

LIGHTHOUSE FOR CHRIST MISSION INFORMATION PACKET & VISITING OPHTHALMOLOGIST GENERAL INFORMATION

The Eye Centre:

The Lighthouse is located on a 2 acre campus-style setting, just off of the Old Harbor on the Island of Mombasa. It is located on Abdel Nasser Road, 1/4 mile from Coast General Hospital (the local Government hospital). The mission consists of four entities: The Eye Clinic and Surgery Hospital, Bible Institute, Evangelism to the Unreached, and Fellowship of Churches. A major part of the Lighthouse property is used for the eye clinic which includes a large reception room, examination and screening rooms, a surgical center, administrative offices, meeting rooms, and guest facilities. 50 Lighthouse churches are scattered throughout the Coastal areas of Kenya. Construction was completed in January 2005 of our 2-story New Eye Clinic and Surgery Hospital and is in full operation today.

The eye centre is a modern clinic and surgical center which normally sees over 30,000 patients and performs over 2,000 major eye surgeries annually. It is a wonderful ministry of Christian good works in and of itself, but it also is a "key" to opening the door so that all who enter might hear the gospel message of Christ's love and forgiveness. The patients who come to the clinic for medical care are mostly from unreached people groups or followers of traditional tribal religions. The Gospel is presented through the use of the Jesus Film and personal witness. Eye care provided through the clinic is also a social outreach and gains a great deal of community good will. It is the primary source of local funds to help pay for the many clinic expenses and overhead. All patients are seen regardless of their inability to pay.

Medical and Surgical Facilities:

Clinic for examination of patients is held morning and afternoon five days a week at the Lighthouse. Surgery is done 4 mornings a week. The clinic is well equipped for our ophthalmologists and optometrists with slit lamps and the other usual basic equipment and supplies. Two operating rooms are available with good Zeiss operating microscopes. Simcoe cannulas may be used for extra capsular surgery. Phaco machine have been acquired for skilled, experienced phaco surgeons. No learners please: We usually have a good supply of posterior chamber lenses. Most cataract surgery done at the Lighthouse is extracapsular, small incision, no stitch with posterior chamber implants. Generally, there is an adequate supply of surgical instruments, but you might like to bring some of your favorite instruments such as corneal-scleral forceps, needle holders and special implant instruments. All surgery is done on an outpatient basis under local anesthesia. We generally use Xylocaine with or without Marcaine depending on availability.

Certain supplies are quite expensive or difficult to obtain locally. We have to rely on U.S. sources for such items as Viscoelastics, intraocular miotics, intraocular lenses, topical steroid-antibiotic medications and sutures. If your local detail men wish to donate any of these items or other useful medicines, please bring them along. Also you may find useful to bring a supply of Trypan Blue. Kenya does demand current medicines so please do not bring expired stock.

All surgeons should be aware that the first few days of surgery, you will be under observation by our Medical Directors. They will assist the visiting doctor to become accustomed to our equipment, instruments, procedures and national staff. If in the Director's judgment the visiting surgeon is having a difficult time and/or results are poor, limiting surgery or a recommendation of medical ophthalmology may be suggested. Conditions, equipment, and hypermature lenses cause surgery to be challenging. No slight or offense should be taken.

Rural Eye Camps:

Besides the eye work at the Lighthouse, we also have rural eye clinics in some of the more remote areas of the Coast Province. The purpose behind these clinics is to extend care to areas where ophthalmic treatment is practically unavailable.

Introduction to Our Director:

Tim Ghrist, Mission Director, continues the ministry that his father had begun. He and his wife Toni often live on the mission compound. Besides directing the mission, he teaches in the Bible Institute and disciples pastors of the

Lighthouse Fellowship of Churches. He has a BS in Business Administration from Cal State L.A. (1976) and a Master of Divinity from Talbot (1980).

The City of Mombasa:

Mombasa is a city of about two million in population. It is two degrees south of the equator, therefore, it is usually hot and very humid. The city lies on an island separated from the mainland by about 200 yards of water. It is the major port for Kenya and lies on the Indian Ocean. Historically, it is an old Moslem City that was dependent on the Arab sailing boats that would travel from the Middle East, along the coast with the help of the gentle monsoon winds. The Moslem influence is still felt with a whole section (Old Town) still being predominantly Moslem. Mombasa now has a very modern port. The center of town is quite up to date, but the rest of the city is very old. Tourism is the number one money maker for Kenya, so along the coast you will find international hotels, each with a number of lovely restaurants that are up to anyone's standards.

