

A SURGEON'S TALE: BACK TO WEST AFRICA

HISTORY OF THE HOSPITAL

The Nigerian Christian Hospital (NCH) is located in southern Nigeria, in the heart of what was once called Biafra. From 1967-1970, this area of Nigeria, home to the Ibos, tried to secede from the country and form the Republic of Biafra. The coup failed after opposing forces isolated Biafra from the rest of the country, and more than one million Ibos died of starvation. It is from this period that we see pictures of children with the hugely distended abdomen of marasmus and/or kwashiorkor.

In 1964, Dr. Farrar, a newly trained general surgeon, learned that Nigerian women in this area were dying from obstructed labor for lack of a surgeon. He went to Nigeria and founded the NCH. Ever since it's founding, the NCH has been a protected enclave of healthcare for the region. Even at 78 years of age, Dr. Farrar still comes to NCH for one month a year. He has done every kind of surgery and has been my mentor since he first took me to NCH in 1985.

GETTING TO NIGERIA

The preparations for our trip to Nigeria began as soon as we returned from our previous trip the year before. It is a difficult task to get a team to Africa. Coordinating travel arrangements for team members that are scattered across the country is a logistical nightmare. Emails and phone calls between team members, travel agents, and NCH numbered in the hundreds. We all needed a ticket, visa, passport, vaccinations, antimalarials, and time off. After finally getting everything arranged we had the daunting task of getting fourteen trunks and fourteen carry-on bags from Temple to Dallas, TX. In addition to travel arrangements, we also had to collect our supplies. This involved requests to various surgical supply companies. Without these donated supplies, the surgeries would be more difficult and we would deplete the hospital's stores.

UNPACKING THE GOODIES

After thirty hours of exhausting travel, we arrived at Port Harcourt, the nearest airport to NCH. We slugged our way through customs with most of our bags intact, a feat in and of itself. Hauling our fourteen large trunks, we rattled into the hospital after a three-hour drive over roads that resembled a bombing range. We immediately ripped into our half-ton of donated medical supplies. We brought an incredible trove of donated supplies: an electrocautery unit from Valleylab Inc, thousands of suture packs, staplers, drains and hernia-repair mesh from Ethicon, burn and dressing supplies from Central Texas Medical Center, anti-inflammatory medications from Pfizer, thyroid replacement medication (Levothyroxine) and anesthetic sedation (Precedex) from Americares, gloves from Sage Products and blood bags from Terumo, to name just a few. The healthcare companies had been amazingly generous. Individuals had also been generous and we had an entire trunk of shoes from the Metropolitan Baptist Church in Houston for donation to needy individuals. We turned one of the bedrooms into a central supply and organized all the equipment.

THE SURGICAL TEAM

Our surgical team included me, a general/thoracic surgeon (and ten time visitor to NCH), two emergency medicine physicians, a surgery resident, an OR nurse, a surgical technician, two medical students and two premed students. Many members of the team had been to NCH before and we had a total of twenty trips among us.

The surgical team also included Dr. Mike Enyinnah, a Nigerian-born and trained general surgeon. Dr. Mike, as he is called, is the only full time surgeon at the Nigerian Christian Hospital. I have known Mike for eight years and participated in his training as a resident. Mike has worked with multiple surgeons from the U.S., as well as Nigeria, and he is one of the best surgeons in Nigeria. During our stay we also had five visiting Nigerian general surgery residents who were anxious to learn new techniques. Every day, the residents would vie for a place in the OR assisting Dr. Mike or me. Of all our efforts, the training of local surgeons is always the most important since it exponentially magnifies our impact.

The local OR staff were also crucial to our success. Eric Ojhe, the locally trained Nigerian nurse anesthetist, was a phenomenon. With more speed, calmness and talent than I've ever seen, he would put seriously ill patients to sleep without the technological backup we are accustomed to in the US. Chimaobi Micah, an OR technician, spent his days feeding surgical packs and instruments into the kerosene autoclave. Many other NCH staff ensured that OR turn-around times were mere minutes.

Mark Ugwunna, our cook, was also a pivotal member of the team. Mark has been cooking for missionaries for forty years. His delicious meals sustained us through our long days. Even when our days stretched to 9 PM, he always had a hot meal waiting for us. His food was so good that most of us gained weight on the trip, in spite of how hard we were working.

PATIENTS, PATIENTS AND MORE PATIENTS

On the first day, we started slowly with just four surgeries. By the third day, the patients were pouring into the hospital with myriads of tumors and other surgical problems. Between surgical cases we ran a clinic, which sometimes resembled a shop of horrors. Time after time we would scream "enyozo" (Ibo for next) and a patient would walk into the OR waiting area. We were constantly astonished at the patients who appeared with grotesque, massive tumors of the face or torso. Some tumors were so big that we joked irreverently that the patient should have two social security numbers.

One of our first patients was Chinyere. She was patiently waiting in the hospital when we arrived. This poor woman had an enormous mass on her neck the size of a cantaloupe. It had grown to this size over five years. After obtaining blood, we proceeded with surgery. The day of surgery was exceedingly hot and humid and the OR air-conditioners were not up to the task at hand. I was sweating profusely and every few minutes a kind observer would futilely wipe my brow. The case was especially difficult because the tumor had multiple draining veins greater than a centimeter in diameter. The tension and sweating increased as we accidentally tore open one of the veins. I was convinced that I could actually hear the blood rushing out of the vein. We rapidly removed the tumor and packed the wound with lap pads to staunch the bleeding. Judging

it to be too risky to prolong the surgery any more, I decided it would be best to bring the patient back to the OR the next day. The following afternoon, there was no bleeding. Our patient recovered and was truly grateful.

