

June 13, 2011

I could read the look of anxiety and hesitation written on the mom's face. She, in her pink track suit and a pink scrunchie, holding together her frazzled hair, looked at the retinal photos of normal eyes versus her baby's diseased eyes. Dr. Gordillo, the hospital's pediatric ophthalmologist, had discussed with both parents that their baby had severe retinopathy of prematurity (ROP) and now required treatment to prevent potential blindness. The mom immediately consented to the treatment, but the dad adamantly refused. He said he would seek a 'second opinion back at home.' However, his home hospital was reached only by a 4-hour car ride, and had no ophthalmologists who were able to treat the ROP. By seeking a 'second opinion,' the dad was essentially abandoning the idea that his baby could be treated for blindness. Also, ROP was a time-critical disease that if not treated appropriately, could lead to blindness.

With the help of the RetCam images that one of the nurses took, we educated the anxious mom about her baby's eyes. We showed a normally developing retina versus her baby's retina with severe ROP. After much discussion, the mom decided to buck cultural tradition of subservience to the husband and consented for treatment and convinced her husband.

During my 2 weeks in Lima, Peru, Dr. Luz Gordillo and I trained 7 nurses from 4 different hospitals in Peru on retinopathy of prematurity and using a digital retinal camera. This camera is used to photo-document the progression of ROP in neonates, and can be used to educate parents and staff, and for telemedicine. The 4 hospitals in Cusco, Callao, Piura and Lima had each purchased a RetCam 3, camera equipment that costs \$150,000 each. However, the pediatric ophthalmologists did not have the time to actually use the camera to screen for ROP. Seeing this gap, Dr. Gordillo and I devised a training session for the neonatology nurses, so that they could facilitate the screening through imaging, and also standardize and educate the doctors in their diagnosis of ROP. During my year-out doing research at the University of Pennsylvania as a Doris Duke fellow, I had become very proficient at both the technology and the imaging using this camera and was able to fill in this gap. It is important to note that I have no financial interest in Clarity, manufacturer of the cameras, nor was I supported in any way through them.

During the 2 weeks of training, I reviewed the pathogenesis of ROP and the progression of disease using retinal photos. We also learned by practice the imaging of babies. I had little to no Spanish, so in the beginning, I spoke in English while Dr. Gordillo translated. By the end of the two weeks, the nurses and I were able to communicate in the mix of Spanglish, motions, and key words, especially when we imaged the babies, without the help of Dr. Gordillo. My Spanish vastly improved, and this trip instilled in me a desire to learn Spanish for my future Hispanic-American patients.

In addition, I had the opportunity to meet with Dr. Patricia J. Garcia, the dean of the Public Health school at the Universidad Peruana Cayetano Heredia in Lima, Peru. In our meeting, I surveyed the school's current program for medical students in global health. There is a 6-week intensive immersion program that begins in June of every year, with learnings in medical Spanish, Peruvian culture, and global health systems, along with a research project. Then it is followed by a 2 week course in Spanish on global health systems. This program would be ideal especially for those medical students interested in global health, Spanish language, Peru and/or those with a free June/July summer, like either those who completed their first year of medical school and/or those 4th year medical students with flexible summer schedules.

During this meeting with Dr. Garcia, I learned about the Peruvian healthcare system, divided broadly into the National healthcare for the poor, the Sealed system for the employed, and the private clinics for the rich. Learning about these three systems was fascinating. In the U.S., we have been struggling with

lack of universal healthcare, with over 40 million U.S. citizens lacking insurance and our fiscal budget has been overloaded with paying for Medicare for the elderly and Medicaid for the poor. While recent national efforts have been made towards universal healthcare, the transition from the private insurance to universal insurance will be difficult. It was fascinating to see the Peruvian healthcare system that essentially provides universal healthcare but in different degrees, but still is lacking in a systemic solution that benefits all their citizens.

Finally, I appreciated the Peruvian culture, food, language and the friendliness of the Peruvian people. The nurses in my training course really embraced me as one of their own, despite the language barrier, and were so eager to learn more about ROP, the retinal camera, and ensuring that these babies did not become blind from the preventable disease.

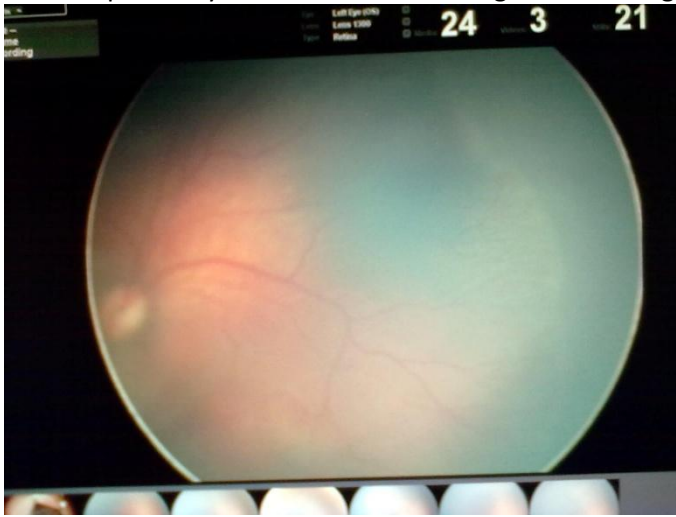
Teaching the nurses on the computer aspects of the retinal camera



Teaching how to image a baby's eye



A retinal photo – you can see on the far right of the image a ‘ridge’ showing ROP disease



Myself (in white), Dr. Gordillo (standing 4th from the right) and the rest of the nurses

