Creating Long-Term Benefits in Cleft Lip and Palate Volunteer Missions

Amado Ruiz-Razura, M.D., Ernest D. Cronin, M.D., and Carlos E. Navarro, M.D.

Houston, Texas, and Lima, Peru

The authors present their experience with 15 years of organizing cleft lip and palate surgical volunteer missions in Latin America. The history, basic principles, and objectives of Operation San Jose, a volunteer goodwill program from Christus St. Joseph Hospital in Houston, Texas, are covered. This report addresses the different problems encountered and solutions found.

Following the principles set by Operation San Jose, CIRPLAST is a Peruvian foundation for plastic surgery that travels to remote areas in Peru, operating on patients with cleft lip and palate deformities. This report highlights the importance of working with local plastic surgeons and their residents, and emphasizes that the program should be organized by and the operations performed by accredited plastic surgeons and with the auspices and support of the national plastic surgery society and the local medical board.

Operation San Jose promotes the creation of long-term benefits by offering a program to teach local surgeons cleft lip and palate repair techniques and to set up guidelines to organize local surgeons so that they can continue this effort by treating their own patients in their own countries. (Plast. Reconstr. Surg. 105: 195, 2000.)

In 1983, Dr. Ernest D. Cronin, Chief of the Plastic Surgery Service at Christus St. Joseph Hospital in Houston, Texas, was invited by the government of Honduras to evaluate and treat patients with cleft lip and palate deformities. The first team consisted of Drs. Ernest and Thomas Cronin, two senior plastic surgery residents, and a surgical nurse. Many children received consultation, and approximately 25 operations were performed under the auspices of Dr. Cesar Enriquez, Chief of the Plastic Surgery Section at the Hospital Universitario de Tegucigalpa in Honduras. Because of the overwhelming number of cases and their limited resources, the team was asked to return in 1984, and again about 25 patients with cleft lip and palate deformities had surgical correction.

In 1985, Dr. Ernest Cronin invited Dr. Amado Ruiz-Razura, the Director of the Microsurgical Training Center in the Plastic Surgery Service at St. Joseph Hospital, to help him coordinate this program. During this year, a third visit to Tegucigalpa took place in which three plastic surgeons, two residents, one anesthesiologist, and two surgical nurses participated in more than 36 operations. The program became more organized and included lectures given by the visiting staff.

Dr. Ernest D. Cronin is the Founder and Medical Director of this program, which was named Operation San Jose by Drs. Ruiz and Cronin in honor of the Hospital’s patron saint in 1985. Dr. Cronin is the Medical Director of the Thomas D. Cronin and Raymond O. Brauer Cleft Palate and Facial Reconstruction Institute. This Institute functions as an entity of St. Joseph Hospital and provides children in the United States with the opportunity to receive facial reconstructive surgery. Operation San Jose is an extension of this institute; it provides indigent children abroad with the opportunity to receive this highly specialized surgery.

Dr. Amado Ruiz-Razura is the Administrative Director of Operation San Jose. He is the Clinical Director of the Institute of Plastic Surgery at Christus St. Joseph Hospital and an associate professor of surgery in the Division of Plastic and Reconstructive Surgery at the University of Texas Medical School at Houston. Dr. Ruiz serves as liaison for Operation San Jose and St. Joseph Hospital. He coordinates the planning and directs the logistics of each trip. Being a founding member and past President of the Society of Latin American Plastic Surgeons of the United States and Canada (SLAPS) and an active member of the Iberian Latin American
Federation of Plastic and Reconstructive Surgery (FILACP) have been key points in maintaining excellent relations with plastic surgeons throughout Latin America. Dr. Ruiz currently serves as the Treasurer of the Iberian Latin American Federation of Plastic and Reconstructive Surgery, the largest Hispanic plastic surgery organization in the world.

