

EAR, NOSE, THROAT (ENT) and PLASTIC SURGERY

Oudomxay Provincial Hospital, LAO PDR

February 2012

National Science Council (NSC)

Government's Office

In Partnership with Lao Rehabilitation Foundation

The Lao Rehabilitation Foundation funded and organized the surgical mission at Oudomxay Provincial Hospital from February 1-8th, 2012. Winchester Hospital donated medical supplies. A glidescope videolaryngoscope by Verathon Medical, and a Sonosite Nanomaxx Thyroid ultrasound equipment were on loan for use on this mission. Dr. Luc Janssens, president of the Lao Rehabilitation Foundation organized the mission in conjunction with Dr. Phetsamone Indara, Lao Ophthalmologist at the Hospital Eye Unit. This was an ongoing yearly plastic surgery and ENT medical mission.

The primary focus of this mission was to collaborate with the Lao physicians and surgeons to provide experience with complex operations so that they can continue the work after the team has left. Over seven days we operated on 30 patients. We trained Lao surgeons, anesthesiologists and nurses. All operations were successful and there were no complications. In the past, many of these complex operations were sent to the capital Vientiane or Thailand, which did not provide the local Lao surgeons with the opportunity to develop surgical skills in this area.

The US team members included

Luc Janssens PhD – President of Lao Rehabilitation Foundation.

Kyle Keojampa, MD – ENT, Thyroid, and Facial Plastic Surgeon.

Carlos Mata, MD – Plastic, Burns, and Hand Surgeon.

Jamie Eller, RN – Intensive Care Nurse.

Our goals were patient safety, collaboration, self-sufficiency, and self-sustainability.

For patient safety, all patients were preoperatively screened and received a complete medical exam and necessary workup prior to surgery. For high risk surgeries such as thyroidectomy, all patients were preoperatively screened with TSH, T3, T4, and were euthyroid (normal thyroid function) at the time of surgery. A preoperative thyroid ultrasound was performed to determine general thyroid pathology, thyroid size, any tracheal deviation or compression from the goiter. A fiberoptic laryngoscope was available to assess for vocal fold mobility/airway obstruction and a glidescope videolaryngoscope was used in the operating room to ensure

successful airway management of large goiters. We had the ability to monitor patients postoperatively to assess for possible hypocalcemia after surgery. We were able to address many of the issues or deficiencies from last year. Thyroid patients were not operated on last year due to inadequate work up. Patients from last year were registered and had thyroid function studies to determine the cause of their goiter and either treated medically or antithyroid medications to render them euthyroid prior to surgical treatment. This mission was different from prior missions, as it required continued year long continued collaboration with the Lao doctors to prepare patients for surgery.

Secondly, we worked to collaborate with the Lao medical and surgical team. Dr. Keo Phommarat, Lao Anesthesiologist and Dr. Bounyour, Lao Thyroid surgeon from Setthathirath Hospital from the capital Vientiane joined us again this year. It is definitely important to involve as many Lao doctors on these missions as the eventual goal is to make these projects self-sustainable using resources of the host country.

Third, we strived to develop self-sufficiency, and self-sustainability. All our surgical cases had Lao surgeons operating and collaborating with us. Our goal was to demonstrate new techniques and have the Lao surgeons gain experience and become proficient at performing those procedures independently. We worked with the established Lao team of doctors, nurses, and staff. We brought surgical equipment and donating them for continued use after our mission.

Our goals were met as we successfully operated on 30 patients without any complications. We organized postoperative follow up with our Lao physicians. Our team stayed two days extra after operations were completed to address any possible issues. We successfully provided cleft lip, cleft palate, burns, hand, reconstructive, thyroid, and major head and neck surgery on this mission. We are planning yearly medical missions to Laos, working on expanding on the previous year's work and involving more Lao doctors. There were a large number of patients needing surgery which we could not accommodate all of them on this mission. We are hoping to recruit additional US experts in Endocrinology, Anesthesiology, and Surgery to expand our goal of providing advanced medical services to Laotian people with a greater focus on children and the poor.



7 year old girl with a cleft lip repair with primary rhinoplasty.

New techniques of rhinoplasty at the time of cleft lip repair were taught.



