Sight for the Sightless
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A few years ago, I got back from an intense week serving on a medical mission through the Sight for the Sightless Initiative based at KK Eye Institute in Pune, India. This was a very different experience from any of my ORBIS missions or my Zambia mission in many respects. India is fascinating from a medical perspective in that it has first-rate physicians with some centers comparable to those of America, but the population has masses of patients who have the health status of those in developing countries. The country is in transition, with highly capable medical personnel & infrastructure who are simply overwhelmed by the sheer number of those in need, as well as hobbled by a lack of top notch equipment, instruments, and supplies.

For background, there are likely 20 million patients with at least one blind eye from cataract in India and about 8 million with corneal blindness. There are only 13,000 ophthalmologists in India, as opposed to 18,000 ophthalmologists in the US (which has only a quarter of the population). From a corneal perspective, donor tissue is much less available in India (unfortunately there is not as yet a well-developed culture of donation on passing away). With these facts in mind, my objectives for the week were to do both service in terms of medical and surgical treatment of cornea and complex cataract conditions and skills transfer in advanced techniques and technology.

It was a physically grueling and emotionally exhausting week. With lectures, clinic, and surgery, we got done pretty much at 8 or 9pm each day (starting each day at 8am). Business dinners on future planning and needs followed, so I pretty much was going on 5 hrs of sleep each day. The most poignant moment occurred in clinic on the first day during which we saw about 20 kids from the local blind school. For most of these children, I was a decade late and a dollar short. While I am a bit of a dinosaur

in medicine (having finished medical school before the Internet and residency before cell phones), I was confronted by even more ancient demons this past week: children who had scarred corneas following measles infection when they were infants, children with wrecked eyes from Vitamin A deficiency. There are few things more heart-wrenching than telling child after child there is nothing we can do. There were 3 children who we thought we could help so we proceeded with transplantation later in the week.

Over the next several days, we performed (3 of these were children, the rest adults):
• An artificial cornea on a child who had lost one eye, and had a badly scarred cornea (barely able to see motion) in the remaining eye that was not a candidate for a standard transplant
• A combined cornea transplant with cataract extraction
• A partial thickness cornea transplant of the front of the cornea
• Two partial thickness transplants of the back of the cornea (one combined with cataract removal)
• A full thickness cornea transplant
• Several hard cataract cases and some amniotic membrane procedures

By comparison, I usually do 1-2 transplants a month in the US. These were all challenging cases given the complexity of the tissue damage on the eyes and the circumstances of available and (unavailable) equipment. But the best part (in addition to fixing the conditions and hopefully helping the patients) was teaching. I spent a lot of one on one time at the Institute with a very talented surgeon, Dr. Kapoor, and it was very rewarding to see her rapid progress over the course of the week mastering the techniques of chopping cataracts and picking up key elements of cornea transplantation. We also did some live surgery teaching the surgical maneuvers of some complex cataracts and the artificial cornea to a group of local ophthalmologists,

and there were several excellent interactive small group sessions, surgeon-to-surgeon.

All in all, it was a fantastic trip. I hope my fellow ophthalmologists and those interested in vision care will join the fight against needless blindness by contributing their time to service and teaching and making a difference where both short and long-term impact can be made. I also hope that developing societies, as they develop, will focus resources on preventing needless blindness through awareness, encouraging eye donation, and fighting diseases like the measles and malnutrition. Saving and restoring vision is probably one of the most important and cost effective things we in health care and societies as a whole can do. Especially for children, who are all too often neglected in the developing world.