



HEARTTALK

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Dari Hati Ke Hati

YAYASAN JANTUNG SARAWAK
SARAWAK HEART FOUNDATION

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December 2012

Merry Christmas & Happy New Year



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Content

Pg

- 1 Message from Editor
- Mr. Eric Lim Swee Khoon is also a Trustee of the Foundation
- 2 Handing-Over Of
Laila Stroke Rehabilitation Centre
- 3 Summary Report On World Heart Day 2012
- 4-5 *Cardiac CT*
- Dr. T.K. Ong ,
Department of Cardiology, SGH Heart Centre
- 6-7 *Renal Denervation*
– A New Way To Treat High Blood Pressure
Without Using Drugs
- 8-9 Activities of the Sarawak Heart Foundation -
Second Half 2012
- 10 Up Coming Events/ Friends/Donation



Message From Editor

Greetings from Sarawak Heart Foundation!

The 2nd half of 2012 of the Foundation's calendar is again inundated with a number of activities. In terms of public health screenings, the Foundation conducted screenings for the public in Chung Hua Middle School No.3 on 2 September 2012 and in Bintawa Community Centre on 7 October 2012. As always, there was a huge turnout in both events.

On 6 September 2012, the Foundation officially handed over the Laila Stroke Rehabilitation Centre to Lembaga Amanah Khairat Darul Hana. The Centre was the brainchild of our late founding President, Datuk Amar Laila Taib after seeing the need of a "halfway house" for the management and recuperation of stroke patients whose home environment are not suitable to provide ambulatory care.

As always, the main highlight for the Foundation in the second half of the year was its signature event, the Walk-A-Mile held in conjunction with World Heart Day 2012. This year the event was held on 30 September 2012 at the Friendship Park, Jalan Song. This year, the Foundation added a twist to the programme by also holding a mini fund raising food stalls. Overall, the event was a success with a turnout in excess of 2,000 participants!

Another caring project which the Foundation revived is the "Heart to Heart" project with a slight modification. This time round, the Foundation is lucky to secure several doctors who were willing to operate at the Sarawak General Hospital Heart Centre at minimal costs where the costs were fully borne by the Foundation. The Foundation would like to extend its heartfelt gratitude to Dr Prashant Joshi, the Foundation's previous advisor who is now based in Australia, Dr Sivakumar from IJN, KL and Dr. Hafiz Law from Gleneagles Medical Centre, Penang for their willingness to participate in this programme. In total, about 37 patients benefited from this programme.

The 2nd half events ended with a Christmas visit to the Sarawak General Hospital Heart Centre to bring Christmas cheers to the heart patients there.

The main event to look forward to in the 1st half of 2013 will be the Heart Week and this year, we have chosen to hold the event in Miri, tentatively from 3-5 May 2013.

I would like to take this opportunity to wish you all a Happy New Year 2013 and for those who will be celebrating the Chinese New Year, "GONG XI FA CHAI"!!

Eric Lim Swee Khoon
Editor

Handing-Over Of Laila Stroke Rehabilitation Centre



On 6 September 2012, YBhg Dato Sri Puan Sri Empiang Jabu, a Member of the Board of Trustees, Sarawak Heart Foundation handed over the Laila Stroke Rehabilitation Centre to YB Datuk Hajjah Fatimah Abdullah, Chairman, Lembaga Amanah Khairat Darul Hana, Kuching. The other Board of Trustees, YBhg Dato Anne Teng and Ms Pauline Kon were present during the ceremony. The Centre was housed at:-

11 GROUND FLOOR, LOT 2343 BLK 10 KTLD
BORMILL ESTATE COMMERCIAL CENTRE
JALAN TUN AHMAD ZAIDI ADRUCE
93150 KUCHING

A brief history of Laila Stroke Rehabilitation Centre

As early as 2004, our late Chairman, Datuk Amar Laila Taib, after many visits to the hospitals and after seeing so many stroke survivors, she had indicated the need to provide a 'halfway' house for the management and recuperation of stroke patients whose home environment are unsuitable to provide ambulatory care in the region of physiotherapy, occupational and speech therapy after being discharged from hospitals. The purpose of such centre shall facilitate the recovery and rehabilitation of such patient in the hope that they could once again actively contribute to their families and communities.

