



Murmurs



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HIGHLIGHTS

- NCHB Sees Surge in Human Heart Valve Transplants
- Tracing the Roots of Mistri Wing
- Fellowship in Cardiac Database Development



AsiaPCR/SingLIVE Grows From Strength To Strength



Participants watching the live transmission session at AsiaPCR/SingLIVE 2011 on 13 January 2011.

AsiaPCR/SingLIVE 2011, one of the leading cardiology meetings in Asia, garnered over 1,700 participants from 57 countries, a 12% jump from 2010. The annual scientific meeting was held from 13 to 15 January 2011 at Suntec Singapore. The strategic alliance was formed in 2010 between EuroPCR, the leading interventional cardiovascular course in the world, and Singapore LIVE, a premier cardiovascular interventional meeting in Asia-Pacific.

Besides a large attendance from Asia, the course also drew newcomers from the Middle East and saw a rising participation from Europe. A total of 87 abstracts and 100 clinical cases were received, doubling that of 2010. The new complications session attracted 41 submissions with India as the largest contributor. Close to 350 exhibitors participated at AsiaPCR/SingLIVE 2011.

Topic-centric Approach

The 3-day course took a topic-centric approach covering various types of cases to enhance the learning experience of the participants. It focused on the management of complex left main and bifurcation lesions, treatment of complex coronary artery lesions, and management of high-risk acute coronary syndrome. The conference also covered important topics like transcatheter aortic valve implantation, chronic total occlusions, mitral valvuloplasty and intravascular ultrasound/optical coherence tomography. For each "How should I treat?" session, two different Asian speakers presented on real-life cases with regional panelists adding depth with their management take and how these practices can be applied in an Asian context. This allows participants to adapt the learning to their everyday practice.

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High Satisfaction Rate

There were overseas satellite transmissions from Asian sites, including Malaysia, India and China. Delegates also saw firsthand how percutaneous coronary interventions are practised in the Middle East, with live transmission from the Dubai Heart Centre, AsiaPCR/SingLIVE's first live transmission site from the region.

Packed with 72 sessions, over 95 hours of education and a stellar lineup of 217 faculty members, 90% of the attendees were satisfied with the course. Besides staying abreast with the latest developments in the cardiology field, participants also renewed and widened their network of contacts.

Through such open exchanges across various continents, AsiaPCR/SingLIVE promotes the advancement of education and information for the cardiovascular community in Asia-Pacific, paving the way for improved patient care in cardiovascular medicine.

FACTS & FIGURES AsiaPCR/SingLIVE 2011

- 1711** attendees
- 217** faculty
- + 95** hours of education
- 6** live centres
- 228** submissions
- 31** partners
- 439** sqm of exhibition
- 57** countries

90% of attendees satisfied

NCHB Sees Surge in Human Heart Valve Transplants



A NCHB staff trims away the excess fat tissue from a donated valve for preservation.

Three years since the National Cardiovascular Homograft Bank (NCHB) started, the bank has seen a nine-fold increase in the number of those who received a local heart valve transplant – from two to 17 in 2010. To date, 29 patients received donated heart valves from the bank.

Most of the donated heart valves are used for patients with congenital heart defects such as abnormal or missing valves. In Singapore, congenital heart disease affects about 0.81% of total live births. This works out to around 12,000 adults with approximately 300 new cases yearly.

Cheaper and Better

"Previously, local hospitals and doctors needing a homograft for their patients will have to search for suitable tissues from overseas, a time-consuming and expensive process. It costs around \$7,800 for a valve from Britain, compared to \$5,000 for a valve from Singapore," said Dr Lim Yeong Phang, Medical Director, NCHB and Senior Consultant, Department of Cardiothoracic Surgery, National Heart Centre Singapore (NHCS).

"Donated heart valves also last longer for about 10 to 15 years, compared to bioprosthetic valves which last around eight to 10 years," he added.

