopentolate drops
- Do not use the drops after the expiry date.
- Only use the dose prescribed.
- Do not miss the dose.
Cyclopentolate hydrochloride eye drops  
(1 drop) before refraction

Orthoptics & Optometry

Storing the drops
• Store the drops in a dry place, away from strong light and below 25°C (room temperature).
• Do not keep them in the fridge.
• Make sure they are out of reach and sight of children.
• Please return any unused drops to the hospital or your local pharmacy for disposal.

Contact details
If you have any questions about the drops, how to use them, or are concerned about any of the side effects please contact the orthoptics department at the hospital your child is attending.

Birmingham and Midland Eye Centre Orthoptics
0121 507 6829
Monday – Friday, 8.30am – 4.30pm

Sandwell General Hospital Orthoptics
0121 507 3202
Monday – Friday, 8.30am – 4.30pm

Outside of working hours please contact the Emergency department (ED) by calling the main hospital switchboard on 0121 553 1831.

Further information
For more information about these eye drops please read the manufacturer's leaflet that comes with them.

For more information about our hospitals and services please see our websites www.swbh.nhs.uk and www.swbhengage.com, follow us on Twitter @SWBHnhs and like us on Facebook www.facebook.com/SWBHnhs.
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Sources used for the information in this leaflet

- DataPharm, Summary of Product Characteristics for Minims Cyclopentolate Hydrochloride 1%, August 2012.