After a few meetings with the Board of Trustees and doctors from this field, SHF decided to provide the necessary funding for the capital expenditure to renovate and provide the initial necessary equipment to run the stroke rehabilitation centre.

In March 2005, SHF engaged the architect to plan, design and provide the necessary tender documentation for the renovation work of the proposed centre. Phase 1 was completed in 2005. After consultation of the physiotherapists and other rehabilitation consultants, the centre was re-renovated in 2007 and completed in August 2007.

The management of the centre was handed over to PERKIM/Lembaga Amanah Khairat Darul Hana, with the assistance from Normah Medical Specialist Centre at the end of 2007 and the first batch of patients who came for rehabilitation stated in 20 September 2007.

In all, SHF spent a total of RM217,280.00 for the centre including furniture and fitting of the interior and equipment.



World Heart Day 2012 On 30 September 2012 At Friendship Park, Jalan Song, Kuching



This year the World Heart Day was celebrated on 30 September 2012 at Friendship Park, Jalan Song, Kuching. This event was organized jointly by the Sarawak Heart Foundation, SGH Heart Centre and Nestle Products Sdn Bhd with YBhg. Dato Anne Teng as the organizing Chairperson.

The activities for the day included Charity Walk-A-Mile, free health screening, mini fund-raising food stalls, physical performances like aerobic, attractive lucky prizes and games.

It was still drizzling in the early morning and many enthusiastic people from all walks of life came to register and donated RM10.00 for a t-shirt with colourful head bands (for females) and helium balloons to tie around waist or wrist (for men), The colorful balloons at the main entrance, walking tracks, and stage were decorated by Ms Jackie Tan and her team. A free healthy Nestle Omega breakfast was provided by Nestle Products Sdn Bhd, one of our main sponsors and our

partner for the Charity Walk-A-Mile. Nestle had also donated to Sarawak Heart Foundation the 1st 900 t-shirts for the event.

YAB Pehin Sri Abdul Taib Mahmud, Chief Minister of Sarawak and Chairman of Sarawak Heart Foundation was the Guest-of-Honor. During the launching of the World Heart Day, YAB Pehin Sri said in his speech that walking was the best way of a healthy lifestyle as it stimulated the heart. YAB Pehin Sri also expressed concern on the lack of physical activity among the people especially the children who preferred to exercise only their fingers playing computer games and urged the parents to encourage their children to exercise through walking.

The students of the Dance Academy did their warming-up exercise. Encik Busman Bakar, Aerobic Instructor did the various physical exercises including Gangnam Style.

More than 2000 participants registered for the Charity

Walk and many people from nearby neighbourhood came to participate also.

Among those who participated in the Walk were Puan Sri Ragad, YB Datuk Patinggi Tan Sri Alfred Jabu, YB Dato Sri Michael Manyin, YB Dr. Jerip Susil, YBhg Dato James Chan, Heads of State and Federal Departments and private sectors.

Free health screening package consisted of BMI (Body Mass Index), blood pressure, glucose and cholesterol were done at the ground floor of the hall of the Tea House at Friendship Park from 8 am to 12 noon. The health screening was conducted by volunteers from the Heart Centre, Sarawak General Hospital. There were a total of 268 public being screened that morning. Roche Diagnostics had kindly sponsored the glucose and cholesterol strips for screening and had also stationed their staff to assist.

*Report prepared by Ms Jennifer Goh
Dated 10 Oct 2012*

CARDIAC CT

Dr. T.K. Ong

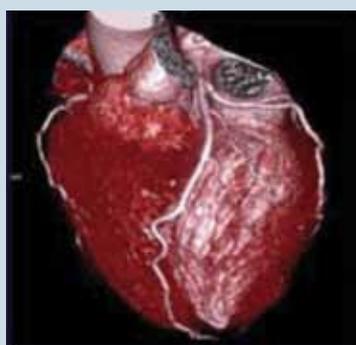
*Department of Cardiology,
SGH Heart Centre*

What is Cardiac CT?