One day, toward the end of our stay, the OR was particularly busy. We had two OR tables in one room and Dr. Mike was on one performing a difficult Caesarian Section on an obese woman with twins who had several sections previously. On the other table, I was finishing a parotidectomy and radical neck dissection on a man with a metastatic cancer. The ward nurse came to the OR to inform us that our last patient, a total thyroidectomy, had a temperature of 104 degrees. Immediately, I knew we had an impending disaster. I told the nurse to bring the patient back to the OR stat. Soon, there was so many people in the OR we could hardly move. Our thyroid patient was obtunded, diaphoretic, tachycardic, hypertensive and obviously in the throes of thyroid storm. In our relatively primitive setup, this was usually fatal. We immediately gave our patient IV fluids, antipyretics, steroids and beta-blockers. We sprinkled his body with alcohol to cool him down. When he started to awaken, we mixed Lugols iodine solution with orange soda and trickled the mix down his throat. Miraculously, he recovered over the next several hours. The next morning he walked down to the OR to thank us!

When we weren't operating or running the clinic, we did "minor" procedures in the OR. There was an assortment of patients with significant problems such as Fournier's Gangrene, pelvic abscesses, wound dehiscences, skin abscesses and masses requiring biopsy. Most of these patients required conscious sedation for their procedures. It was not unusual to do five to ten procedures every day and this was exceedingly time consuming.

REUNION WITH A FRIEND

One day, my old friend Robert came to clinic. Last year, Robert came to the hospital with a gigantic ameloblastoma, a tumor of the jaw. When I first saw him I remember thinking, "I don't know what this is but it's the worst case I've ever seen". This poor man had the tumor resected thirteen years previously but rapidly developed a recurrence. He had an enormous mass projecting off the side of his face. The tumor had a draining sinus which smelled terrible and constantly dripped pus. It is inconceivable to us that Robert had lived this way for more than a decade but this was not unusual, and Nigerians accepted inaccessible medical and surgical care resolutely. I performed a hemimandibulectomy, partial resection of the floor of the mouth, and pectoralis muscle flap. This year he came to greet me and show me the results of my handiwork. He was talking well, had good tongue mobility and gained about 30 pounds. There was no sign of a recurrence. Seeing Robert made the whole ten thousand mile-trip worthwhile

FAILURE AND DEATH

On our eighth day at the hospital, a mother arrived with her twelve day-old baby. The child's abdomen was massively distended and his body ravaged by dehydration. The baby had been sick for over one week and the family had been at another hospital. The abdominal xray was, as usual, of poor quality but showed dilated bowel and possibly free air. We knew we had to operate as soon as possible. I thought I would need to do a cut down to get IV access for the surgery but Eric, the Nigerian nurse anesthetist, came through as usual, and deftly placed a

peripheral IV. Most surgeries don't worry me but newborns make me anxious. In the US I work at a VA Medical Center and this little Nigerian patient was about sixty-five years younger than the average age of my U.S. patients.

We brought the lights close to the table for better visibility, and I put on a pair of surgical loupes to get a close-up view of the infant's tiny organs and blood vessels. The surgical spotlights bore down on my neck and I could feel them burning the back of my head. Between the lights and the tension, I was sweating even more than usual in the 90-degree temperature. As Dr. Mike, and I opened the abdomen, we were dismayed to hear a whoosh of air, confirming a bowel perforation. We found a small hole in the descending colon-probably from necrotizing enterocolitis. We resected part of the colon and diverted the colon outside the body by performing a double ostomy. Despite our best efforts, the baby died after three days.

AN INTERESTING CASE

After about one week, a very pleasant fourteen year-old came to the clinic. He had a several year history of a swollen right jaw. His x-rays showed a giant cyst of the mandible with multiple ectopic molars. The cortex of the mandible appeared paper-thin. I thought this would be an odontogenic cyst. At surgery, we raised a flap and exposed the mandible. The cortex was thin easily peeled off the cyst. We completely removed the cyst and excised the ectopic molars. As we debrided the cyst cavity, the mandible suddenly fractured. While I realized this could occur, I was distressed that the surgery just became more complicated. Next, we harvested bone from the iliac crest using a chisel purchased in the US at Ace Hardware, crushed the bone with ronguers and packed the cyst cavity. Finally, we wired the upper and lower jaws together to stabilize the fracture. Our patient did well. The pathology, done in the US, showed an ameloblastoma so he will need to be closely observed for a recurrence.

EXHAUSTION

The days started to blend together. Every day we operated from 0830-1700, interspersing major cases with minor cases and wound care. We often operated on emergencies at night. The team was exhausted. The OR staff were exhausted. Even the autoclave was worn out. Of course, donating blood also wore us down. Each of us gave at least one unit of blood, sometimes immediately after a bloody surgery. After twenty-one days and one hundred ten major cases, we were starting to feel the effects of running on overdrive. We had completed all the cases we could do; yet the hospital was still full of patients hoping to get a chance on the operating table. They would have to wait for Dr. Farrar who was coming in a month. Despite our fatigue, we were happy and satisfied. The rewards of using our talents and perseverance to help these needy people were dramatic and fulfilling.

EPILOGUE

Even before we were completely unpacked, we were making plans to return to Nigeria. Life in the US seemed too mundane. The suffocating paperwork, interminable delays and profligate waste seemed unbearable after our work in Nigeria.

Brian Camazine, M.D. is a general and thoracic surgeon at the Central Texas Veterans Health Care System in Temple, TX. Visit www.camazinemd.com for further information.