

STRABISMUS AND AMBLYOPIA

Strabismus is the condition in which a person is unable to align both eyes simultaneously under normal visual conditions. When both eyes do not point at an object at the same time, it results in the appearance of one eye "turning" in relation to the other. This turning may be in, out, up, down. This eye turning may be constant, in which an eye turns all the time, or it may be intermittent. It may also alternate so that either eye turns at any given time. Besides the obvious turning of an eye, the individual with amblyopia has reduced coordination of both eyes, loss of stereopsis (depth perception), and may develop reduced vision in one eye (amblyopia).

There are many different causes of strabismus. The specific treatment is dependent on the specific type and cause. Strabismus can be treated at any age. Some factors favor younger patients, while compliance and motivation are more favorable with adults. Treatment typically consists of prescription lenses and prisms and a program of vision therapy. In certain patients, surgery may be recommended in conjunction with vision therapy. Surgery may cosmetically straighten the eyes, but does not typically improve visual function. The prognosis for optimal outcome in these cases is enhanced through pre and post-surgical vision therapy. Whether it is constant or intermittent, strabismus always requires treatment. It rarely goes away by itself nor will children outgrow it.

Amblyopia, more commonly known as "lazy eye", is a condition in which reduced vision, not correctable by glasses or contact lenses, will develop usually in just one eye. It is not due to any apparent structural or disease condition. It may be related to strabismus, since a turned eye generally loses vision to some extent due to disuse. Many patients with amblyopia may be unaware of the condition until they undergo a vision screening or a comprehensive vision examination. There are different causes of amblyopia and the treatment is dependent on the cause. In general, the treatment consists of the use of lenses and occlusion (patching) in conjunction with a vision therapy program. Patching of the non-amblyopic eye is more successful when it is part of an active vision therapy program.

For many years, it was thought that amblyopia could only be treated during the "critical period" of visual development before seven or eight years of age. Current research has conclusively demonstrated that effective treatment can take place at any age, but the length of the treatment period increases dramatically the longer the condition has existed prior to treatment. Research has also demonstrated that patients with amblyopia are more likely to sustain injuries resulting in the loss of their good eye than individuals with two good eyes. This is one of the many reasons that early childhood examinations are essential.

Members of the College of Optometrists in Vision Development (COVD) have post graduate education in the management of strabismus and amblyopia. Fellows in the College are certified and skilled in diagnosing and treating these conditions. For further information, contact COVD or consult with a COVD member optometrist.

This informational paper was produced by the College of Optometrists in Vision Development, which board certifies qualified optometric physicians in vision therapy. For further information, see our website, www.covd.org. WP3 Rev 1/2/08 ©2008