Besides lower costs and longer durability for patients who receive human heart valves also do not need to take immunosuppressants or blood-thinning medication.

NCHB is the first national homograft tissue bank in Singapore set up by NHCS in 2008. The bank also stores other types of homografts such as vascular tissues and trachea.

Heart valves, windpipes and arteries are not included under the Human Organ Transplant Act. To donate, you can simply complete an Organ Donation Pledge Form and submit it to the National Organ Transplant Unit (NOTU). The form can be downloaded from the Live On (MTERA) website at www.liveon.sg.

Tracing the Roots of Mistri Wing

In 1957, a three-year-old boy was at the edge of the Mistri Wing and accidentally fell off from the third storey. This story had a happy ending as a man on the ground floor had seen the child topple over. He rushed over, stretched out his arms and caught the toddler in time.

This was one of the many true stories related by Mr Noshir Mistri, nephew of the late Mr Navroji R Mistri, when he and his family visited the Mistri Wing on 4 April 2011.



Mr and Mrs Noshir Mistri (centre) describing some old photos of the late Mr Navroji Mistri to the staff.

The late Mr Mistri was a patient at the Singapore General Hospital (SGH) in 1953. During his stay, he noticed that there were no proper facilities for children in the hospital. He was quoted saying, "I cannot bear to think of sick children and their mothers lying on the floors of hospital wards...

because of the shortage of space and funds...I thought it was my duty to do something for Singapore's children."

Unfortunately, Mr Mistri, who was single, passed away later that same year. His brother, Mr Hormusji Mistri, laid the foundation stone in his place in 1954 and Mistri Wing was officially open in 1956. His generous donation not only helped to build a 4-storey building that had eight wards with 274 beds/cots; it had also paved the way for early paediatric care in Singapore. This was the birth of Mistri Wing.

The paediatric unit at Mistri Wing was moved to Singapore General Hospital's Block 5 and later moved to KK Women's and Children's Hospital in 1997. The Mistri Wing was revamped to house the then Singapore Heart Centre in 1994. A marble bust of Mr Mistri still stands proudly at the lobby of NHCS, in appreciation of his generous donation to Singapore healthcare.

Besides the Mistri Wing, the late Mr Mistri had also made several donations in his lifetime: \$50,000 to the University of Malaya (now the National University of Singapore) to establish a Mistri Scholarship Fund, the St. Nicholas Home for the Blind, Singapore Child Welfare Society, St. Andrews Orthopaedic Hospital, Little Sisters of the Poor, Singapore Government Trade Centre, Singapore Association of Tuberculosis (SATA) and eight charities in Bombay, India.



The Mistri family with NHCS management on their visit on 4 April 2011.

Fellowship in Cardiac Database Development

This issue, the Murmurs team talks to Dr Chin Chee Tang, Consultant, Department of Cardiology at National Heart Centre Singapore (NHCS) on his insightful fellowship at the Duke Clinical Research Institute, Duke University Medical Center, Durham, North Carolina, United States, from July 2009 to June 2010.

Why the Duke Clinical Research Institute

The Duke Clinical Research Institute (DCRI) is the largest academic research organisation in the world. It has the operational capabilities of a contract research organisation plus the expertise of the faculty at the Duke University Medical Center. DCRI is known for conducting groundbreaking multinational clinical trials, managing major national patient registries, and performing landmark outcomes research. It is also home to the Duke Databank for Cardiovascular (CV) Diseases, the largest and oldest institutional cardiovascular database in the world. The institute has conducted studies at more than 3,592 sites in 64 countries and has more than 1,050,150 patients enrolled in DCRI studies.

The Insightful Training

During my training, I was involved in the development of the TRANSLATE-ACS registry. This is a US-wide, multicentre registry aiming to recruit 15,000 acute coronary syndrome patients. The development stage included protocol design, document design, site recruitment and startup, information technology systems for data entry, data quality verification and database development. I was privileged to be mentored by Professor Eric D Peterson who is the Faculty Associate Director and Director, CV Outcomes Research and Quality at DCRI.