Cardiac CT or cardiac computed tomography is an x-ray imaging technique which uses an ultrafast CT scanner to take multiple thin-slice cross-sectional images of the heart. A powerful computer software is then used to combine these images to produce 2 or 3-dimensional pictures of the heart (Fig. 1 & 2). An iodine-based dye (contrast) is usually injected into a vein at the elbow during the scan. The dye travels via the veins to the heart and eventually enters the small blood vessels on the surface of the heart to enhance the images of these tiny structures.



*Fig. 1
2D image
showing a
narrowing in the
right coronary
artery (arrow)*



*Fig. 2
3D image
showing a
normal left
anterior
descending
artery*

What are the main uses of Cardiac CT?

There are many potential uses of cardiac CT. However, some of them are still under research. In routine clinical practice, cardiac CT is mainly used for the following indications.

- To detect calcium deposits on the coronary arteries (blood vessels which carry blood and oxygen to the heart muscle). The presence of calcium may be an early sign of coronary heart disease even before symptoms develop. The Calcium Score is an estimate of the total amount of calcium deposits on the coronary arteries and has been shown to be a predictor of future cardiac events. The higher the score, the higher the risk.
- Coronary CT angiography (CTA) produces images of the coronary arteries as contrast flows through the lumen. CTA can show where arteries are narrowed or blocked, as well as fatty deposits (plaques) within the wall of e arteries. Because the heart is a moving object and the arteries are small, only newer generation ultrafast CT scanners capable of producing very high resolution images can be used to take pictures of the coronary arteries. CTA is generally indicated only in individuals with a low or intermediate likelihood of having coronary artery disease. An example would be someone with chest pain not quite typical of heart disease and has undergone an exercise treadmill test but the result is equivocal or difficult to interpret.
- Follow up of the heart after a procedure. For instance, a patient who had undergone coronary bypass graft surgery may be asked to undergo cardiac CTA to see if the bypass grafts are still patent. In selected cases, patients who had undergone coronary angioplasty (balloon dilatation of an artery) followed by stenting (placement of a metal scaffold to keep the artery open) may undergo CTA to see if the stent is still patent.
- Rapid “one-stop” assessment of acute chest pain. Chest pain has many possible causes other than the heart. A single CT scan study can now be performed to determine if the symptom arises from a blockage in the coronary artery, a tear in the wall of the aorta (dissection) or a blood clot in a blood vessel in the lung (pulmonary embolus). This is called a “triple rule out” protocol.

What are the limitations of Cardiac CT?

Because the heart is a moving object, it is not possible to scan the heart if it is beating very fast because the image will be blur. Hence, the doctor might ask you to take a medication to slow down your heart beat before coming for the scan.

If there are a lot of calcium deposits on your arteries, it might not be possible to do a cardiac CTA. The calcium will obscure the lumen of the arteries making it difficult to decide whether there is a true narrowing inside the artery.

There is a small risk of developing an allergic reaction to the dye (contrast) which is injected into your body during the scan. If you have underlying kidney disease, the dye may worsen your kidney function. Hence, your doctor will do a blood test to check your kidneys before performing the scan on you.

Cardiac CT uses x-rays to produce images of the heart. The amount of radiation is small. However, with commonly used 64-slice scanners, it is still equivalent to the amount of radiation that you will be naturally exposed to (e.g., when you travel in an airplane) over a 3-year period. Exposure to excessive radiation carries a theoretical increased risk of developing cancer in the future. This risk is higher for people younger than 40 years old.

What can be done to overcome the limitations of Cardiac CT?



Fig . 3 DSCT at SGH Heart Centre

CT scan manufacturers use various techniques to overcome some of the limitations of cardiac CT. In general, most try to increase the speed at which the x-ray tube rotates around the body. This will shorten the time required to take a “snapshot” of the heart, thereby making it possible to scan at a faster heart rate without getting a blurred image.

The Siemens Somatom Definition Flash (Fig. 3) installed at the SGH Heart Centre in Kota Samarahan is called a DSCT (Dual Source CT) because it uses 2 x-ray tubes aligned at 90o to each other. The first tube contributes 50% of the image while the second tube contributes the other 50% as they both rotate simultaneously around the heart. Because of that, it

takes half as much time to acquire a slice of image of the heart. This improves the so-called temporal resolution and makes it possible to scan a heart which is beating fast. It is even possible to scan a heart which is beating irregularly.

