SUMMARY REPORT

Rotary-Sponsored Surgery Mission to San Lucas Toliman, Guatemala March 6 - 14, 2015

This is a report on the fourth annual surgical mission (fifth visit) to the 45-bed paroquia hospital in San Lucas Toliman, Guatemala: **Hospital Obras Sociales de Monsignor Gregorio Schaffer**, named after its founder. The mission or "jornada" was co-sponsored by Opal House (www.opalhouseguatemala.com) as the co-host, and the Fidalgo Island Rotary Club of Anacortes, Washington (www.fidalgorotary.org) with additional financial support from the Podiatry Institute (www.podiatryinstitute.com) and several private donors. Although the primary focus is for deformities and disabilities involving the lower extremities, mostly in children, for the second year it was expanded to include other orthopedic problems by the integration of the same volunteer pediatric orthopedist.



Case 1 preop 4

The 35 patients who underwent surgery in 2014, followed locally by Dr. Boegel, had healed uneventfully and the team was invited to return this year by the lone hospital physician, Dr. Rafael Tun. As usual, Dr. Tun was both welcoming and extremely helpful throughout the "jornada". He was involved at every level in the evaluation and treatment decisions. The Hospital Administrator, Julio Lopez, and the Director of Logistics, Pablo Benedicto, were extremely helpful. The hospital is supported by Friends of San Lucas (http://www.sanlucasmission.org/healthcare.php) headquartered in Minnesota.

This surgical mission evolved out of the efforts of volunteers Will and Diane Boegel who felt called to return to Guatemala after a medical mission to serve the needs of the poor (especially the women and children), the indigent, the sick and the forgotten in a society, particularly the Mayan community, emerging from the 36 year civil war and its effects. They sold their house in the US and moved onto a finca (farm – Opal House) near the town of Agua Escondida, 20 km from San Lucas Toliman.



Case 1 postop 1 PMR and cc fusion

Including Will, this team of 23 volunteers committed to sacrificing precious time from their busy work schedules to help the poor and needy people of San Lucas Toliman and surrounding Lake Atitlan. It consisted of 4 podiatric surgeons, 1 pediatric orthopedic surgeon, 1 anesthesiologist, 1 family physician, 1 nurse practitioner, 2 nurse anesthetists, 2 foot and ankle surgery residents, 5 nurses, 1 scrub tech, an instrument technician, a team administrator, and logistics assistants. Three represented Group Health and four represented the Podiatry institute (Louis Jimenez, Justin Fleming, Steve Miller and Julie Ferland). Although most were from Seattle and Anacortes,

Washington, team members also came from St. Paul, MN; Rice Lake, WI; Atlanta, GA; Philadelphia, PA; Portland, OR; and Manchester, England.

Also of great assistance was Glen Barde, the US coordinator for Opal House and teacher Jacqueline. The withdrawal of one PACU nurse and one surgical technician shortly before the start of the mission required considerable team compensation.

Patients were procured via the local clinics and networks of Dr. Tun and Dr. Boegel. Word-of-mouth and successfully treated patients returning to their communities as well as other NGO's brought many more patients with challenging problems. Other organizations sending children included *Embrace Guatemala* (Brian Stipek), *Nuestros Picanos Hermanes* (Dr. Lauren Gomez), *Mayan Families* (Wayne Wiley) and several brought by Dick Rutgers. The team evaluated over 62 patients, several as follow-ups from previous years, and performed 63 procedures on 33 patients, mostly children. There were 24 surgical patients under age 22 and 9 adults. Included were 7 neglected clubfoot repairs, bilateral Ponseti castings and two difficult long-bone infected nonunions requiring external fixation frames. All cases had excellent anesthesia support and close management coordinated by our family physicians and PACU nurse.

The goals of this surgical mission team were to treat primarily children with lower extremity and other orthopedic deformities and to donate equipment, supplies and medications to the hospital to enable more surgery to be done locally, as well as for follow-up care. The pathology encountered included clubfeet (virgin, rigid, neglected, residual and partially corrected), dropfoot,



hardware for removal, tumors, cerebral palsy, isolated equinus, congenital pes valgus, pes cavus, short limb, tibial and femoral nonunions, congenital hip dysplasia and amputee revision.

