Atropine Refraction

As a part of your child’s complete eye exam, the pediatric eye doctor suggests an atropine refraction. Atropine is a medicine that is used in the eyes to dilate (open) the pupils. It also relaxes the muscles that focus the eyes. This allows the doctor to look at the retina, optic nerve, and other structures inside the eye that cannot be seen well until the pupil is dilated. This also allows measurements to be taken to decide if your child needs glasses and what strength they should be.

How to Use the Medicine

The medicine will come as an ointment in a small tube, like a tube of toothpaste, or as eye drops in a small bottle.

Wash your hands before opening the tube or the bottle of medicine.

If the medicine is an ointment, pull the lower eyelid down and squeeze a small dab, about the size of a grain of rice, into the space between the eyelid and the eyeball.

If the medicine is an eye drop, pull the lower eyelid down and put one drop into the space between the eyelid and the eyeball.

After you put the medicine in your child’s eyes, wash your hands again.

The medicine should be put into each eye ________ times a day starting __________ days before your scheduled eye exam. Do not use the medicine on the morning of the exam.

Special Precautions

If you use more of the medicine than is needed, your child’s face may look flushed or feel warm. This most often does not mean that your child is allergic to the medicine, but it means too much was used. If using the ointment, use a smaller amount for the next dose. If using eye drops, be sure to use only one drop in the eye. If this happens again, stop using the ointment or drops and call the Pediatric Eye Clinic.

While your child’s eyes are dilated, no special safety measures need to be taken. Your child may be a little light sensitive. Light will not damage or hurt the eyes, but you may find that your child squints more in the sunlight. Your child may be more at ease with sunglasses or a hat with a visor. Sometimes, eye muscle control may seem worse while the pupils are dilated. This will go back to normal after the ointment or drops wear off. Your child may still swim, run, and play during this time.
If any of the ointment or drops stay on your hands after you handle the tube or bottle, and you rub your own eye, your pupil may dilate and your vision may become somewhat blurry. This is the reason you should wash your own hands well after you put the medicine in your child’s eye.

Store this medicine in a safe place that is out of the reach of children. If it is taken by mouth, call the Poison Control Center at 1-800-222-1222.

If you have any questions please call:

UWHC Pediatric Eye Clinic: (608) 263-6414, 8:00 a.m. – 4:30 p.m., Monday – Friday. Nights and weekends, this number will give you the hospital paging operator. Ask for the Eye Resident on Call and leave your name and phone number with area code. The doctor will call you back. If you live out of the area, please call 1-800-323-8942.