**Basic Principles**

Operation San Jose is a volunteer goodwill program, funded by Christus Health Care, the St. Joseph Hospital Foundation, and private donations. The team is composed of 13 members and includes four plastic surgeons with a faculty appointment at Baylor College of Medicine or at the University of Texas Medical School at Houston, two anesthesiologists, two senior plastic surgery residents, one pediatrician, one recovery room nurse, and three certified operating room technicians. The team makes a yearly visit to developing countries, donating their time and covering their own expenses (Fig. 1).

The objectives of Operation San Jose are threefold:

1. First and foremost, the program provides medical and surgical intervention to children suffering from cleft lip and palate deformities. It benefits patients who might otherwise not receive timely treatment.

2. It is an academic exchange of ideas between the members of Operation San Jose and the host medical personnel, including plastic surgeons, residents, nurses, speech therapists, orthodontists, etc., for sharing and learning advanced medical techniques. Each trip is always at the invitation of the local medical society in the host country and serves to promote international goodwill.

3. It provides additional educational experience to senior residents in the Christus St. Joseph Hospital’s Plastic Surgery Residency Training Program; the residents work with these patients under the direct and close supervision of a faculty member. Each case is performed with a member of the teaching staff present and “scrubbed in” to supervise the local and visiting plastic surgery residents.

Operation San Jose requires the following predeparture documentation:

1. A formal written invitation from the host hospital
2. Local community medical board approval
3. Endorsement by the local host’s national plastic surgery society
4. The invitation and collaboration of local plastic surgeon(s) for follow-up coverage

The organization of this type of mission takes about 6 to 9 months. Planning begins on receipt of the official invitation from the Latin American host hospital. This is followed by a letter of support from their university, the local medical board (including the local plastic surgeons), and the national plastic surgery society. Then, the Operation San Jose team requests temporary medical licenses for each team member and importation permits of equipment and instrumentation from the appropriate local health and customs officials. This documentation must be completed and approved before travel or planning any surgery.

Operation San Jose also believes in having local staff and resident participation in the active exchange of ideas for the treatment of cleft lip and palate patients. The team follows the highest ethical standards, as set by the local national plastic surgery society and the local medical board.

Typically, the team arrives on a Saturday. On Sunday, the preoperative evaluation of patients is made by all the staff surgeons with the plastic surgery residents. Any potential anesthetic problem cases are evaluated by the anesthesiologists and our pediatrician. Surgery may be postponed if the patient is not an appropriate candidate or is a surgical anesthetic risk. Then, a tentative surgery schedule is created. All patients undergoing surgery must have a preoperative evaluation, including laboratory studies.

More than 3500 pounds of equipment and supplies are brought with the team and are unpacked and organized to be ready for surgery the following day. Seven to eight cases are performed each day from Monday to Friday, and the team returns to Houston on Saturday after making all the necessary arrangements for the follow-up care of the patients.

To minimize the host hospital’s financial burden, the team travels with all surgical equipment and supplies, including sutures, drapes, anesthetics, instruments, headlights, pulse oximeters, cauteries, suction device, dinamaps, gowns, etc. Operation San Jose must remain
focused, and efforts are concentrated only on the surgical treatment of cleft lip and palate deformities.

On average, no more than 40 patients are operated on in 5 days. Two operating rooms run simultaneously. In each room, visiting and local plastic surgery residents are closely supervised by the teaching staff. A complete operative report with diagrams is included in the patient's chart, along with an anesthesia report and postoperative instructions for follow-up care in their native language. The local plastic surgeon and his team are available for postoperative care when our team leaves.

Operation San Jose includes an educational program in every trip. A series of lectures, given by the visiting staff and local surgeons, allows a bilateral exchange of ideas. Our program offers educational opportunities for local residents and medical personnel to visit Christus St. Joseph Hospital for a period of 2 to 3 weeks, where lodging and meals are provided. In addition, we offer scholarships to staff and residents of host hospitals to receive continuing medical education at our institution in these and other areas, such as endoscopic or microsurgical training.

