

## Robot Surgeon Should Draw Foreign Patients to Brazil

Contributed by Marina Sarruf  
Thursday, 16 August 2007

Brazil will have a new robotic system for performing complex, high-precision surgery. The Syrian-Lebanese Hospital has purchased the newest surgeon robot, a technology known as the Da Vinci Robotic Surgery System. Imported from the United States, the equipment should arrive at the institution within a month.

"With this new equipment, the hospital should attract patients from other states and countries. The Syrian-Lebanese wants to be regarded as a state-of-the-art facility," said thoracic surgeon Riad Younes, one of the country's leading lung cancer specialists.

Younes, who is also the clinical director at the hospital, and coordinator of the advanced thorax center at the organization, was one of nine specialists at the Syrian-Lebanese Hospital to take a preparatory course in order to command the robot.

"We all think this is a great advancement in surgical technology," he said. Besides Younes, also trained were specialists in liver transplant, gynecology and obstetrics, cardiology, urology, general surgery, and colorectal surgery.

The new equipment is divided into two machines. The first one is a robot with five long, articulate arms, capable of holding surgical clamps and other tools for surgery. One of the arms has a camera that broadcasts a 3D image to the surgeon, who controls the robot through the second machine.

The doctor's fingers manipulate the master control, and the system immediately translates the surgeon's hand, wrist, and finger movements. "The great advantage of the robot is the fact that it is very precise and blocks out any wrong motion," stated Younes.

According to him, other advantages include the facts that it is capable of turning his hand 360 degrees, does not shake, and makes precise incisions. The system is also less aggressive toward patients, as there is less bleeding and incisions are smaller," said Younes.

Presently, the robot is mostly used in urological, gynecologic, heart, and gastric surgery. "But I believe its uses will be broadened. Children's surgery should also become much easier," said the surgeon.

At the moment, the doctors are awaiting clearance of the equipment's registration by the National Health Surveillance Agency (Anvisa). The robot costs an average of 3.5 million reais (US\$ 1.7 million), but for its implementation at the hospital, the institution invested around 5 million reais (US\$ 2.4 million). The robot is already used in countries such as

United States, Japan, China, Mexico, Venezuela and European nations.

## Refugee in Brazil

Younes was born in Lebanon and came to the southeastern Brazilian city of São Paulo in 1976 as a refugee from the civil war. At 18 years of age, he entered the Medical School at the University of São Paulo (USP), and in 1988 he went to New York to specialize in lung cancer surgery. Two years later, upon returning to Brazil, he was invited to be the head of the Department of Thoracic Surgery at the Cancer Hospital.

The work of Younes' team at the Cancer Hospital became a reference in Brazil and around the world. In 1999, international magazine Chest published a study describing the routine and follow-up strategy for lung cancer patients after surgery at the Cancer Hospital.

The text was selected by the American College of Chest Physician as one of the ten best works on lung cancer in the decade, in addition to being recommended as a reading to all specialists in the field.

In 2003, the surgeon was a member of the Brazilian delegation that accompanied Brazilian President, Luiz Inácio Lula da Silva, on a trip to the Arab countries. He was the health representative at the delegation.

## Investment

The Syrian-Lebanese Hospital is going to invest 350 million reais (US\$ 174.6 million) in new equipment, infrastructure, and catering concept over the next five years. New features announced, yesterday, August 15, by the institution include the center for Health Follow-Up and Check-Up, turned to executives.

"This new center will take care of the patient inside and outside the hospital. We want to show that, state-of-the-art technology and great specialists aside, the hospital will help in the prevention and promotion of people's health," said the superintendent at the organization, Maurício Ceschin.

According to a survey conducted by the hospital between August 2006 and March this year, 80 out of 100 executives surveyed had some sort of health condition, and most of them do not follow their doctor's recommendations correctly. This led the organization's Check-Up department, which has existed since 2004, to invest in a new form of patient follow-up.

"We are initiating a new Check-Up phase. We want to have early diagnosis of diseases, and to help patients adhere to

treatment," said the cardiologist Danielli Haddad, manager at the center for Health Follow-Up and Check-Up.

According to her, shortage of time among executives is a great challenge, therefore the team at the new center will continue to evaluate patients even at a distance. "The team at the center or the doctor himself is going to contact the person by telephone," said Danielli.

The new center is part of the hospital expansion process, which includes the construction of a 20-story building including several inpatient rooms, in different fields of specialization. According to Ceschin, the new building should be built during the first half of 2008. Up until now, 5 million reais (US\$ 2.4 million) have already been invested in the center.

Full check-ups will take six hours, as patients will undergo several tests and see nine specialists. Currently, the center has 13 rooms, including ophthalmology, gynecology, urology, cardiology, physiatry, dermatology, cardiology, nutrition, oral health, and other offices.

The rooms are equipped with state-of-the-art technology. At the dermatology office, for example, the patient can view a spot in his body in a very enlarged image, causing a certain impression on the patient. "The goal of the images is also to raise the patient's awareness of his own health," said Danielli.

According to her, 75% of the risk factors that trigger off cardiovascular diseases, for instance, which are the leading cause of death in the world, are amenable to prevention.

"Our role, as an institution, is precisely that of helping the individual prevent himself," stated Danielli. Presently, the center receives 20 patients a day, and check-up prices range from 2,800 reais (US\$ 1,397) to 3,200 reais (US\$ 1,596).

## 85 Years

The history of the Syrian-Lebanese Hospital began 85 years ago with the foundation of the Women's Benevolent Association, comprised entirely of Syrian and Lebanese descendents. The institution offers treatment in more than 60 different medical specialties, and was the first in Latin America to inaugurate an Intensive Care Unit. Other pioneering action was the installation of equipment that enables earlier detection of small tumors, and more precise planning of radiotherapy.

The hospital houses large centers for diagnosis, such as cardiology, oncology and neurophysiology. It also features a Sleep Medicine Service, a Mastology center, and a center for Memory Disturbances.

In 2003, the hospital established a Teaching and Research Institute, featuring modern infrastructure for courses and technological research on surgery, and clinical investigation laboratories.

Anba - [www.anba.com.br](http://www.anba.com.br)