Climate:

The temperature is fairly moderate throughout the year, averaging about 86 degrees during the daytime. Because of our location, the seasons are opposite that of the United States, slightly cooler in the summer and hotter in the winter. Bring an umbrella for the long rains in the months of April-June, the short rains during the month of November. Our hottest months are December-March. Nairobi is at an altitude of about 5000 ft. and therefore about 20-25 degrees cooler than Mombasa. All our visitors come through Nairobi to enter and leave the country.

Clothing:

Dress for a hot and humid climate. Wearing cotton is the smartest and most comfortable. Bring comfortable shoes. Favorites are usually sandals or flip-flops for lounging and the beach, tennis shoes or crocs for surgery and around the clinic. Bring one pair of dress shoes for special events. Doctors are often comfortable in their own scrubs around the clinic. Ladies would be most culturally appropriate by wearing cotton dresses or skirts and cool blouses. A sweater or a lightweight jacket would be needed for the cooler evenings and rainy times. You may need a jacket or sweater upon your return to the states, depending on your location and while in flight. Swimming apparel, shorts and slacks are fine at any of the beach hotels.

Lighthouse Accommodations:

There are very nice quarters at the Lighthouse for our short term visitors. Our guest rooms are air conditioned and have their own restroom and shower facilities. All our staff is available to assist you during your stay with us. We have drivers that can take you around and staff that can help you with your cleaning and washing of your clothing. Nakumatt (similar to WalMart) is the grocery store of choice and most things are available. Expect imported processed food to be about twice what you pay in the U.S. It is strongly recommended that the water be boiled and filtered before drinking. There are kitchen facilities if you want to cook at home.

Immunizations and Medicine for your protection:

Malaria prophylaxis is important! Several regimens are used in East Africa; Choices are Mefloquine (Lariam) 250mg (one tab) weekly. It is essential to start the medicine one week before arrival and continue for four weeks after departure. For those coming four weeks or less, one (1) Doxycycline 100mg taken daily as prophylaxis. The very latest advice on prophylaxis and treatment may be obtained by calling CDC at (404)332-4555 or click on links listed on [Volunteer Opportunities](#).

It is important to have the recommended immunizations against hepatitis A & B, yellow fever, typhoid, and tetanus. Your local health clinic will be able to inform you of what is necessary for coming Kenya. Bring your health (medical) card with your shot record in case it is requested. Vibramycin is handy for G.I. disturbances. It has also been recommended by some to have a supply of Cipro, and I-Modium. Some medicines that we have in the U.S. are available in Kenya but are expensive. It is best to bring any necessary prescription drugs. Sun screen or sun block and mosquito repellent are important to bring with you.

Things to do in Mombasa:

Swimming: North Coast - Just a few miles from the Lighthouse are beach hotels with pools and beautiful beaches. Beach hotels provide scuba school, wind surfing school, goggling trips to the coral reef and many other beach activities.

Tennis: Tennis courts are available at some of the hotels and also at the Mombasa Sports Club. They allow temporary membership for a small fee. If you enjoy a game of tennis bring your racquet. There are usually extra racquets available through the missionary staff if you would rather not bring yours.

Golf: Mombasa has two golf courses, one on the island and one to the North at Nyali Golf Club. Extra clubs are available, so if interested, let us know.

Sightseeing:

Game Parks: East and West Tsavo are only about 100 miles from Mombasa. Both of these game parks are quite good for seeing most of the game. Salt Lick and Taita Hills are part of the Hilton chain and are also very nice to visit with their own private game park. Another choice is Voi Safari Lodge in East Tsavo. Amboseli and Masai Mara are probably the most popular and all game trips can be arranged through local tour guide companies.

Fort Jesus: There is a well preserved 16th century fort, built by the Portuguese. There are often cultural events at Fort Jesus in the evening as well as an interesting museum.

Bamburi Nature Trail and Mamba Village is near Mombasa for viewing of crocodiles, hippos, and many other animals.

Shopping: There are many interesting places to go to purchase gifts and keepsakes whether they are beautiful woodcarvings, wall hangings, precious gems, soapstone carved items, African design dresses, etc. The Lighthouse has established a good rapport with many of the local merchants.