**Problems Encountered**

The primary reason for the existence of a program such as Operation San Jose is the great need for additional surgical and other medical care for cleft lip and palate patients in some developing countries in Latin America. Many cleft lip and palate patients in these countries are not being taken care of in a timely fashion for the following reasons:

1. Limited number of qualified surgeons compared with the need
2. Few plastic surgery residency training programs available
3. Lack of instruments and supplies
4. Lack of funds or medical coverage
5. Lack of education and fundamental knowledge of the condition
6. Malnutrition making these patients high-risk cases
7. Remote location of many of the patients
8. No available speech therapy or orthodontic services

Obviously, some of these issues are beyond the scope of any volunteer program to solve because they relate to the government and public health policies of the specific country, but a program such as Operation San Jose can make an impact.

Another fundamental problem we have encountered is a lack of enthusiasm or even animosity toward American volunteer medical missions in general. We have gone to great lengths to address this so that everyone benefits. Although many good volunteer medical programs exist, we have heard complaints regarding the arrogant attitude of some volunteer groups, which do not include the local medical authorities in the treatment of these patients. We have heard of programs that operate without any permits or temporary medical licenses. Some volunteer groups more or less barge in without contacting any local medical authorities.

Our solution to this is that the program is a joint effort between the local plastic surgeons and their residents and the Operation San Jose team. Other solutions are the attitude of working together, not preaching; suggesting new ways, not demanding; a positive outlook, not negative criticism; and accommodation to local needs and conditions, not rigid or dogmatic behavior. Having team members who speak Spanish is not as crucial as having team players who understand the Latin-American mentality. For a mission to succeed in helping the needy patients, it must have benefits for both the visiting team and the host surgeons.

**Organizational Issues and Additional Considerations We Have Encountered over the Past 15 Years**

1. Customs officials can be noncooperative, even with proper documentation, causing delays. If travel connections must be made, allow plenty of time for the transfer of supplies.
2. It is difficult to keep track of supplies and luggage. Our solution is to have large numbers on each box or piece of luggage, with a master code that lists all of the contents. The team may, at times, need to assign items to be watched so that they do not disappear.
3. In the host hospital, we need a secure area for our supplies in or near the operating suite. This must be prearranged or it will be difficult to obtain once the team and supplies arrive.
4. To be able to count on operating room equipment at the host hospital, it is best to see pictures or have exact specifications. In one location, the anesthesia machines were
Fig. 1. Operation San Jose team members in front of the Hospital del Seguro Social in Huancayo, Peru, in June of 1998.

Fig. 2. Creating long-term benefits in Peru, Operation San Jose and CIRPLAST team members pose for a picture with the Andes Mountains in the background.
antiquated and to get them operational caused considerable delay and anxiety.

5. In one hospital, the electrical outlets were supposed to all be 220 V, but some were 110 V and others were 220 V but were not marked. This caused the malfunction of some of our equipment. Bringing volt meters and converters can save time and equipment.

6. Some hosts may want other types of cases operated on. We have tried to concentrate only on cleft lip and palate patients, but we are happy to give consultative opinions on other cases.

7. Although in the United States, we do not have the need for transfusions, occasionally, with extensive palatal surgery, we have transfused patients in Operation San Jose. Thus, the availability of blood must be taken into account. We limit the amount of surgery on individual patients at times to avoid the need for transfusions.

8. Although in the United States, we see patients in a team setting with speech therapy, orthodontic, and ear, nose, and throat evaluations, thus far we have not brought these team members with us on Operation San Jose because usually, there are no such available follow-up services.

9. Because of the age, previous surgery, and condition of the patients, our surgeries may vary from our routine in the United States. We have recommended pharyngeal flaps much more frequently during Operation San Jose trips than in the United States, especially in secondary cases.

**Results**

Operation San Jose has conducted volunteer missions under the auspices of the local national plastic surgery society and the local medical board in Honduras, Mexico, Venezuela, Nicaragua, Ecuador, and Peru (Table I); 826 procedures have been performed (Table II).

**Operation San Jose and CIRPLAST**

Peru, a third-world country with a population of more than 25 million people, has a high incidence of congenital malformations, including cleft lip and palate, and sequelae of trauma, cancer, and burns that require reconstructive plastic surgery. Unfortunately, some of these patients are neglected or receive substandard care.

