

NYSTAGMUS

Nystagmus, often called "dancing eyes," is a continuous, involuntary jiggling movement of the eyes that make them appear to be doing a dance. The fine movements may be side-to-side, up and down, or even a rotational rocking. It may be exaggerated on looking to the side. Both eyes are usually involved.

A person who was born with Nystagmus is not conscious of the eye movement and cannot see them by looking in the mirror.

What causes Nystagmus?

There are several types of Nystagmus, and they have different causes.

Motor Nystagmus may appear in infants in the first month or two of age and can affect the development of good visual acuity because the eyes' continuous motion prevents quality retinal images from forming. It can be due to a defect in the brain's control mechanism for movement of the eyes, and may result from a birth injury, tumor, or a failure in normal brain development. The condition sometimes runs in families.

Sensory Nystagmus can occur when vision is extremely poor or absent, such as with very high myopia (nearsightedness) or hyperopia (farsightedness), albino conditions, congenital (present at birth) cataract, congenital glaucoma, congenital blindness, or abnormal development of the optic nerve and/or retina. This type also may appear as early as one or two months of age. (infants may continuously rub or poke at their eyes). Because of the lack of sight, the brain sends "searching" signals to the eye muscles, so the eyes continuously dance and rove, looking for an object to fix upon.

Other types of Nystagmus—more common in adults—are referred to as acquired Nystagmus because they did not exist during the early years of life. There may be double vision and blurring. If the double vision is incapacitating, it may be necessary to cover one eye with an eye patch. Causes include injury, medications, illegal drugs or alcohol, or it can be a sign of a disease, stroke, or tumor of the central nervous systems.

Examination

A complete eye examination will be made after the pupils have been dilated (enlarged) with eye drops. The exam will include visual acuity, the cornea, lens, retina and optic nerve, as well as eye movements. It is necessary to know if vision is reduced and also if a serious eye problem, such as congenital cataract or glaucoma, is present. A consultation with a neurologist may be recommended.

Treatment

Treatment depends on the type of Nystagmus, the cause, and the patient's age. For example, an infant who has Nystagmus that is related to a treatable disease such as congenital cataracts, may require surgery, which may in turn help the nystagmus. If reduced vision is the cause, improving vision with glasses and/or low vision aids may help.

Children with one type of congenital nystagmus have less nystagmus when they look in a certain direction. These children tend to keep their heads turned or tilted to achieve that particular eye position. In such cases, glasses with prisms or eye muscle surgery may improve the abnormal head posture and allow better vision.

In acquired nystagmus, improvement may be obtained if the problem is due to a tumor or medication, since medications can be changed, and a tumor may be treatable by surgery.

Medications, biofeedback, and eye exercises do not seem to have any beneficial effect on nystagmus.