Transportation to Kenya:

Many of the major airlines such as British Air, KLM, Lufthansa, and Sabena have excursion fares to Nairobi. Prices vary dramatically, so shop around before purchasing your tickets. **We STRONGLY recommend that you avoid London as luggage has been known to be lost or delayed several days. Many of our volunteers fly KLM going through Amsterdam.**

You will book your flight all the way to Mombasa.

Lighthouse deals with 2 major travel agents who can give substantial savings for those traveling with a mission (Missionary or Non-Profit Discount). Go to [Volunteer Opportunities](#) for these agencies. You may also want to check www.expedia.com for some great deals,

Fares can run about \$1,300-\$2,250 round trip, Economy Class. These fares can be arranged by you to suit your particular needs. You may pay for the airline tickets through the mission with a round number donation to cover the purchase. Call the U.S. Mission Office for details.

June –August is high travel season. Plan ahead when coming during those months to save on airfare.

Please Note: Many U.S. medical insurance policies do not include international travel. Go to [Volunteer Opportunities](#) and click on International Travel Insurance.

Medical License:

A Kenya medical license is required to work within the country. To obtain this document, notarized copies of

various licenses and certificates are needed.

Please allow the Lighthouse 2 months in advance of your trip to Kenya to apply for this medical license. Send your completed application for acceptance and approval by Dr. Larry Kenney, Director of Volunteers. Dr. Kenney will forward your application to the Lighthouse for Christ Mission in Mombasa, Kenya.

Visa:

A Kenya tourist visa is necessary! Effective June 15, 2009, a Visa application form with instructions must be completed on-line: <http://www.kenyaembassy.com/services.aspx> A Single Entry Tourist Visa costs \$25. Persons ages 16 years and younger are no longer required visas to enter Kenya.

GENERAL INFORMATION FOR VISITING OPHTHALMOLOGIST

Lighthouse for Christ Eye Centre
Matende Ibrahim, M.D. - Assistant Medical Director
December 2005

1. Visiting Doctors will be expected to work in clinics as well as in surgery unless the visiting doctors prefer to do only clinic work. If surgical skills have not been kept up, then the doctor's work will be restricted to clinic.
2. In the clinic the visiting Doctors will be expected to attend to all presenting ophthalmological conditions in the patients they see as there is no established triage system.
3. Visiting doctors will be restricted from performing surgery if they have not operated for an extended period of time.
4. If a visiting doctor has not done a particular operative procedure routinely in his practice, it is expected that he will not do this procedure at the Lighthouse, e.g. if you have not done at least 6 Trabeculectomy in the past year, it is probably best that you do not do Trabeculectomy. For specific situations, discuss with the Medical Director.
5. If new medications are brought which we do not routinely use, please discuss with the Medical Director.
6. On Tuesday and Friday, there is one half hour of daily devotion beginning at 7.30 a.m. We welcome you to these morning devotions.
7. Clinic hours are 8.00 – 5.00 p.m., short tea and lunch breaks for less than 30 minutes each are allowed.
8. We have various sources of Medication: Locally produced, locally purchased or donated from overseas. It will be prudent to obtain a list of medications available in our pharmacy. In case there is a need to prescribe a drug we do not stock, please confirm with the Medical Director if that drug is available in the drugs stores in this country.
9. Medical legal considerations are generally like those in the US—though the Lighthouse has never been involved in a malpractice suit. Problems are generally avoided by good communication, good judgments, adequate skills and considerate manner.

