Youngsters with lazy eye feel less accepted by peers, less physically competent

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By Marilynn Larkin

NEW YORK (Reuters Health) - Lower self-perception of peer acceptance and physical competence are hallmarks of altered visual development in young children with amblyopia, researchers say.

Dr. Eileen Birch of the Retina Foundation of the Southwest in Dallas and colleagues studied healthy children with a mean age of 6.3 years (about half boys): 60 had amblyopia; 30 never had amblyopia but had been treated for strabismus, anisometropia, or both; and 20 children had no eye condition.

Participants' self-perception was assessed using the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children, which includes four specific domains: cognitive competence, peer acceptance, physical competence, and maternal acceptance. Scores for each domain range from 1 to 4, with higher scores indicating higher perceived competence or acceptance.

Fine motor skills, visual acuity and stereoacuity were also assessed in 33 of the children with amblyopia.

As reported online February 14 in JAMA Ophthalmology, compared with the control children, those with amblyopia had significantly lower mean scores for peer acceptance (2.74 vs. 3.11) and physical competence (2.86 vs. 3.43).

Further, among the children with amblyopia, self-perception of physical competence significantly correlated with aiming and catching skills (ability to catch a ball or bean bag) and stereoacuity.

Children treated for strabismus or anisometropia, but who never had amblyopia, also had significantly lower mean scores for physical competence compared with controls (2.89 vs. 3.43), suggesting that "discordant binocular visual experience, not amblyopia, is influencing children's self-perception" in this realm, according to the authors.

Commenting by email, Dr. Evelyn Paysse, a pediatric ophthalmologist at Texas Children's Hospital in Houston, told Reuters Health, "We should use this knowledge to aggressively treat amblyopia and minimize the consequences. We need to bring awareness of the psychosocial consequences of amblyopia in addition to the visual consequences to pediatricians, family practitioners, teachers and school nurses."

"It is most important to bring awareness of the psychosocial consequences to parents," she added, "so that they hopefully will be more compliant with our treatment regimens, understanding the more global deficits that children and adults with amblyopia suffer from."

Ophthalmologist Dr. Catherine Olson Jordan of Nationwide Children's Hospital in Columbus, Ohio, pointed out in an email that while the statistics seem valid, the group sizes were uneven and fine motor skills were tested only in the children with amblyopia.

Also, she told Reuters Health, "The conclusions would have been much stronger if they used a group of children who wore glasses but didn't have amblyopia or amblyopia risk factors as the control. That way, glasses wear alone could be eliminated as a source of altered peer acceptance and physical competence."

"Clinically, this is not going to change how I treat my patients or counsel their parents," Dr. Jordan said. "Amblyopia is very important to treat early and treatment will involve patching or atropine drops and depending on the type, may also involve glasses or surgery."

Ophthalmologist Dr. Ming Wang, founder of the Wang Foundation for Sight Restoration in Nashville, Tennessee, told Reuters Health by email, "These results do seem to correlate with my own experience. The visual system truly guides development early in life (and) those with impaired vision are often likely to have some developmental delays versus those with average vision."

That said, he added, "The study looks at general trends and (the results) are not representative of every individual experience. A child with a visual impairment and very involved parents may still develop to a high level relative to their peers without vision impairment. However, it is an additional barrier that must be overcome by that child."

"Clinically, the study verifies the importance of early diagnosis and intervention in cases of visual impairment," he noted. "Too little emphasis is placed on children having eye examinations. This is unfortunate, as treatments for amblyopia are very effective if started at a young age, preferably under age 7, and are less likely to be successful the older the child is."

Dr. Birch did not respond to requests for a comment.

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