

MEDICAL MISSION UPDATE: El Salvador 2003

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In accords with ongoing missions, the Podiatry Institute embarked to El Salvador for the first time after being invited there in 2001. The actual trip was postponed due to the September 11th terrorist attacks. While in Nicaragua for a mission in 2002, a liaison from the country of El Salvador associated with Healing the Children, Greater Philadelphia chapter, brought two children on a thirteen hour bus ride to Nicaragua in hopes of surgically correcting their neglected clubfoot deformities. Upon completion of their surgery, they turned around and headed home two days later. In that short time frame, it was decided by a rotary club in El Salvador to have this particular Podiatry Institute team travel to their country to assist the lower extremity needs of it's children.

Over the past four years, this team has made journeys to Guatemala twice, Venezuela, Nicaragua, El Salvador, and has arrangements to visit Guatemala again April 2004 with a possible return to El Salvador October 2004. This current team is in the process of forming a second "scout" team in which each team will travel to a determined location spaced about six months apart. This will ensure better follow-up regarding post-op surgery of the children previously operated on and facilitate increased numbers of young patients to receive appropriate and necessary surgery. The Podiatry Institute and Healing the Children organization, Greater Philadelphia chapter continues to support and promote this particular team as it expands and moves forward. This team will travel to Guatemala spring of 2004 to complete its first mission with many veteran core team members accompanying a handful of new professional volunteers.

TEAM COMPOSTION

This particular team was the largest assembled to date numbering a total of 24 members. Four Podiatric surgeons, three orthopedic surgeons, two anesthesiologists, two CRNA, five operating room nurses, two recovery room nurses, three Podiatric residents, one high school student for observation purposes, and one administrative staff from Healing the Children organization. This was the author's 11th medical mission and the Podiatry Institute's 5th mission under the leadership of Dr. Cicchinelli and the author since 1999.

EL SALVADOR DEMOGRAPHICS

El Salvador is a very small country which totals 8093 square miles when compared to the largest Central American country, Nicaragua at 49,998 square miles. It is about the size of Massachusetts and located on the pacific coast of Central America. Guatemala borders its west, Honduras to the north and east, and the Pacific Ocean to the south. More than twenty-five extinct volcanoes are located throughout the country. The capital of the country is San Salvador with a population of one million people in the city; the total population of the country is 6,237,662. The population density is 796 per square mile compared to the United States at 79.6 per square mile. The population continues to grow at a rate of 2.3% per year compared to 0.9% in the United States. The ethnicity profile finds 94% Mestizo (Spanish-Indian), 5% Indian, and 1% European descent. The language is primarily Spanish with some folk speaking Nahua. Religion is 75% Roman Catholic and 20% Protestant. Annual inflation rate tops out at 3.8% versus 6% in the United States. Birth rate is 27.9 per 1000 births (14.1 per 1000 U.S.) and infant mortality 26.8 per 1000 births (6.7 per 1000 U.S.). Lastly, unemployment rate averages about 10% when compared to 5% in the United States.^{1,2}

MISSION PARTICULARS

On September 27 – October 4, 2003, the Podiatry Institute's medical mission team traveled from the United States to El Salvador. Team members came from eight states and two different countries, met in Houston, then traveled on together as a unified team to El Salvador. The first day after arrival, numerous children from El Salvador had traveled long distances within the country for the screening process, hopeful to be candidates for surgical correction. One child had traveled from Panama in hopes of having severely deformed feet surgically corrected. After thorough screening process by the surgeons and anesthesiologists, it was concluded that a cervical spine work up was necessary due to her past medical history regarding former neck trauma for anesthetic pre-cautions. She will be flown back to the United States for this evaluation to be done at the University of Missouri

Medical campus. Upon completion of the appropriate testing performed, if cleared for surgery, she will travel to Guatemala to meet the Podiatry Institute's newly formed "scout team" on May 22, 2004 for the resultant lower extremity surgery.

Approximately 98 children were triaged the day after our arrival into San Salvador with 26 being selected for surgical repair. The selection process for surgery mostly depended on the severity of the deformity, followed by an acceptable prognosis, rehabilitation potential, and health status. Age of the patient as detailed above is strictly adhered to with a few exceptions; namely depletion of patient population toward the end of the week in direct proportion with the amount of operating room time available. Usually toward the end of the week, young adults selected wait in anticipation who are told there might be a possible operating time available for them. The unfortunate thing is that many have traveled long distances and have to remain near the hospital on a daily basis until the week's end.

Upon selection of a surgical candidate, this individual is then triaged by the pediatric anesthesiologist for history/physical who clears each patient medically. When every child has been screened, a daily schedule of operations is devised for the entire week. Each child selected is admitted 24 hours prior to their surgery to be sure they are properly hydrated and assessed by the nursing staff.

Throughout the week, a daily influx of more children continued to trickle into the hospital for assessments, triage, and opinions. Any child who had an urgent problem that needed surgical treatment was added to the schedule later in the week. During the triage process, there were many non-ambulatory children with neurological disorders who were turned away due to the fact that surgery would not affect future ambulation in a positive manner.

The majority of the procedures were clubfoot repair totaling twelve feet. Fourteen feet received posterior soft tissue lengthenings with posterior capsule releases, one foot with polydactyly resected, four feet with major rearfoot and midfoot arthrodesis, two feet requiring major tendon transfers, and three feet needing osteotomies with bone grafting.

Upon surgical completion of each patient, admission to the medical floor of the hospital for 48 hours was the standard protocol for pain control and observation. Upon discharge, each child was sent home with donated oral pain medications and discharge instructions written in Spanish. The El Salvadorian Orthopedic surgeons had volunteered to evaluate the children post-operatively and all supplies that were not used throughout the course of the week were donated to the hospital, including casting materials and antibiotics.

CONCLUSION

The Podiatry Institute and HTC, Greater Philadelphia chapter complete a successful mission to a first time country and the local rotary club is anxious to for the team's return in the fall of 2004. Twenty-six children were operated on during the week with eleven patients having bilateral deformities and fifteen patients with unilateral deformities. The majority of the deformities were due to congenital and neglected clubfoot; a larger percentage having Neuro-muscular disorders which required joint arthrodesing procedures and tendon transfers.

The nucleus of the team will collectively decide a future site for the fall of 2004 taking into account the in-country support from the local rotary, the orthopedic community, the numbers of children to be screened, and the ability to exchange techniques and ideas with the medical community of the host country.

CASE PRESENTATION

6 year old neglected clubfoot deformity El Salvadorian who traveled to Nicaragua spring 2002 for surgery and follow-up during our mission to El Salvador October 2003.

REFERENCES

1. www.lonelyplanet.com/destinations/central_america/el_salvador.
2. Infoplease.com/El_Salvador.



Figure 6. One year follow-up plantar clinical photograph of the corrected right clubfoot.



Figure 7. One year follow-up AP weightbearing clinical photo.



Figure 8. One year follow-up weightbearing clinical photo, rearfoot neutral position and forefoot is quite rectus.



Figure 9. Group photograph of the entire surgical P.I. team visiting a local orphanage in El Salvador.