In 1994, Carlos E. Navarro, M.D., founded CIRPLAST, a nonprofit, nongovernmental organization made up of physicians specializing in plastic and reconstructive surgery and allied health professionals. He encountered many frustrations during the first year. However, in 1995, this foundation started to grow and be recognized after Operation San Jose was invited to Arequipa, Peru, for a cleft lip and palate program. Dr. Navarro, who is the current President of the Peruvian Society of Plastic and Reconstructive Surgery, trained in Plastic Surgery at Baylor College of Medicine in Houston, Texas, and was certified by the American Board of Plastic Surgery in 1978. He saw how Operation San Jose worked, how it was organized, what the guidelines to follow were, and the importance of having local volunteers involved.

In 1997 and 1998, Operation San Jose offered missions in Arequipa and Huancayo, Peru, and continued to support CIRPLAST in multiple ways. Operation San Jose helped by training some of their young plastic surgeons; allowing them to use Operation San Jose mission statements, preoperative diagrams, operative notes, postoperative orders, organizational charts, and surgical equipment and supplies; helping with patient selection; credentialing volunteers that wanted to be part of this kind of program; and providing slides and videotapes, etc. (Fig. 2).

In the last 2 years, the CIRPLAST group has worked hard with very limited funds, has had

**Table I**

<table>
<thead>
<tr>
<th>Place</th>
<th>Years</th>
<th>Host Plastic Surgeon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tegucigalpa, Honduras</td>
<td>1983, 1984, 1985</td>
<td>Dr. Cesar Enriquez</td>
</tr>
<tr>
<td>Caracas, Venezuela</td>
<td>1993</td>
<td>Dr. Jose Ortega Lara</td>
</tr>
<tr>
<td>Leon, Nicaragua</td>
<td>1994</td>
<td>Dr. Arturo Gomez</td>
</tr>
<tr>
<td>Arequipa, Peru</td>
<td>1995, 1997</td>
<td>Dr. Carlos E. Navarro</td>
</tr>
<tr>
<td>Babahoyo, Ecuador</td>
<td>1996</td>
<td>Dr. Nelson Estrella</td>
</tr>
<tr>
<td>Huancayo, Peru</td>
<td>1998</td>
<td>Dr. Carlos E. Navarro</td>
</tr>
</tbody>
</table>
TABLE II
Procedures Performed

<table>
<thead>
<tr>
<th>Procedure</th>
<th>No.</th>
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<tbody>
<tr>
<td>Unilateral cleft lip</td>
<td>128</td>
</tr>
<tr>
<td>Bilateral cleft lip</td>
<td>88</td>
</tr>
<tr>
<td>Fistula repair</td>
<td>126</td>
</tr>
<tr>
<td>Pharyngeal flaps</td>
<td>62</td>
</tr>
<tr>
<td>Vomeron flaps</td>
<td>201</td>
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<tr>
<td>Pushback palat repair</td>
<td>93</td>
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<tr>
<td>Abbé flaps</td>
<td>8</td>
</tr>
<tr>
<td>Alveoloplasty</td>
<td>28</td>
</tr>
<tr>
<td>Lip revisions</td>
<td>34</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>58</td>
</tr>
<tr>
<td>TOTAL number of procedures</td>
<td>826</td>
</tr>
<tr>
<td>TOTAL number of patients</td>
<td>502</td>
</tr>
</tbody>
</table>

drawings more than 1500 consultations, and has performed surgery in approximately 800 indigent patients during 18 surgical journeys to remote areas in Peru. All CIRPLAST members are volunteers and work for free. Mrs. Maria Elvira Mulanovich de Navarro coordinates and oversees all the activities. Also integrating the Peruvian team is Italo Fernandez, M.D., an anesthesiologist, and a group of young plastic surgeons: Alberto Bardales, M.D., Miguel Sarmiento, M.D., Rene Herrera, M.D., Edgar Soto, M.D., Dante Arce, M.D., and Ernesto Tejada, M.D.

