

Institute's Youngest Patients Benefit Most from Doctor's Change of Major

Audina M. Berrocal, M.D.

It seemed natural that Audina M. Berrocal, M.D., would become an ophthalmologist. After all, her father, Jose Berrocal, M.D., was Bascom Palmer's first trained retina specialist, and the first retina specialist on the island of Puerto Rico. Her older sister, Maria Berrocal, M.D., already was following in his footsteps.

Laser treatment on tiny babies is a delicate procedure requiring exceptional skill. "Experience is key," Berrocal points out. "The physician has to be very experienced with the procedure and comfortable with children."

But that didn't guarantee a future in ophthalmology for the youngest of the Berrocal children. Audina Berrocal pursued a different path, earning an undergraduate degree in political science from Princeton University.

Things changed however, after Berrocal spent a summer working in Congress.

"I learned politics just wasn't for me," she says. "So I changed course and went into medicine."

That change included earning a medical degree from Tufts University, completing an internship at St. Vincent's Hospital in New York City, a residency in ophthalmology at Tufts University Medical School and a vitreoretinal and uveitis fellowship at Bascom Palmer.

Today, Berrocal, a retina specialist like her father, is assistant professor of clinical ophthalmology and medical director of the Retinopathy of Prematurity Service at Bascom Palmer. Many of her patients are premature babies, born as young as 23 weeks, (a full term pregnancy is 40 weeks), babies who just 20 years ago, would not have survived.

Few ophthalmologists are willing to treat children with retinal disorders, Berrocal says, calling her specialty a "rare sub-sub specialty." Medical and legal issues, combined with the challenges of working with children in difficult situations, are largely behind the critical shortage of specialists like herself and her colleagues at Bascom Palmer.

In addition to pediatric retinal conditions, Berrocal also treats adults with a full range of vitreoretinal diseases, often performing delicate surgery to treat those patients. Berrocal sees her youngest patients, premature babies, in the Neonatal Intensive Care Unit at University of Miami Miller School of Medicine/Jackson Memorial Hospital. These are the patients at risk for retinopathy of prematurity (ROP), a condition in which developing blood vessels in the retina grow wildly, producing scars and potentially leading to retinal detachment and permanent blindness. The condition only affects premature babies. Regardless of how early a baby is born, the condition cannot be diagnosed until a baby reaches 32 gestational weeks of age. Premature babies born at less than 26 weeks are at greatest risk for the disease.

According to Berrocal, premature babies born after the 26 week-threshold may still develop ROP, but typically only a mild form of the disease. Those children are closely monitored through weekly or biweekly visits, but are not treated otherwise because the condition will generally take care of itself by the time they reach 40 weeks—their supposed birth date. Children born at less than 26 weeks and showing signs of the disease undergo aggressive laser treatment, often more than once, to quiet the growth of the vessels.

Highly effective results can be achieved with laser treatment on tiny babies. "Experience is key," Berrocal points out. "The physician has to be very experienced with the procedure and comfortable with children. Exceptional results make the challenges of her work worthwhile."



“If I can save the retina, these children will have 70 years of vision. I take that very seriously. I am not only impacting a child’s life, but the life of the family as well.”

Though some children who undergo laser treatment eventually become myopic (near-sighted) or develop amblyopia (lazy eye), their vision is saved. “If using the laser means saving their vision, we’ll take it,” adds Berrocal. When children are referred with advanced ROP, presenting with a partially or fully detached retina, Berrocal performs surgery to reattach the retina. The earlier that surgical intervention takes place, she says, the better the outcome for the patient.

When she’s not in the office, Berrocal spends time with her family. “I think I’m a better Mom because I like what I do so much. My kids really do get the best of me.” She and her husband Steve, also a physician, have three daughters, ages 4, 2 and a newborn.

“After I had children my whole world changed. Having children makes my work more relevant,” she says. “I know I can do my job well and have a positive impact.”

Doing her job well includes relating to parents, many who are not only frightened about a particular retinal condition, but also dealing with a multitude of medical issues. Their involvement is crucial. “It’s not always about being smart,” she says of the parents. “It has to do with caring. If they care, they will become educated and do what they need to do.” For many of her patient’s parents, that means ongoing and continual follow-up to monitor progress and check for related conditions and complications.

Luckily for so many of her patients, Berrocal discovered her calling for ophthalmology long ago. “Seeing these kids come back with vision is the most rewarding thing of all,” she says. “It doesn’t get any better than that.”