



## **General Surgery Mission Trip March 19-28, 2022**

Hospital del Norte, Cochabamba  
&  
Hospital San Juan de Dios, Santa Cruz



**The team begins surgery at Hospital del Norte, Cochabamba, Bolivia.**

### **I. Introduction**

Hospital del Norte is a new second-tier public hospital in Cochabamba, Bolivia. The surgery department, inaugurated in January 2021, employs several general surgeons who have partnered with Solidarity Bridge over the past decade. These surgeons, in coordination with the hospital leadership, proposed a visit by a Solidarity Bridge mission surgeon to provide specialized training and to lay the foundations for ongoing collaborations between Hospital del Norte and the Solidarity Bridge/ Puente de Solidaridad General Surgery Program.

This trip also provided the opportunity to meet with the surgical team at the San Juan de Dios Hospital in Santa Cruz to follow up on training provided on previous visits as well as recent equipment donations to the hospital.

## II. Trip goals

1. Provide training in the diagnosis and laparoscopic surgical treatment of esophageal achalasia and hiatal hernia.
2. Assist Hospital del Norte to treat a backlog of surgical patients.
3. Assess possibilities for permanent collaboration with Hospital del Norte.
4. Provide follow-up to prior training at San Juan de Dios Hospital in Santa Cruz.
5. Verify the installation and correct use of equipment donated to San Juan de Dios Hospital through a collaboration with Rotary International and various Rotary clubs.

## III. Activities

The mission team consisted of General Surgeon, Dr. Magued Khouzam, accompanied by General Surgery Program Director, Jodi Grahl. The following summary is organized around the trip goals named above.

1. Hiatal hernia and esophageal achalasia are two relatively infrequent pathologies affecting the upper digestive system, both of which may be treatable through specialized laparoscopic surgery. Dr. Johnny Camacho of Cochabamba had participated in a 2019 Solidarity Bridge mission trip to San Juan de Dios Hospital in Santa Cruz in which Dr. Khouzam trained the local partners in these procedures. Dr. Camacho and other staff surgeons at the new Hospital del Norte were interested in advancing their skills so that they can provide the same treatments for public hospital patients in Cochabamba.  
Upon arrival in Cochabamba on Sunday, March 19, Dr. Khouzam met with the local medical partners to review the files of patients previously identified with the noted pathologies. The U.S. and Bolivian partners jointly evaluated each patient, ordered additional testing as needed, and drafted a surgical schedule for the week.  
Over the following days, the team performed five laparoscopic hiatal hernia repairs using variations of the Nissen technique, and two laparoscopic Heller cardiomyotomy surgeries to treat esophageal achalasia.
2. The surgical team headed by Dr. Khouzam performed 10 surgeries, including those noted above as well as a sigmoidectomy to treat megacolon, a ventral hernia repair, and an exploratory laparoscopic abdominal surgery converted to an ovarian cyst extraction.  
At the same time and as part of the week-long mission, Bolivian surgical teams performed 18 additional surgeries, primarily hernia repairs and cholecystectomies. The local team was able to treat this high number of patients thanks in large part to the supplies delivered by the mission team, including surgical mesh, laparoscopic instruments, sutures, and disposables.
3. As a result of this successful collaboration between the Hospital del Norte medical staff and leadership, the local health ministry, Puente de Solidaridad, and Solidarity Bridge, the hospital and Puente de Solidaridad have agreed to continue to work together to provide surgical care to Bolivian patients through our surgical programs.
4. After the conclusion of the mission week in Cochabamba, Dr. Khouzam and Jodi Grahl traveled to Santa Cruz de la Sierra to visit the San Juan de Dios Hospital, site of General Surgery Mission Trips headed by Dr. Khouzam in 2015, 2016, 2017 and 2019. Dr. Khouzam met with the surgical team and accompanied them on rounds of current surgical patients. The partners discussed recent hiatal hernia and esophageal achalasia surgeries performed at the hospital by the team trained in 2019, reviewing the management of common complications.