The members of Operation San Jose think that one of the greatest contributions of the past 15 years, besides the gratitude of more than 500 patients, has been to serve as a model for the creation of volunteer groups and goodwill foundations in Latin America. We feel honored to know that our work has created an incentive for young plastic surgeons to come together and work hard to perform good surgery to help their own people, in their own country, despite the adversity and limitations they face.

**DISCUSSION**

In Operation San Jose, we created a system in which everyone feels comfortable helping these patients. We are guests in the host country and must adhere to local rules and regulations. We must also have realistic expectations, know our limitations, and be open to exchanging ideas.

Our program does not perform extensive or multiple procedures on one patient. We do not operate in tents or without the basic needs to provide adequate surgical care. The safety and well-being of patients is always our primary concern. However, we do not only operate on virgin lips but perform palate repairs, secondary cases, fistula repairs, etc. We are not interested in numbers alone.

A mission program should be straightforward, with clear objectives and educational and scientific goals; it is not a social program. It should be organized by and the operations performed by qualified plastic surgeons under the auspices and support of the local national plastic surgery society and the local medical board. The program must provide postoperative follow-up care arrangements. We have always done this through local plastic surgeons, and we think that this has been the key to our success. Team members should have realistic expectations and limit surgery to one or two procedures per patient. The program should be planned as a mission of service and not of opportunity.

Although our program is supported by the Sisters of Charity of the Incarnate Word (Christus Health Care), there is no proselytization or religious pressure of any kind. The program has no political agenda and does not serve for the personal promotion of anyone.

We shared these guidelines with Dr. Arturo Gomez during the Operation San Jose 1994 mission in Leon, Nicaragua. We feel honored to know that he incorporated these concepts in the creation of Niciplast, a plastic surgery foundation in Nicaragua designed to assist plastic surgery patients.

We also presented these ideas to Dr. Nelson Estrella during Operation San Jose 1996 in Babahoyo, Ecuador. He forwarded our guidelines to the Iberian Latin American Federation of Plastic Surgery so that other Latin American countries can follow them when receiving visits from foreign volunteer missions.

The concepts outlined here were also presented during the Annual Meeting of the Society of Latin American Plastic Surgeons of the United States and Canada during the 1994 meeting of the American Society of Plastic and Reconstructive Surgeons in San Diego. By the recommendation of Dr. Ulrich Hinderer, Secretary General of the International Confederation of Plastic, Reconstructive, and Aesthetic Surgery (IPRAS), these guidelines were sent to Dr. S. T. Lee of Singapore, Chairman of the IPRAS Committee to include this document in
the IPRAS cleft lip and palate volunteer program guidelines.

CONCLUSIONS

Operation San Jose has been successfully performed for the past 15 years in six countries in Latin America. More than 500 patients have received surgical treatment, and hundreds more have received consultations through this volunteer goodwill program. Our biggest rewards have been the satisfaction of seeing patients of different ages receive surgical reconstruction with a strict follow-up, encountering minimal complications, and the satisfaction of contributing to the formation of an organized group of plastic surgeons helping their own communities. We feel fortunate to have been a positive influence so that they can now operate on their own initiative, with greater and long-lasting benefits to their communities.

We have worked as a team with the local plastic surgeons and their residents, following the highest ethical standards as set by their national plastic surgery society. As we have become better organized, our objectives have broadened to include encouraging local programs such as CIRPLAST (Peru), Nicaplast (Nicaragua), Foundation Estrella (Ecuador), and Fundapafi (Venezuela). The program has been humanitarian, harmonious, and earnest.

We established mutual benefits for the visiting and host surgeons, with special attention to education, training, and the postoperative follow-up care of all patients. What we treasure the most are the friendships that we have established with the local staff members and residents, which reflect our purpose of working together under their conditions and under their auspices.

Amado Ruiz-Razuva, M.D.
Operation San Jose
Plastic Surgery Service
Christus St. Joseph Hospital
1800 St. Joseph Parkway
Houston, Texas 77003
aruiz@sjste.org