

MEMORIAL HERMANN'S CENTER for VISUAL REHABILITATION

HELPS PATIENTS ADAPT TO CONGENITAL VISION LOSS

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Ask 10-year-old Maya Munoz what she likes about Bhavani Iyer, O.D., and she answers without hesitation: “She will tell you the whole thing. She’ll give you a straight answer. She doesn’t just send you on to another doctor.”

Maya and her parents Selene Ballestas and Edwin Munoz saw seven ophthalmologists before they were referred to Dr. Iyer at the Center for

“With correction, Maya’s vision is only 20/100 in the right eye and 20/80 in the left eye,” says Dr. Iyer, a certified low-vision specialist who is director of the Center for Visual Rehabilitation. “During the initial evaluation, I asked her parents how well she does in school. Her father said, ‘I think she’s smart and could do better if her vision improved.’ This is an answer we often hear from parents. Kids who are



Dr. Bhavani Iyer fits Maya with bioptic telescope lenses.

Visual Rehabilitation at Memorial Hermann-Texas Medical Center in December 2009. Diagnosed with congenital nystagmus at the age of 6 months, Maya had trouble reading, seeing the chalkboard in school and recognizing faces. She was referred to Dr. Iyer following evaluation by Robert Feldman, M.D., professor and chair of the Richard S. Ruiz, M.D. Department of Ophthalmology and Visual Science at The University of Texas Medical School at Houston and Richard S. Ruiz, M.D. Distinguished University Chair in Ophthalmology.

visually impaired take longer to complete tasks because the individual is heavily focused on interpreting the images rather than just comprehending them.”

Formerly a good student at the Valley West SMaRT (Science, Math and Robotic Technology) Academy Magnet Program, Maya started losing ground in grades in the fall of 2009. “Until we met Dr. Iyer, we didn’t understand the magnitude of Maya’s problem,” Selene Ballestas says. “Because school and homework were not pleasurable for her, she was developing a tendency to day-dream. Once we really understood how little she could see and what Dr. Iyer could do to help, we held a fundraiser with friends to help cover the cost of

equipment that would help her see. Our insurance doesn't cover vision."

Friends donated gifts for a silent auction, and the Ballestas-Munozes sold more than 300 plates of barbecue, raising funds to help pay for Maya's devices. Dr. Iyer fitted her with a bioptic telescope equipped with lenses that immediately focus on the object of vision. Portable and lightweight, the telescope improves Maya's vision to 20/25 in each eye. She underwent training with Lind Stevens, O.T.R., the Center's occupational therapist, to learn how to walk with the telescopes, which are mounted above the line of sight.

"Patients who are younger, especially those with congenital nystagmus, tend to respond well to telescopes," says Dr. Iyer, a clinical assistant professor in the department of Ophthalmology and Visual Science at the UT Medical School. "The bioptic telescope will give her a lot of flexibility now and in years to come. It opens up the possibility of

qualifying for a driver's license, although we don't know what her field of vision will be."

She also introduced Maya to a video magnifier - a closed-circuit television (CCTV) - that enlarges text and other objects. "When I enlarged images for her on the CCTV, it opened a whole new world," Dr. Iyer says. The Acrobat CCTV, a flexible three-in-one video magnifier that enables near, distance and self-viewing, has a detachable camera that rotates 340 degrees and allows Maya to project the images she wants to see on a video monitor.

"These are tools she'll be able to use for the rest of her life," the optometrist says. "She can have a video monitor at home and one at school and carry the camera with her when she goes from place to place. We give our patients the opportunity to be trained on these leading-edge devices in our clinic so that they can make the right personal selection. There are very few centers for visu-

Dr. Bhavani Iyer observes as Lind Stevens, O.T.R., instructs Maya Munoz using the CCTV.



al rehabilitation that offer the options we offer our patients. We also work with the Texas Department of Assistive and Rehabilitative Services for patients who qualify for those services.”

Dr. Iyer and Stevens also worked with Maya’s teachers to help them design accommodations for her needs, instructing the school on the critical print size to be used for Maya’s course material.

“Children are rewarding to work with because they’re so grateful. Whatever you give them is so much better than what they’ve got,” says Dr. Iyer. “We always work with our patients to find visual aids that are discreet. We gave Maya the option of a telescope that was much smaller and flush mounted, but the field of view wasn’t as wide. In the end, Maya picked function over appearance.”

“We’ve never presented Maya’s visual problems to her as a deficiency,” Ballestas says. “She’s a very free spirit, a real Punky Brewster personality. When we asked her how she feels when kids comment on her telescope, she told us she’s not too concerned about what people think.”

Edwin Munoz says the family is committed to raising awareness of nystagmus. “Until we found the Center for Visual Rehabilitation at the Cizik Eye Clinic at Memorial Hermann-TMC, we weren’t getting any answers. The Center was extremely helpful. After years of being told nothing could be done for Maya, this has been a great experience.”

“Like many of the people referred to the Center for Visual Rehabilitation, Maya’s parents were unaware of the availability of visual rehabilitation services,” Dr. Iyer says. “That’s something we hear over and over again from patients: ‘Why didn’t we hear about this sooner? I didn’t know I had this option available to me.’ The higher the level of awareness about options for visual rehabilitation and the earlier patients get to us, the greater the chance of improvement.”

ABOUT THE CENTER FOR VISUAL REHABILITATION

The Center for Visual Rehabilitation at the Cizik Eye Clinic at Memorial Hermann-Texas Medical Center began as the Memorial Hermann Low Vision Unit, originally occupying only one room. As the list of patients grew, along with the list of services offered, so did the need for space. Today, the Center occupies 800 square feet on the Memorial Hermann Medical Plaza’s 19th floor, and at any given time has a client list of about 25 to 30, ranging from children to elderly patients.

The Richard S. Ruiz, M.D. Department of Ophthalmology and Visual Science at The University of Texas Medical School at Houston has always offered low vision services, but the opening of the Center in May 2009 marked the first time a comprehensive visual rehabilitation program was offered. The Center received strong support from Richard Ruiz, M.D., then chairman of the department of Ophthalmology and Visual Science, and from his successor, Robert Feldman, M.D.

“To get a program like this up and running is very cost intensive,” Dr. Iyer says. “It’s a low-volume, high-value program.”

The ergonomically designed facility uses a range of tools, from high-tech devices such as the Dynavision™, which helps with eye-hand coordination, peripheral vision and tracking skills, to simple but effective aids such as portable magnifiers, talking watches, telephones with enlarged keys and the closed-circuit television, which allows patients to project an enlarged image of what they want to see on a video monitor. Visually impaired patients can learn how to cook and be independent in the Center’s fully equipped adaptive kitchen.

The Center offers visual rehabilitation services for all ages and diagnoses ranging from congenital conditions to acquired conditions such as age-related macular degeneration, glaucoma and stroke-related vision loss. For more information about the Center for Visual Rehabilitation, contact us at 713.559.5200 or visit the Center’s website at www.cizikeye.org.