10. Many times people think that because our clinic prices are low and often free, that people will come in multitudes. This is not true. Not all patients scheduled for surgery do present for surgery, as most have to deal with their social cultural issues therefore further straining the number of surgeries. We must demonstrate to our patients that we want to help and can help them. Many of our patients are sensitized to any slight or break of courtesy because they are poor and commonly have been neglected. Attentive interest in the patient and a caring courteous manner will give confidence and added comfort to their treatment in clinic.
11. Remember, we have 240 V electric supply and much of our equipment is 110 V. Transformers and surge protectors are needed. If you have any problems or confusion with electrical equipment, get help. It is easy to burn out bulbs and fuses.
12. We prefer not to use Adrenalin with local anesthesia except in plastic cases. We have had two [2] cases of pulmonary edema associated with the use of Adrenaline. Under no circumstances should Adrenalin be used in hypertensive patients –even if BP is under satisfactory control. Adrenalin should also not be used in the presence of a cardiac arrhythmia. Do not use Adrenalin in over 1:200,000 concentration. If there is a failed block, do not give additional Adrenalin in a repeat block. Blood pressure must be taken and recorded on all surgical patients. Listen to the heart and lungs before surgery.
13. Do not operate on very poor prognosis eyes. Operative failure is a very unpleasant situation for the patient as well as for the surgeon. The Lighthouse also gets a bad reputation. For advanced cataracts, the visual acuity should at least be finger counting, or light projection if hypermature. Hand motion is not a reliable measurement. For glaucoma surgery with a clear lens, it is probably best to avoid surgery unless there is at least finger count at 2 feet or at least navigational vision. Do not use a “dead eye” to practice a surgical procedure. It is highly advisable not to try or practice a new surgical skill or technique that you are not comfortable or familiar with at the Lighthouse without addressing it with the Medical Director.
14. For hypertensive patients, be sure and advice them to take their blood pressure medications on the morning of surgery; also to bring their medications in with them. We find Valium 5 mg PO very helpful in control of B/P at surgery. Give Valium 2.5 mg if patient is over 65 years of age frail. Do not give Valium if very frail.
15. Since all our adult surgeries are done under Local Anesthesia we generally allow light meals before surgery. For Diabetics, we ensure that the blood sugar is well control and we do urinalysis in the morning before surgery. If there is more than a trace of Ketones the surgery has to be cancelled until proper control is done. Blood Sugar levels can also be assayed before surgery.
16. AIDS is fairly common, probably in the range of 10 – 20% incidence in the patients you are seeing. AIDS is more common when the following conditions are present, Herpes Zoster Ophthalmicus, Kaposi's Sarcoma, CMV infections such as pan-retinitis, or general debilitation. HIV tests are available free of charge at the Coast General Hospital. Wear gloves and be careful with needles if you suspect AIDS.
17. PRE-OP AND POST-OP CARE PROTOCOL

I. Cataract Surgery:

A. Pre-operative cataract surgery

1. Get blood pressure, also listen to hear and lungs on all patients.
2. Check light projection on all hypermature cataracts.
3. If patient is hypertensive give usual hypertensive medication in AM.
4. Valium 2.5 mg to 5 mg PO may be given. Most patients can take 5 mg PO unless they are old and frail. If very frail, don't give Valium.
5. Cyclopentolate, Phenylephrine and Tropicamide are available to dilate the pupils.

B. For Anesthesia we use

1. 6 – 7 mls of 2% Lidocaine instilled in the peribulbar space/
2. We use the Super Pinky or Mercury Bag.

C. Schedule for post-op cataract

1. Diamox 250 mg bid x 2 days.
2. Paracetamol [Tylenol] 500 mg every 8 hours PRN x 2 days
3. Steroid antibiotic drops 6 x daily first week; then gradual reduction over the next 1½ months.
4. Clinic exam next day
5. Schedule of visits.
 - a. 1 week Post-op
 - b. 3 week Post-op. Refract and prescribe glasses if needed
 - c. 2 months Pos
 - d. 4 months Post-op.

II. Trabeculectomy:

A: Pre-operative Trabeculectomy

1. Usually same peribulbar block as cataract surgery.
2. We use a SuperPinky for Trabeculectomy. It is much easier to operate on a soft eye. Most often the eye is soft and able to maintain a deep chamber after excision of scleral blocks.
3. The pupil is kept small pre-op with 4% Pilocarpine 1 drop every 10 minutes x 3.

B. Post-operative Trabeculectomy

1. Post-op dressing [day of surgery]
2. Atropine 1% drops.
3. Steroid antibiotic ointment.
4. Post-op day 1 ...Steroid antibiotic 6 x daily, Atropine drops 2 x daily.
5. Post op day 4 ...
 - A. If shallow anterior chamber, consider air bubble.
 - B. If IOP elevated, consider suture release.
 - C. Steroid antibiotic 6 x daily, Atropine drops 2 x daily.
6. Post-op day 10 ...
 - A. Steroid antibiotic 6 x daily continue

C. In General please note:

Trabeculectomy should have steroid antibiotics for 6 months or longer. Continue steroid antibiotic 6 x daily for 3 months then reduce to 4 x daily for 3 months then reduce to 4 x daily for 3 months. Discontinuing steroids early is a major case of Trabeculectomy failure.

Revised by

Dr. Ibrahim O. Matende, M.D.

19th December 2005