

# Project of international cooperation in pediatric heart surgery. Actors: National Institute of Cardiology (INC) and Republic Islamic Algerian

*Projeto de cooperação internacional em cirurgia cardíaca pediátrica. Atores: Instituto Nacional de Cardiologia (INC) e República Islâmica Argelina*

José Alberto CALIANI<sup>1</sup>

RBCCV 44205-957

The President of Brazil, Luis Inácio Lula da Silva, visited Algeria in March 2006. At that time, an international cooperation in Plastic Surgery, for treatment of burn complications, and Pediatric Heart Surgery, was required by his Algerian counterpart, Abdelaziz Bouteflika. The Brazilian Authorities agreed and led off a preparation of a cooperation project aiming at to provide skilled Algerian practitioners in those specific specialties in a long term. Along with the Brazilian presidential entourage, the acting Brazilian Ministry of Health, Dr. Saraiva Felipe, accompanied by the Brazilian Ambassador in Algeria, Sérgio Danese, outlined the text project, which would lead off to the agreement of the international cooperation between both countries. The following day, both Presidents sanctioned formally the agreement, as well as their respective Ministries of Health.

In the present article, the focus is our specialty; thus, we will not address the ongoing course of the burn specialty project.

On his returning to Brazil, Saraiva Felipe led off to the materialization of the Pediatric Heart surgery project. The Brazilian Agency for Cooperation [Agência Brasileira de

Cooperação (ABC)] was called on to provide both a programme framework and a logistic support to the project. In a partnership with the Ministry of Health Office of International Affairs, the Brazilian Agency for Cooperation has outlined a contract provisions and divided the project into three phases: prospecting, inspection, and execution.

Once the project has been outlined, the Rio de Janeiro National Institute of Cardiology was invited by the Ministry of Health to be an actor in the materialization of the project.

The first phase (prospecting) happened in July 2007. The Brazilian Delegation comprised by Dr. Regina Xavier, the acting NIC General Director, Dr. José Alberto Calini and Fábio Tagliari, the Ministry of Health International Affair Adviser flew to Algiers, the capital city of Algeria.

We have set up a meeting agenda with Algerian patient care teams and hospitals which have been performing heart surgery in adults' subjects for nearly 20 years. We have visited three hospitals, one in Algiers, and another in Constantine, located 500 km in the east of the capital Algiers. At first, our attention turned to the preparation of an accurate diagnosis of the heart surgery "status quo", observing the local sanitary profiles, practitioners technical

1. Head of the NIC Pediatric Heart Surgery Service

Correspondence address:  
Rua das Laranjeiras, 374 - Laranjeiras  
Rio de Janeiro - RJ. CEP: 22240-005.  
Tel: 021/22853344 - ext 2255.  
Email: jcaliani@incl.rj.saude.gov.br

level, surgical outcomes, equipment availability, hemotherapy service, previous dentistry screening, postoperative unit, hospital infection commission, specific material for surgeries with cardiopulmonary bypass support, clinical analysis and laboratory diagnosis services, and radiologic service.

The final perception was positive regarding the adult heart surgery. The facilities and the local patient care teams perform a surgery of quality with satisfactory outcomes. Consecutively, we addressed the epidemiologic aspects directly related to pediatric thoracic surgery. In the current context, only one of the services visited provides reasonable conditions to the professional practice of pediatric thoracic surgery. However, the Algerian sanitary authorities and physicians have refuted the outcomes, considering them unsatisfactory. For a population of 38 million inhabitants, it is estimated to be a contingent of nearly 3,000 children with congenital heart defects with referral to surgery in a waiting list. From this contingent, some are transferred to European countries (France, Sweden, United Kingdom) to have their heart defects corrected with a mean cost of 30.000 euros per patient. We must add to this excessive cost, the significant difficulties of linguistic communication, the withdrawal of the child and the family from their natural environment, and the psychological implications of expatriation.

The Algerian authorities have understood the need to increase the delivery of medical care and to provide professional medical and paramedical training to respond to this restrained demand of patients in extreme medical poverty. There, it is where the Brazilian cooperation purposes fitted the occasion, a country which chose to assist this nation to overcome a serious public health problem. The project was then idealized and refined unanimously for 3-year length period with an average of four to five missions yearly lengthening 15 days each.

At this phase of prospecting, we have made a list of the material to be bought by the hospitals in order to adequately structure a pediatric heart surgery service. In achieving the first phase, the Brazilian delegation returned to Brazil.

The second phase (inspection) occurred in November 2007. The experts Hamilton Torres, perfusionist, Dr. Rodrigo Barcellos, anesthesiologist, and Dr. José Alberto Calini,

cardiovascular surgeon arrived in Algiers to inspect the material recommended in the previous phase. A check up of all items was performed, and it was concluded that all the material met the requirements previously made.

The third phase (execution) was undertaken in the first 15 days of December 2007. The same experts from the second phase flew again to Algiers in order to start the execution phase itself.

The first day at work, a list of 30 patients previously screened, with diagnosis and surgical referral formalized was presented. From this group of patients, 20 were selected and 10 were contraindicated as a result of blood crisis and/or infectious complications.

In the next day, the surgical activity was started which took the next 15 days. It was performed 17 surgeries; of these, 16 had been performed with cardiopulmonary bypass (CPB) support and one underwent a palliative, modified Blalock-Taussig intervention. The heart diseases were distributed as follows: 13 patients had tetralogy of Fallot, two had interatrial communications, one patient had supra-aortic stenosis, and another one pulmonary atresia. All the patients have gotten benefits from the complete correction of their heart diseases but the patient with pulmonary atresia. There was no late and/or hospital death. There was no morbidity. One reoperation has been performed as a consequence of coagulation disorder. After the reopening and washing of the pericardial cavity, the problem was solved.

The three Brazilian experts were seconded by their Algerian peers. Several other professionals from other cities have been present, yielding a good interaction and interesting technical debates among them. We believe there has been a good empathy among different Algerian medical care teams and hospital sectors with the Brazilian experts.

At the end of the work, the local media promoted a press conference and the mission outcome was largely touted and celebrated as an example of a successful cooperation between two South Hemisphere countries.

We expect that this cooperation keep on with absolute success, strengthening the Brazilian cardiac surgery, and that with modesty and perseverance, we might be able to take this great legacy "extramural", which the pioneers of this specialty in our country have left us as trustees.