

Ambient Lenses for Autism and Other Types of PDD

by Melt.in Kaplan- O.D.

A recent study supports the use of ambient lenses to improve posture, head tilt and coordination in autistic youngsters. The lenses have also been reported beneficial for children with other types of Pervasive Development Disorders (PDD).

Therit Robetson was diagnosed with PDD at age 2 years 10 months. Language, as well as gross and fine motor skills, were significantly delayed. He had poor balance, dragged a foot when walking, and often fell for no apparent reason. Therit did not make eye contact with others and lacked normal social skills. Shortly after the diagnosis he began speech language and occupational therapy.

Therit's occupational therapist suggested there could be a problem. "After trial and error in searching for the right person we ended up in the office of Dr. Mel Kaplan" explained his mother: Ann. During the initial evaluation different lenses were placed on Therit as he did various such as standing on a balance beam: looking at TV: and trying to catch a ball swinging on the end of a string- We knew which glasses were right: because when they were on he straightened his body. And his head, which was usually tilted to one side was straight. Also without the lenses when the ball was swinging he would bat his hand in the air as if trying to catch bubbles. With proper glasses he could reach out and actually grab the ball. It was amazing."

Therit soon grew accustomed to wearing his lenses: and wears them at age five- Ann explained that Dr- Kaplan also prescribed vision exercises but they did not seriously pursue them. After several months she noticed that Therit had plateaued in his progress: so they began taking him to Dr- Kaplan's office once a week for vision training and they followed up with consistent daily practice at home. "We then saw tremendous changes" Ann said "We realized Therit really had no map of his body. If he lay on the floor and I touched his right arm and left leg and asked him to lift them up, he couldn't. He also was not able to imitate or mimic others and he didn't participate in games. But with these exercises and the glasses, he became much more social, developed eye contact and improved even more in motor activities. His awareness of space was much better. He made progress in all areas once the vision problem was thoroughly addressed

Therit no longer requires occupational therapy but continues to need language development therapy. A weakness in auditory discrimination has been observed. He is mainstreamed his pre-kindergarten program with an assistant.

Melvin Kaplan, O.D., of the Center for Visual Management: explains that children with autism or PDD frequently display abnormalities due to visual distortions in the way they perceive their environment. The aspect of vision involved in spatial organization — related to body posture, locomotion, and the perception of self-motion — is referred to as ambient vision. The public is more familiar with a separate visual system known as focal or acuity vision. Ambient lenses, often referred to in the literature as conjugate prisms, yoked prisms, or performance or transitional lenses, can be used to help modify ambient vision. They are distinct from "prism glasses," which are also recommended

for autistic children by some professionals.

In the study: a group of 14 children in a program for the developmentally delayed in Montreal, all independently diagnosed as autistic, were observed and videotaped for head position, body posture, facial expression and ball catching prior to and during ambient vision correction. Head tilt, body posture, and ball catching improved significantly.

"It is beneficial to augment ambient lenses with 'visual training- In Therit's case:" said Dr. Kaplan: "the lenses helped change his orientation in space. But he could not sustain the attention required for fun visual-motor adaptation- The use of visual-motor exercises along ambient lenses leads to a higher level of functioning.

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