One exceptional helper this year was Daniel, the local x-ray technician whom we had recruited last year and had since completed his training. He was able to take acceptable x-rays from the donated portable x-ray machine we brought last year in the operating room using the makeshift boom on wheels that we also brought last year. We donated another x-ray head for backup. Still, adequate x-ray imaging support is sadly lacking at the hospital.

Our Fidalgo Island Rotary Club and the local Panajachel eRotary Club have partnered for a Rotary Matching Grant to purchase and install a digital full-body x-ray machine for the hospital as well as a fluoroscopy and/or mini C-arm for the operating room. These will greatly enhance the capabilities of the hospital and the OR. The grant has already been approved by The Rotary Foundation and, as of June 1, 2015 funding for the seed money has been completed and the hospital is in the process of receiving and installing the x-ray equipment.

A generous amount of surgical equipment and supplies were donated to the hospital by the team and the Group Health Global Health warehouse in Seattle in support of the surgeries and for follow-up care. This included a 1.5-4.0 mm Ti6 cannulated screw set on loan from MetaSurg (now acquired by Integra); and pins and external fixator parts from Smith & Nephew; bone allografts donated by Community Tissue Services of Kettering, Ohio and many orthopedic appliances donated by Prestige Medical (Jackson & Ryan Stowers); and numerous Fiberwire anchors and hardware from Arthrex. Especially valuable were the many AFO braces donated by Cascade DAFO, so important toward the long-term follow-up care of our patients. Most medications were supplied by the Group Health Global Health Foundation at cost. To all these generous donors we are very grateful.

We also wish to thank Dr. Rafael Tun for his support and guidance. The follow-up care for one patient from a very poor barrio in Guatemala City was graciously assumed there by local orthopedic surgeon, Dr. Jorge Penagos, who is very experienced working with medical mission teams. For his contributions we are also very grateful.

This year there were more financial obligations which affected our medical mission budget and will significantly impact it in the future. Similar to last year, each patient family was asked to pay 200Q (\$25 USD) per surgery which was covered by donations if they were unable to do so. Further, payment for the lunches supplied by the paroquia were paid for from the team budget and this year we were required to pay for all the lunches for all of the local hospital staff for the whole week as well. We will also have to participate in the construction of a new bodega (storage room) in order to store our equipment and supplies (but no cost estimate yet). The current bodega is needed for an educational conference room. We understand the hospital need for help. It provides and lot of care at minimal to no cost and we recognize the impact that our week of surgery can have on their overhead.

Follow-up negotiations have resolved most of the above issues and we are on schedule to return to **Hospital Obras Sociales de Monsignor Gregorio** Schaffer in San Lucas Toliman in March of 2016.

As a gesture of goodwill and to promote inter-cultural understanding, our team sponsored a full restaurant dinner one evening, integrating team members among the tables of hospital staff. Gratitude was expressed for the hospital staff. At the end of the mission, the hospital administrators, including Dr. Tun, profusely thanked the team, then presented a team certificate and hand-made gifts from a grateful patient. All topped with cake and ice-cream.

In the future, we plan to expand our pediatric orthopedic services and try to institute some educational programs for the hospital staff and clinics in the vicinity of Lake Atitlan. By next year we expect the new digital x-ray machine and mini C-arm to be installed which will greatly improve patient care locally and surgical capabilities across many specialties. Our bilingual instrument technician proved to be popular and improve the surgical logistics. Also, our bilingual CRNP immensely helped floor nurses for improved communication and patient care.



Many of these patients present with very complex problems requiring judicious evaluations and customized surgical plans plus skilled anesthesia, PACU and short-term hospital care. In the end, many lives are changed, the ultimate goals being to improve the health and to expand the opportunities for each individual. Each year we come to the same hospital and treat the indigent, we feel we can migrate slowly to the goal of making the hospital more self-sufficient and attracting other healthcare providers to the area.

Stephen J. Miller, DPM Team Leader