This examination is based on the objective recording of eye movements while the baby is watching a small grating drifting over the stimulation screen.

Visual acuity is estimated from the highest resolution of the grating that the subject is able to track.

Examples of the tests presented on the stimulator screen and corresponding to different visual acuities.

The image of the baby’s face is analyzed in real time.

A reflective dot positioned over the forehead is used to determine the head movements.

Eye gaze movements are measured from the position of the pupils relative to this reflective dot.

Compatible stimulators: MonCV3  MonPack One
Examples of examination result with the movement of the stimulus (grey color) and the eye movement trace recorded from a baby (red color).

This technique presents several advantages:

- it provides objective responses,
- it implies "central" vision,
- it's time effective
- it can be used at the youngest ages.

It can also provide information on the maturation of eye movements and detect eye movement disorders.

Références

- LENGYEL D., GOTTLOB I. Comparison between grating acuity measured by visual tracking and preferential looking in infants Strabismus, 2003, 11, 2, 85-93