Current scanners from different manufacturers use specific protocols to minimize the amount of radiation that the patient is exposed to. The DSCT exposes the patient to about half as much radiation as previous generation 64-slice scanners. In addition, in selected patients with very well controlled and stable heart rates, the DSCT can scan in a “Flash” mode whereby the table is accelerated during the scan. This technique dramatically reduces the radiation further to <10% of the dose of 64-slice scanners.

Presently, it is still not possible to overcome the limitations imposed by coronary calcium. Hence, patients with a high calcium score should not undergo a CTA because the images will be hard to interpret and give rise to false results. Also, patients at risk of kidney injury should not undergo CTA because conventional invasive coronary angiography (done in the lab) requires half as much contrast volume and therefore is less likely to induce kidney failure.

Finally, healthy individuals with no symptom or coronary risk factor (such as smoking, high blood pressure, diabetes or high cholesterol) should not undergo cardiac CT as a screening test because there is no scientific evidence that this will lead to a better outcome or survival. The risk of cancer from radiation, allergic reaction to contrast and kidney injury outweighs any potential benefit of screening.

RENAL DENERVATION – A New Way To Treat High Blood Pressure Without Using Drugs

Dr. Tan Sian Kong
Cardiologist
Sarawak General Hospital Heart Centre



INTRODUCTION

Renal denervation (RDN) has recently become available as a new treatment modality for resistant high blood pressure. The nerves supplying our kidneys help to regulate the blood pressure in our body. Sometimes, the nerves malfunction and this results in very high blood pressures that do not respond to medications. Destroying these nerves may help to improve blood pressure control.



Since 1999, numerous clinical trials have been conducted which showed that this technique works. In fact, several RDN medical devices have already been approved by international regulatory authorities for their use in treating humans.

Interestingly, the concept of treating high blood pressure by destroying the nerves of the kidney is not something new. Historically, before the availability of drugs, surgical removal of the nerves (called sympathectomy) was a recognized treatment for high blood pressure. Modern medical treatment for high blood has improved over the years. However, approximately 10% of patients continue to have persistently high blood pressure (>140/90mmHg) despite taking more than 3 blood pressure lowering medications. This condition is called resistant hypertension.

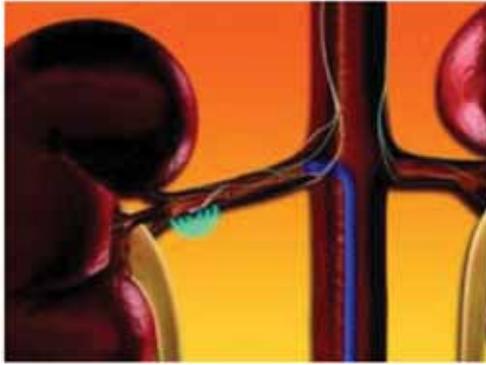
WHO MIGHT BENEFIT FROM RDN?



Patients who might benefit from RDN are those with high blood pressures that require more than 3 medications to control the blood pressure.

They should not have a past medical history of renal disease or surgical procedures done to the kidneys.

THE RDN PROCEDURE



The nerves that supply our kidneys run along the surface of the kidney artery. They can be destroyed by delivering small electrical impulses to the artery. This is known as radiofrequency ablation.

RDN can be done as an out-patient day care procedure without the need for hospitalization. The patient is usually told to fast overnight (or approximately 6 to 8 hours before the procedure). Sedative medications may be given before the procedure.

Using aseptic techniques, after giving a local anaesthetic injection, the doctor punctures the artery in the groin to gain access. Once there is access to the blood vessel, the doctor uses a thin hollow

plastic tube (called a catheter) to engage the artery of the kidney. A small amount of dye (contrast) is injected through the catheter to outline the artery. A steerable ablation catheter is then introduced and electrical impulses are delivered to the wall of the artery to disrupt the nerves surrounding it.

The procedure does not involve any permanent implant. After the procedure, all the catheters and sheaths are removed.

Since October 2012, the SGH Heart Centre have acquired the expertise to provide this novel treatment to patients with very high blood pressures that are resistant to oral medications.

