On the Learning Curve

The Physician as Teacher

BY LEE SAVIO BEERS, M.D.

I just returned from the Pediatric Academic Societies' annual meeting, where there is much time devoted to resident and student education. There are many innovative and exciting initiatives going on in this area, but the reality is that many pediatricians aren't in a practice or an area in which this type of education is occurring.

That does not mean, however, that many pediatricians are not teachers. All pediatricians are teachers, whether the students are residents, medical students, patients, families, office staff, or community members—just to name a few.

However, residency programs often do not prepare their graduates for this responsibility. Even though residents have supervisory duties and requirements, most are just thrown in and left to figure these things out on their own. There is very little formal instruction on teaching given to residents and medical students.

So, how do you, as the average pediatrician, refine and improve your teaching skills? First, develop an awareness of when and where you teach. Think about your daily encounters in a new light. Did you spend 5 minutes teaching your new office assistant about why it is important for asthmatics to receive a yearly flu shot and thus stressing how important those reminder calls are? Did you talk to a family in the nursery about what the results of the newborn hearing screen meant? Did you write an article in your practice's newsletter? These are all teaching opportunities that may or may not have been effective, depending on the interaction.

Next, think about areas in which it might be beneficial for you to provide more teaching. As an example, when I was in my first position as a pediatrician after residency at a very small naval hospital, I was responsible for the newborn nursery. I quickly realized that many of the staff members were very young and few had any experience caring for newborns. Many had no idea how to even change a diaper or prepare a bottle. The Neonatal Resuscitation Program already was in place; however, there were still many unmet needs for the staff.

I began by doing one-on-one teaching with individual staff and then developed a 4-hour newborn-care course that ultimately was required for all staff working in the nursery. I recruited family practitioners and more experienced nurses to assist me in teaching, and we held this course quarterly. While it sounds like a lot, it actually was very easy to implement and took relatively little time. The most important step was to identify a need and acknowledge myself and other providers as teachers—even though there was not a medical student or resident in sight.

Finally, assess your skills. There are many structured instruments around that assess both teaching skills and teaching style, but it can be done more simply. Do your patients generally seem to understand your instructions or do they say later, "Oh, I didn't realize I was supposed to do that"? Do you ask if they understand? Try asking them to repeat the instructions back to you to assess truly what they have heard. Does the behavior of your office staff change after you have taught them about something that affects office practice? If not, what seem to be the barriers?

Familiarize yourself with andragogy (the principle that adults are self-directed and expect to take responsibility for their decisions) and adult education principles and think about how you do or don't implement them into your teaching. (While there are many others, Malcolm S. Knowles is one of the classic authorities on these topics.) It also is critically important to assess the cultural competency of your teaching methods and style—your teaching never will be optimally effective unless you take this into account.

After you have done all of this, consider ways in which you may improve your skills. Many hospitals and universities offer faculty-development workshops. Most professional organizations have faculty-development resources you can take advantage of as well, and some even have more in-depth training opportunities. You also can seek out additional reading in the areas of medical education—there are several journals devoted specifically to this topic.

Most importantly, don't neglect your role as a teacher. Teaching in all arenas can be rewarding and can improve patient care, office performance, and your community impact. ■

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Lack of Screeners May Thwart Revised Guidelines for ROP

BY DAMIAN McNAMARA
Miami Bureau

MIAMI — A shortage of ophthalmologists willing or able to screen for retinopathy of prematurity is hampering implementation of updated guidelines released last year, Dr. Roberto Warman said at a pediatric update sponsored by Miami Children's Hospital.

"There is a major manpower crisis in management of retinopathy of prematurity. Because of liability concerns, very few ophthalmologists are interested in screening these babies and even fewer are willing to treat," said Dr. Warman, director of the division of ophthalmology at the hospital.