5. Dr. Khouzam and Jodi Grahl also visited the surgical department to review the equipment and supplies recently received through a Rotary grant. Much of the equipment is already being put to daily use in the O.R. Dr. Khouzam discussed the use and maintenance of the equipment with the O.R. staff.



**Participating in patient rounds at San Juan de Dios Hospital, Santa Cruz de la Sierra.**

### **III. Patients served**

Patients operated during this mission week included 13 women and 15 men between the ages of 19 and 90 (average age 48). Surgeries included 10 gall bladder extractions, seven abdominal hernia repairs, eight esophageal surgeries, two colon surgeries, and one ooforectomy. Most patients were discharged within 24-48 hours of surgery, except for the esophageal surgery patients who remained hospitalized an average of 72 hours. One month following each discharge, the Puente de Solidaridad social worker completed a follow-up survey with each patient to assess their overall recovery. All patients reported satisfactory progress, and most had returned to work and other normal activities.

### **IV. Patient story**

Jimmy, age 43, lives with his wife and two pre-teen daughters in Cochabamba. Jimmy had suffered severe acid reflux and heartburn for over ten years. He visited multiple doctors, who diagnosed him with gastroesophageal reflux disease (GERD). Gastroenterologists monitored his condition and prescribed antacids, but could not offer a definitive solution. By 2021, Jimmy had developed Barrett's esophagus, a potentially serious complication of GERD, which can be a precursor to esophageal cancer.

On March 22, 2022, Drs. Magued Khouzam and Luis Herrera performed a Nissen procedure to correct Jimmy's hiatal hernia, which was the root cause of his reflux. He was discharged on March 25 to continue recovery at home. Thanks to his surgery, the Barrett's disease is now under control, drastically reducing Jimmy's cancer risk. Just a few weeks after discharge, Jimmy was able to return to his job at a drinking water distribution plant.

When social worker Marizol Mamani telephoned Jimmy a month after surgery, he reported his health as "excellent." He is participating more actively in his family's activities, and has been motivated to eat healthier and lose some excess weight. After over a decade of suffering, Jimmy is overjoyed to live without pain and enjoy life again!



**Dr. Magued Khouzam, Dr. Oscar Román and Dr. Johnny Camacho with Jimmy during his post-op recovery.**



## V. Mission Team

Solidarity Bridge is grateful for each of the following individuals and the many unnamed others – hospital administrators, donors, families and colleagues – who together made this trip possible. In particular, we would like to recognize the sterilization, cleaning, and other support staff at Hospital del Norte who took on hours of extra work during our mission week.

### **Solidarity Bridge team:**

Dr. Magued Khouzam, General Surgeon  
Jodi Grahl, Trip Leader

### **Bolivian team:**

#### **Puente de Solidaridad:**

Patricia Vargas, Executive Director  
Marcela Canedo, Chaplain  
José Choque, Medical Supplies  
Marizol Mamani, Social Worker  
Alfonso Flores, Supplies and transportation  
Verónica Castellón, Assistant  
Ariel Montaña, Communications  
Sister Pabla González, Volunteer chaplain  
Dr. Denisse Ibañez, Volunteer interpreter

### **Bolivian medical partners:**

#### **Hospital del Norte Chief of Surgery:**

Dr. Oscar Román

#### **Anesthesiologists:**

Dr. Alejandra Azogue  
Dr. Andrea Valderrama  
Dr. Minosa Orellana

#### **General Surgeons:**

Dr. Johnny Camacho  
Dr. Luis Herrera  
Dr. Karen García  
Dr. Orlando Jimenez  
Dr. Marcelo Quiroga  
Dr. Hugo Troncoso  
Dr. Fabiola Mamani

#### **Cardiovascular Surgeon:**

Dr. Harold Muñoz

#### **Gynecologic Surgeon:**

Dr. Susana Choque

#### **Head of Nursing:**

Lic. Erika Madrano

#### **Instrument Techs:**

Jenny Guzmán  
Vanessa Muriel  
Tifani Montoya