

Press Release

### **Local Mitral Regurgitation Cases on Growth Trend**

## **Hong Kong Adventist Hospital Launched the First MitraClip Treatment Centre in China, Japan and Korea Offering New and Less Traumatic Therapy for Patients That Cannot Receive Open Heart Surgery;**

(Hong Kong—21 August 2012) **The Hong Kong Adventist Hospital brings new hope to patients with mitral regurgitation, as its MitraClip Treatment Centre offers an advanced “less invasive than minimally invasive procedures” to treat the heart valve disease. The centre is the first of its kind in Greater China, Japan and Korea.**

The ageing population in Hong Kong fuels the annual increase of heart disease cases. Among various heart valve diseases, mitral regurgitation records the most significant growth. In the past, treatments of mitral regurgitation included only medication or open-heart surgery. Medical treatment cannot treat a structurally defective valve and therefore can only provide symptomatic relief. Invasive open-heart surgical treatment is an invasive treatment therefore cannot be offered to all of the patients with severe mitral regurgitation and having other significant comorbidities.

According to Dr Chris Wong Kwok Yiu, cardiology specialist at the Hong Kong Adventist Hospital, mitral valve allows blood to flow forward from the left atrium into the left ventricle and prevents blood flowing backward in the opposite direction during a normal heart-beat. When the left atrium contracts, the mitral valve opens and oxygen-rich blood is pumped through it into the left ventricle, then supplying oxygen and nutrition to the tissues and organs of the entire body.

“Under normal circumstance, mitral valve allows blood to flow forward through the heart. But if the mitral valve fails to close completely, blood flows backward in the opposite direction. That is called mitral regurgitation,” Dr Wong explained.

### **At least 70,000 patients in Hong Kong; posing a growing trend**

Dr Chris Wong said that cases of mitral regurgitation pose a growing trend around the world as the global population ages. “In the United States, the incidence rate among patients aged between 18 and 44 is approximately 0.5%, but that of patients over 75 years old jumps rapidly to 9.3%<sup>1,2</sup>. There are about 500,000 people over the age of 75 in Hong Kong<sup>3</sup>, so it is projected that there are at least 50,000 patients in the city. And the number is increasing,” he said.

Dr Chris Wong pointed out that the causes of mitral regurgitation include heart disease or deterioration of heart valve tissue. “When backflow of blood occurs, patients may experience shortness of breath, fatigue, exhaustion, cough, sensations of fluttering heartbeat, and sometimes, excessive urination at night,” he said.

### **Patients unable to take the open-heart surgery**

Existing treatments of mitral regurgitation include medication and open-heart surgery. Physician may prescribe medicines to manage the symptoms, but it does not cure the root of the problem – mitral regurgitation. The existing treatment "open-heart surgery", either repairing or replacing the mitral valve is considered a major surgery, which requires suspending the patient’s heartbeat and the use of extracorporeal membrane oxygenator to support the body.

### **MitraClip: a small clip makes a big step to better treatment**

Fortunately, the percutaneous catheter solution MitraClip, the latest treatment developed by the medical sector, reverses the adversity. Dr Ryan Ko Lap Yan explained, “MitraClip is a small clip allowing the mitral valve to close more completely, and therefore helps restore normal blood flow through the heart. The procedure is actually similar to Angioplasty; the MitraClip is transferred and clipped to the mitral valve through a catheter.” This minimally invasive surgery records a success rate as high as 98%, and effectively reduces 45% of re-admission cases<sup>4</sup>.

### **Leaving a small 6mm wound, patient can be discharged from hospital in 1-3 days**

Dr Ryan Ko said that patient undergoing the surgery has to be under general anesthesia for about two hours. Right after the surgery, patient can already feel the ease of symptoms, and can get out of bed the next day. Under observation in the hospital for one to three days and the patient can return home for recover.

### **Open-heart surgery: Gold Standard    MitraClip: filling in treatment gap**

“The advantage of this treatment is that the wound is as small as 6mm, greatly reducing the risk of complication. While open-heart surgery is still the gold standard of therapy at this moment, open-heart surgery is too invasive for some patients, especially the elder patients with poor heart function, forcing them to give up treatment. Now with MitraClip, there is new hope as it makes up the shortcomings of the current treatments,” Dr Ko added.

At present, MitraClip has been granted authentication by the European Union. This treatment has been made available in about 30 countries, benefiting over 5,000 patients<sup>5</sup>.

### **Case: patient unable to finish 10 steps in the past can go for sports and travel now**

David, an Irish staying in Hong Kong for 10 years, had suffered from mitral regurgitation since 2005. His condition remained stable until 2011, when it deteriorated abruptly with severe symptoms. "I could not even climb up ten steps, and always experienced shortness of breath and exhaustion. This really affected my daily life and work," he sighed. His doctor arranged a body check for him and mitral regurgitation was diagnosed, with his heart enlarging from a normal size of 5cm to 6.8cm.

David, now 66, was persuaded by his doctor to receive a surgery, and he chose the MitraClip treatment. "I stayed in the hospital for four days only. The next day of my surgery, I could already go out of bed to walk. On the third day, I could be discharged, and I didn't feel like a patient at all."

David regards himself as a lucky guy. "The wound on my leg is so tiny that it is barely visible. And I don't feel any pain at all. I can get back to work and my usual life immediately," he said. His recovery is good and he is now picking up his favourite sports and enjoying travel.

### **Hong Kong Adventist Hospital established the first MitraClip Treatment Centre**

Witnessing an increasing population of mitral regurgitation patients awaiting the most advanced treatment, a number of physicians from the Hong Kong Adventist Hospital joined the training and introduced the state-of-the-art MitraClip treatment, and established the first and only MitraClip Treatment Centre in Greater China, Japan and Korea. So far, the centre have treated 5 patients; all of them are recovering well.

The Specialists in Cardiology expect the MitraClip treatment to bring new hope to patients. "Desperate patients who were unable to receive the Current treatment in the past can now have a chance to be treated and uplift the quality of life," they said.

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