DEPARTMENT OF HEALTH

Pupillary Light Response

Ages

Post newborn through 20 years.

Purpose

To check for the pupils' reaction to changes in illumination.

Description

Pupillary light response is checked as a light is briefly flashed into the eye.

Equipment

- Penlight.
- Visual acuity chart at 10 feet from the child's eyes.

Note

This test should be performed AFTER the visual acuity test, as the bright light creates dark afterimages that may have a negative impact on the visual acuity test.

Facilities

Room at least 12 feet long with low light.

Screener Qualifications

This test should be performed only by trained health care personnel, such as ophthalmic or optometric staff or nurses.

Procedure

- 1. Dim the room lights.
- 2. Instruct the child to look at the largest figure on the eye chart across the room or another large target that keeps the attention of the child away from the light.
- 3. Observe the size and shape of the pupils (they should be round and equal in size).
- 4. Turn on the penlight and shine it directly into the child's right eye at a distance of approximately 3 inches from the eye.
- 5. Observe the pupil size quickly decrease (constrict) in both eyes.
- 6. Move the penlight away from the eyes.
- 7. Observe the increased size of both pupils (dilate) after the penlight is moved away.
- 8. Shine the penlight directly into the child's left eye at a distance of approximately 3 inches from the eye.
- 9. Observe the pupil size quickly decrease (constrict) in both eyes.
- 10. Shine the penlight into the right eye and observe the pupil size (it should stay small).
- 11. In a smooth motion, swing the penlight (still on) to the left eye and observe the pupil size (it should stay small).
- 12. Repeat the swinging motion between the two eyes 2 or 3 times.

PASS

- Pupils dilate (get larger) when room light is dimmed.
- Pupils are round and equal in size, in both bright and dim light.
- Pupils quickly and symmetrically constrict to a bright light directed into either of the eyes and when the bright light swings between the two eyes.

REFER

- Unequal or sluggish response to light.
- Pupils unequal in size or not round.

Minnesota Department of Health Child and Teen Checkups 651-201-3650 <u>health.childteencheckups@state.mn.us</u> www.health.state.mn.us 01/2022

To obtain this information in a different format, call: 651-201-3650.