Ophthalmoplegia | eye disorder | Britannica ~ with appreciation to Cathy Blank ~ references for AY 10 Covering the eyes

https://www.britannica.com/science/ophthalmoplegia

Ophthalmoplegia

Ophthalmoplegia, also called extraocular muscle palsy, paralysis of the extraocular muscles that control the movements of the eye. Ophthalmoplegia usually involves the third (oculomotor), fourth (trochlear), or sixth (abducens) cranial nerves. Double vision is the characteristic symptom in all three cases. In oculomotor paralysis the muscles controlling the eye are affected in such a way that the eye drifts outward and slightly downward and has difficulty turning inward and upward. In addition, the upper eyelid of the affected eye usually droops, a condition called ptosis, and the pupil may be enlarged. If the pupil is abnormally large, the possibility of a <u>cerebral</u> <u>aneurysm</u> arises. This can be associated with pain. Trochlear paralysis, involving another <u>muscle</u>,

the superior oblique, causes a vertical deviation of the affected eye. Abducens nerve paralysis affects still another ocular muscle, the lateral rectus, such that the affected eye turns inward toward the nose and cannot fully turn outward.

Muscles of the right eye

levator palpebrae superior superior oblique medial rectus lateral rectus inferior rectus

C Encyclopædia Britannik



A diagram showing the extraocular muscles of the right eye. The extraocular muscles control the movement of the eye and are themselves controlled by a variety of cranial nerves. Sometimes these muscles become paralyzed, and conditions such as ptosis (drooping of the eyelid) result.*Encyclopædia Britannica, Inc.* There are 12 pairs of cranial nerves that function to control the muscles and sense organs of the head and thoracic region. Several of these, including the third, fourth, and sixth nerves,

control muscles that move the eye.Encyclopædia Britannica, Inc. Ophthalmoplegia can be caused by congenital abnormalities, trauma, complications of viral infections, or disorders that affect the nervous system, including multiple sclerosis, cerebral tumours, migraines, and vascular (blood vessel) disease such as that associated with diabetes. Ophthalmoplegia can also occur as a complication of muscle disorders such as myasthenia gravis, although it is usually associated with other muscular symptoms. Treatment of ophthalmoplegia is directed at correcting any underlying disorders, if possible. In many cases, isolated nerve palsies resolve on their own over time, and treatment consists of patching the affected eye to <u>alleviate</u> any

transient double vision. Eyeglasses fitted with prisms or surgical intervention may be helpful for people with long-standing ophthalmoplegia.