Africa Fleet Mercy 2018 Cameroon



28 Feb 2018 Postcard 3 How it Works

If you are a blind person in Cameroon, within about 2 hours of the Port of Douala, and your blindness is due to treatable cataract, then now is your chance for free eye care. Just like flying Southwest, there are some lines you have to wait in, and you have to take a number.

Primary Screening



Pat Broyles and Dan Twelker are just back from VOSH Hermosillo and I suspect that the above sight is very familiar to them. Large numbers of people reporting for eye screening.

The goal of primary eye screening is to identify patients with bilateral (both eyes) blindness, where one eye is likely to benefit from cataract surgery. If someone is blind in both eyes, and someone else sees well in one eye and is blind in the other, it makes sense to first get as many people seeing with at least one eye, and then, if there is time, do the second eye.



Larina runs the primary screening team. She can speak some French, but the other members of her team are at minimum bilingual (English and French). Together they sort through the patients to identify candidates for surgery.



Larina is Certified Ophthalmic Assistant (COA) at the bottom of a funnel that collects people whose pinhole vision is 20/200 or worse in both eyes. She then does a hand-held slit lamp exam to check for cataract. Approximately one person in ten that comes to the primary screening is bilaterally blind. Of course that means that 9 in 10 patients have some other form of vision impairment, perhaps treatable, but the goal is to identify surgical patients, not patients who need glasses. So, the 9 in 10 that are not surgical candidates are identified fairly quickly and don't spend all day waiting for a pair of sunglasses or a bottle of artificial tears.

Secondary Screening



Secondary screening occurs on the grounds of a government hospital (Hôpital Laquintinie) near the Africa Mercy. (4.048139, 9.701687 for the curious).

On the hospital grounds is a clinical facility that was purpose-built by Mercy Ships for the Cameroon mission. It is a very nice facility for both Vision and Dental.

Here is the Vision Center:



The vision center has clean power and air conditioning. It is equipped with several slit lamps, two YAG lasers (more about those to follow), lens meters, refracting lanes (trial lenses) and a surgical scheduling office. Sort of the outpatient care facility.



There is outside waiting (shaded with benches and water) so that the patients that are inside are actually doing something. It is well staffed by a bilingual local crew.



Theresa Loubassa is a Norwegian Optometrist who runs the secondary screening program. Her job is to examine the patients whose primary screening exam suggested that they may benefit from surgery. She works in a very nice, purpose built facility on the grounds of a hospital that is relatively close to the Africa Mercy ship. About 8 of 10 that come to see her are approved for surgery from an ophthalmic stance. They still may have medical issues that would prevent safe surgery. The biggest worries seem to be uncontrolled hypertension, uncontrolled diabetes, active infection somewhere (wounds are common), and cough that would prevent laying still for surgery.



Marilyn Neville does the surgery scheduling. Thank goodness it is not Cerner based. Good old Microsoft Access. Once through secondary screening, the patients will be given a date, perhaps months in advance. A lot can happen during that interval. So, the patients are given a date for their surgery, and they return to the Eye Clinic early AM on the appointed day. Transportation is the responsibility of the patients and their families or sponsors.

On the day of surgery, some patients do not show up (surprised to hear this?). That creates holes in the schedule that are filled with patients who presented for secondary screening and who are fit for proceeding with immediate surgery. It seems like of 16 to 20 patients scheduled each day, about 4 typically do not show and the slots are filled after lunch by patients who were screened in the morning.

Day of Surgery Team



Kim Strauss runs the day of surgery team. I believe that the flow is something like this: when patients arrive at the ship, their first stop is a pre op medical evaluation in the tents at dockside



These are not just any popup tents. They are built like Zodiac boats – pressurized self supporting structures that are air conditioned and very pleasant inside. And they are anchored down – not jumping castles at all. Additionally, there is a set of ribs that form a second roof that provides shade. I'm surprised I haven't seen these in Black Rock City.

Some magic happens here. Patients show up with high blood pressure (around here a "high" diastolic is over 105). Some can be tuned up. The "dockters" (ha ha) do their magic and the patients that are cleared make their way up the gangway about 3 stories, then through a lobby, then down a flight of stairs into the Eye Waiting room where they are given dilating eye drops and all the pre-op tasks that accompany safe surgery.

Operating Room



It is a very big and very diverse operating room staff. The two eye operatories are equipped with anesthesia machines, but the only patients who get general are pediatric cataracts.



I think these are all the permananet supervisory staff of the Operating Rooms. Two surgeons snuck in: Dr Strauss and Dr Christianne.



Nearly all the patients have an "across the room" diagnosis of cataract. We do safe surgery practice, reading the arm bands, paperwork, consent, lens selection, pre and post brief, allergies etc. It is a careful operation. At the beginning of the day everyone has a briefing and introduces themselves. Every day someone new is either scrubbing or circulating. The average tour is two weeks for nursing staff. That is a LOT of turnover.

Surgery

Lots of things happen during surgery that many of you may find interesting and others just don't want to know about. Let's just say that lots of sharp pokey things are applied to the eye with care and good stuff happens as a result.



Please google MSICS (Manual Small Incision Cataract Surgery) if you would like to see the details. While the procedure is manual, the equipment requires care and it is a challenge to bring a scrub nurse up to speed in a day. Most are coming from other than eye rooms.



Our knives are small and sharp. It is a different skill set. Thankfully everyone takes care and the permanent staff are superb at orienting new team members.

Post Op Care

Woody Hopper OD is the optometrist who partners with Dr Strauss and provides the majority of post op management.



Using eye drops is problematic. Often they become contaminated, often are sold rather than used, and often don't seem to be given as directed upon close questioning. For this reason, TriMoxi (a combination of antibiotic and depot steroid) is given as intravitreal injection at the end of the case, along with intramcameral ceftriaxone, and depot steroid subtenons injection. The goal is to minimize the need for eye drops. Still, about 25 percent of the patients are prescribed additional steroid for a period of a week or two.

Six Week Follow Up

At six weeks everyone returns for a post op visit. Many have had intermediate visits but not all. A final acuity is obtained after autorefraction and trial lens tumbling E.



Here is the "Secret Sauce" of the Mercy Ships protocol. At six weeks, everyone gets a YAG. Some are preventative, and some were needed weeks ago, but everyone gets one.



IMHO, this is brilliant. In our Tucson protocol for MSICS it was clear at the 3 month follow up that patients would benefit from a YAG. The incremental cost of the procedure is nil. Comparing the risk of RD to the near certainty of posterior capsular opacification makes the decision to put YAG in the protocol obvious. "I wish I had thought of that" kind of moment.

Celebration of Sight





Following the last bit of care, it is party time! Patients are very happy and grateful for the gift that they have been given – their sight back. Remember, most all these patients were bilaterally blind prior to surgery. They are HAPPY! So there is a little party with testimonials, music and dancing.



Today was my last day in the Operating Room. All told, I was in the operating room 13 days, will have done YAGs on 3 days, and performed about 36 MSICS cases and an additional 5 pterygea removals (they grow them BIG here!).

I would like to thank everyone back home that made it possible for me to come, and everyone here for making the trip so worthwhile.

I hope that this fills you in on how the system works here – and that if you have any interest in working with Mercy Ships you will consider. I would like to thank Alcon for the generous support that they provide this program – equipment, packs, scopes, you name it and they have helped the people of Cameroon to see, and me to learn.

If there are errors in this, they are mine. This is not an official communication of Mercy Ships.

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