13 year old girl with cleft palate repair.



Demonstrating Thyroid ultrasound to examine for thyroid pathology, general thyroid size, and any tracheal deviation from goiter



Thyroid patients waiting to be examined. We found a large number of patients with toxic multinodular goiters.

Iodine deficient goiters from hypothyroidism were rarely seen.



Large thyroid goiter which was causing dysphagia, airway compression. She underwent successful thyroidectomy.



Explaining to the Lao doctors how the glidescope works and indications in the difficult airway patient



Demonstrating to the Lao doctors how to use the Glidescope videolaryngoscope



Lao Anesthesiologist using the glidescope videolaryngoscope



Kyle Keojampa, MD,
Carlos Mata, MD
Lao Surgeon and Lao Nurse
working together.

Operating with the Lao surgical team and removing a large thyroid goiter.



Large parotid tumor surgery. We spent time teaching the Lao surgeons the importance of finding the facial nerve which you can see in the dissection to prevent injury and to safely remove the tumor.



Lao and US Team





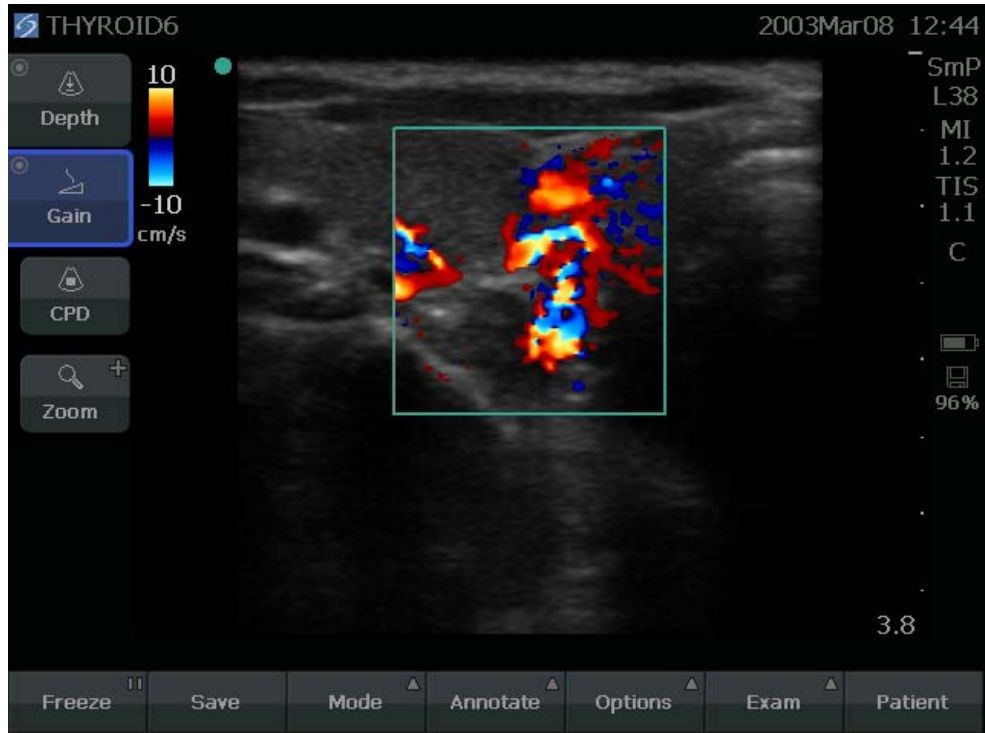
Ultrasound Data – NanoMaxx on Loan from Sonosite Global Health



Large multinodular goiter with complex cysts. Mid transverse view.



Large multinodular goiter with complex cysts. Mid sagittal view.



Graves disease patient. Pulsatile pattern or “thyroid inferno” with multiple small areas of intrathyroidal flow seen diffusely throughout the gland. This hypervascularity is due to arteriovenous shunts in the thyroid gland. Mid transverse view.



Graves disease patient. Hypervascularity with diffuse enlargement. Mid Sagittal view.



Left thyroid multinodular enlargement with hypoechoic cysts. Midline transverse view.



Left thyroid multinodular enlargement with hypoechoic cysts. Left mid transverse view.