The revised screening and treatment guidelines contain some "important changes," Dr. Warman said. "The most important issue is gestational age." All premature infants born at a gestation of 32 weeks or less or weighing 1,500 g or less should be screened. Select infants born with a birth weight from 1,500 g to 2,000 g and an unstable clinical course also should be screened.

Timing is important because retinopathy of prematurity (ROP) is a progressive condition if left unchecked. The guideline authors wrote, "Effective care now requires that at-risk infants receive carefully timed retinal examinations by an ophthalmologist who is experienced in the examination of preterm infants for ROP and that all pediatricians who care for these at-risk preterm infants be aware of this timing" (Pediatrics 2006;117:572-6; erratum Pediatrics 2006; 118:1324).

Target the first exam for 4-6 weeks of age, Dr. Warman said. This will be approximately 31 weeks since last menstruation for infants born at 22-27 weeks of gestation. The guidelines recommend a topical anesthetic to reduce discomfort, pupil dilation, and then binocular indirect ophthalmoscopy to detect ROP.

"We have a small window of opportunity to treat," Dr. Warman said. If the initial exam unequivocally demonstrates that the retina is fully vascularized in both eyes, then a second examination is not required.

Otherwise, the guidelines recommend close follow-up—the timing and frequency of which is determined by the degree and location of initial retinal findings. The guidelines were updated by the American Academy of Pediatrics, the American Academy of Ophthalmology, and the American Association for Pediatric Ophthalmology and Strabismus in February 2006.

ROP occurs only in immature retinal tissue. The condition can progress to tractional retinal detachment and functional or complete blindness. "We are trying to prevent a patient with scars in the retina. Although the retina is not detached, scars can cause serious visual impairment," Dr. Warman said.

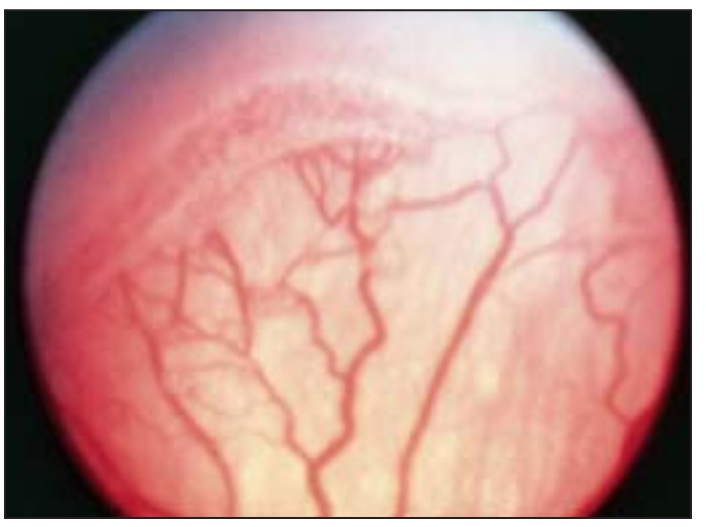
A marked decrease in the incidence of adverse outcomes is possible with advancements in peripheral retinal ablative therapy using laser photocoagulation, the authors noted.

Tight oxygen level monitoring in the hours after birth is another recommendation, Dr. Warman said.

"Still the best thing we can do is keep oxygen levels within guidelines in the neonatal intensive care unit and have great nursing to monitor well."

Retinal detachment surgery is now performed during active disease, Dr. Warman said. "But this creates a problem because very few specialists are willing and able to do this surgery in these tiny patients."

Direct injection of vascular endothelial growth factors is being performed in other countries "with great results," Dr. Warman said. This area of research is "very exciting," he added. A study sponsored by the National Institutes of Health to assess the safety and efficacy of this therapy is scheduled to start soon. ■



Timing is important because ROP is a progressive condition if left unchecked, as seen in this Stage 3 disease.

Here is an example of ROP with scarring in the posterior pole with cicatricial changes and with dragging vessels.

PHOTOS COURTESY DR. ROBERTO WARMAN