CLINICAL OUTCOME

Clinical trials have shown that this procedure produces a significant reduction in blood pressure and the effect is still maintained at 3 years (longest follow-up to date). In fact, about 70% of treated patients will start to show some response as early as one month after the procedure.



COMPLICATIONS

Clinical trials have demonstrated that RDN is a very safe procedure. Patients may experience some pain or discomfort during the delivery of the electrical impulses to the kidney artery. A small dose of pain relief medication can be given to relieve the symptom.

Other documented procedure related complications include groin puncture site bruises and dissection of the renal artery. However, these complications are extremely rare.

Clinical trials in humans have showed no permanent damage to the artery or kidney function. In fact, in some instances it may even improve the kidney function. The reason for that is still not clear.

THE FUTURE

The renal denervation procedure is currently being investigated for the treatment of other conditions such as chronic heart failure which are thought to be related to hyper-activity of the nerves supplying the kidneys.

Activities of Sarawak Heart Foundation 2nd Half of 2012



06/07/12

Sarawak Plantation in collaboration with SHF donated 20 units of four-seater link chairs amounting to RM10,000.00 to Emergency Department SGH

06/07/12

SHF sponsored a heart patient who had been operated in SGH



10/08/12

SHF donated benches to SGH Heart Centre



02/09/12

Health Screening & Talk
@ CHMS No.3, Jalan Pending, Kuching



07/10/12

Health Screening & Talk
@ Bintawa Community Centre, Kuching



01/11/12

Sponsorship of RM20,000.00 for the research study

“Research on factors associated with physical activity levels among adolescents attending schools in Kuching Division (1 Year) to be carried out by Dr. Cheah Whye Lian, senior lecturer in Unimas. This also includes Health Talk & Health Screening for teachers in seven secondary schools in Kuching Division. 2 schools SMK Bau & SMK Paku had been completed.

13/12/12

SHF Christmas Visit to SGH Heart Centre



SHF Outlet @ SGH
Heart Centre,
Kota Samarahan

With effect from 2 January 2013, the Outlet will be open from:-
Monday - Saturday
7.45 am - 6 pm

Up Coming EVENTS

5/2/13	CHINESE NEW YEAR VISIT TO SGH HEART CENTRE
9/3/13	WOMEN'S HEART DAY, KUCHING
20/4/13	HEART HEALTH AWARENESS PROGRAM @ LAWAS
3-5/5/13	MIRI HEART WEEK

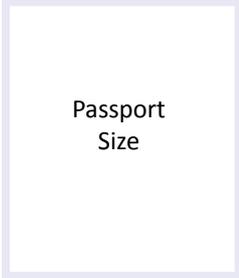


SARAWAK HEART FOUNDATION
(383498-P)

"FRIEND OF THE FOUNDATION" FORM

HOW CAN YOU HELP?

1. If you are someone who is caring and would like to help Sarawak Heart Foundation you can register as a "Friend of the Foundation" (as a volunteer to help in the various projects undertaken by the Foundation from time to time and especially with fund- raising)
2. Please fill in the form below and send to us.



Thank You

Full Name :

IC/ No. :

Address :

Tel. No. : Fax No. :

E-Mail : H/P No.:

Date :

All donations payable to:

Sarawak Heart Foundation

No.11, 1st Floor, Lot 2343 Bormill Estate Commercial Centre , Jalan Tun Ahmad Zaidi Aduce, 93150 Kuching Sarawak
Tel: 082-258212 Fax: 082-258303 Email address: sarawakheartfoundation8@gmail.com



SARAWAK HEART FOUNDATION
(383498-P)

DONATION FORM

Full Name :

Address :

Tel. No. : Fax No. E-Mail

PAYMENT

- [] Cheque No. For RM
- [] Band Draft For RM

For Direct Remittance, please bank into **HSBC A/C No. 322-148842-101**
(Please fax or email the bank-in slop to Fax: 082-258303
Email: sarawakheartfoundation8@gmail.com

All donations payable to:

Sarawak Heart Foundation

No. 11, 1st Floor, Lot 2343, Block 10 KCLD
Bormill Estate Commercial Centre
Jalan Tun Ahmad Zaidi Aduce, 93150 Kuching, Sarawak.
Tel: 082-258212 ; Fax: 082-258303
Website: sarawakheartfoundation.org.my

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