



**INSTITUT DE
CARDIOLOGIE
DE MONTRÉAL**

AFFILIÉ À
Université de Montréal



CHU Sainte-Justine
*Mother and Child
University Hospital Center*

For the love of children

Université de Montréal

Press release

For immediate release

A world first in pediatric cardiology

The Montreal Heart Institute and the Sainte-Justine UHC have achieved a world first in the treatment of a young patient with a completely blocked yet vital heart artery

Montreal, September 21th, 2006 – The Sainte-Justine University Hospital Center and the Montreal Heart Institute (MHI) proudly announce the achievement of a world first in the treatment of a young pediatric patient's coronary arteries. Marie-Jeanne, an 11 ½ years old, who suffers from severe heart problems as a result of Kawasaki disease, became the first child in the world to have benefited from a new technology, called the CROSSER, which is used to treat patients with completely blocked coronary arteries.

This heart catheterization procedure was successfully completed at the Montreal Heart Institute last June 16th by Dr. Réda Ibrahim, Interventional Cardiologist at the MHI and Dr. Nagib Dahdah, Interventional Cardiologist at the Sainte-Justine UHC, with the collaboration of Dr. Louis Cannon from the Heart and Vascular Institute in Michigan. Their expertise made it possible to use the CROSSER technology successfully on a child for the very first time.

"I am obviously very satisfied with the success of this procedure, which has allowed Marie-Jeanne to become healthy again and to carry on with a normal life. We regularly undertake complex coronary procedures at the MHI, but this case was particularly difficult since the patient's artery was completely blocked. Furthermore, it was located in a critical area of the heart, namely the left main coronary", Dr. Réda Ibrahim said.

"I am very happy with the results that were achieved thanks to this device. I am already planning on using this new technology in the treatment of three other patients of mine. We have made tremendous progress in the area of pediatric cardiology, particularly in the treatment of Kawasaki disease", Dr. Nagib Dahdah explained.

Last March, Dr. Nagib Dahdah, who had diagnosed a complete obstruction of his young patient Marie-Jeanne's left coronary artery, sought an alternate solution to double bypass surgery, a procedure her condition initially warranted. After reading about the results, in the specialized medical journal *Journal of Invasive Cardiology*, published by European investigators on their first 50 cases using the CROSSER, Dr. Dahdah became convinced that this new technology could be used in the treatment of his patient.

He thus contacted the officials at FlowCardia, the American company that had developed the CROSSER, and attempted to convince them of the necessity to try the technology on a child. At the time these initial contacts were made last spring, the CROSSER hadn't yet been commercialized, and had only been used on about 300 patients throughout the world during the last stage of clinical validation. Several telephone conversations later, and after necessary information about the patient's medical file had been discussed with them, the clinical investigators at FlowCardia agreed to provide Dr. Dahdah with the CROSSER device so that it could be used during the intervention on Marie-Jeanne.

An exemplary and fruitful collaboration

Throughout his discussions with FlowCardia, Dr. Dahdah is also continuously in contact with Dr. Ibrahim at the MHI, since both regularly work together performing heart catheterization procedures in the treatment of congenital pediatric patients who have reached adult age or, more recently, on children afflicted with an acquired coronary illness such as Kawasaki disease. Such interventions on the coronary arteries of young pediatric patients require the combined expertise of the Sainte-Justine UHC and the Montreal Heart Institute, one for its acute understanding of Kawasaki disease, and the other for its expertise in heart catheterization interventions for the treatment of coronary arteries, which are generally more frequent among adults.

A promising medical advancement

In this particular case, where an intervention was performed using a device that was still little-known even in adult cardiology, the procedure was broadcast in closed circuit during the MHI's "15th International Symposium of Interventional Cardiology". The intervention allowed doctors registered at the training event to learn about this device as well as its clinical possibilities. "In adult cardiology, the CROSSER will allow us to avoid having to perform invasive heart surgery on our patients. It is a major advancement in the area of medicine", Dr. Ibrahim, from the MHI, concluded.

The dynamism of the Université de Montréal's RUIS

The success of this intervention is very important for the dynamism of the Université de Montréal's Réseau Universitaire Intégré de Santé (RUIS). "For the Faculty of Medicine of the Université de Montréal, this success clearly demonstrates what can be achieved when combining the expertise of the MHI and the Sainte-Justine UHC. When brought together, our network's various institutions form an important hub of expertise and excellence that provides outstanding health care to Quebecers anywhere in the province", said Dr. Jean-Lucien Rouleau, Dean of the faculty of medicine, Université de Montréal.

Dr. Nagib Dahdah at the Sainte-Justine UHC and Dr. Réda Ibrahim at the MHI, both Hemodynamics Cardiologists, are also Clinical Assistant Professors at the Faculty of Medicine of the Université de Montréal. In 1989, in an effort to ensure a continuum of care from childhood until adulthood in the field of heart sciences, the Sainte-Justine UHC and the MHI reached a collaborative agreement which resulted in the creation of the MHI's Adult Congenital Heart Centre. The Centre monitors patients suffering from severe heart conditions since childhood. Many doctors who follow up on these patients also work for children at Sainte-Justine.

About the Montreal Heart Institute

Founded in 1954, the Montreal Heart Institute constantly aims for the highest standards of excellence in the cardiovascular field through its leadership in prevention, ultra-specialized care, training of professionals, clinical and fundamental research, and assessment of new technologies. It is affiliated with the Université de Montréal and its clinical outcomes are among the best in the world. In 2005-2006, the MHI performed more than 6,500 procedures in hemodynamics, including 2,800 therapeutic interventions (coronary, valvular and congenital). To learn more about the Institute, please visit its website at www.icm-mhi.org

About the Sainte-Justine UHC

The Sainte-Justine University Hospital Center is the largest mother-child center in Canada. It encompasses 450 beds and over 4,000 employees, admits 19,000 people annually and welcomes 260,000 patients at its Outpatients Clinic. It is one of the four most important pediatric centers on the American continent. Affiliated with the Université de Montréal, the Sainte-Justine UHC is by far Quebec's largest pediatric training center, and a leader in Canada. Each year, it welcomes about 4,000 students. The global reach of the Sainte-Justine UHC and its research center is quite impressive. The Sainte-Justine UHC will be celebrating its 100th anniversary in 2007. www.chu-sainte-justine.org

About the Université de Montréal

Founded in 1878, the Université de Montréal is, along with its affiliated schools, HEC Montréal and the École Polytechnique, the leader in higher education and research in Quebec, the second in Canada and one of the most important in North America. Its Faculty of Medicine includes over 4,000 students and relies on a solid hospital network featuring two major university hospitals

(UHC) and thirteen affiliated hospitals and institutes. Through its Réseau Universitaire Intégré de Santé (RUIS), the Faculty of Medicine is responsible for the health care of 40% of the Quebec population.

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