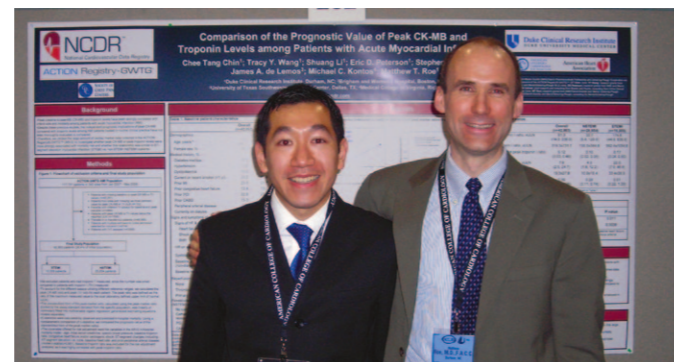
At DCRI, I had the unique opportunity to be intimately involved in the operational and statistical activities of two large national US registries – the US National Myocardial Infarct registry (ACTION-GWTG registry) and the Cardiac Catheterisation and PCI registry (NCDR CathPCI registry). During my time there, I learnt the structure of these registries – how data is captured, transferred and stored while ensuring quality, and analysed for patient care improvement. There were also weekly statistical group meetings led by academic thought leaders and faculty grade statisticians where the different analyses being conducted were analysed and discussed.

With access to the various registries, I studied the trends in baseline characteristics, treatment patterns, outcomes on patients admitted with acute myocardial infarct, complicated with cardiogenic shock. I was also involved in the development of a mortality risk assessment and bleeding risk assessment prognostic model. Other studies included length of stay after primary percutaneous coronary intervention for patients admitted with ST-segment elevation acute myocardial infarct; the different prognostic significance of peak cardiac markers in acute myocardial infarct patients; and the safety and efficacy of anticoagulation during intra-aortic balloon counterpulsation pump use.

By observing large number of patients, we can better understand the changes in patient characteristics, identify potential gaps in management strategies and help to improve clinical outcomes, patient safety and reduce healthcare costs.

In addition to working with these large registries, I was also involved in the operations of a large international multicentre randomised clinical trial – the TRILOGY-ACS study. My mentor, Professor Matthew Roe, was instrumental in exposing me to the other side of clinical trials, giving me a unique insight to it beyond normal site-based activities.

During my fellowship training, I presented abstracts at the 2010 American College of Cardiology (ACC) Scientific Meeting and 2010 American Heart Association (AHA) Scientific Sessions. I also have three papers published in the American Heart Journal and the American Journal of Cardiology.



Dr Chin Chee Tang with his mentor, Professor Matthew Roe at the American College of Cardiology (ACC) Scientific Meeting in Atlanta in March 2010.

Memorable Experience

Through this research fellowship, I learnt a new facet of academic medicine. Leading clinical trials and registries allows me to view clinical research from a fresh perspective – I now better appreciate the hard work involved and the operational challenges and limitations.

DCRI is part of the Duke University. Being on university grounds, it felt like reliving my university days. I stayed in Chapel Hill with my family, which is two hours away from either the mountains or beaches. On weekends, we were spoilt for choice having to decide between trekking sessions in the Appalachian mountains or whiling the time away on the Atlantic coastline.



Dr Chin Chee Tang and his wife on a ski holiday at Vail, North America's top ski resort.

What's next

We aim to develop a mortality/ischaemic risk and bleeding risk assessment for patients admitted with acute coronary syndrome tailored specifically for Singapore and refine national cardiology databases for acute coronary syndrome and cardiac catheterisation percutaneous coronary interventions.

Dr Chin Chee Tang enjoys sports and is an avid supporter of the activities organised by NHCS Healthy Lifestyle Committee. He has participated in badminton and soccer and recently ran a marathon. Dr Chin also loves ski holidays with his family.



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NHCS Interventional Cardiology Procedures

- Coronary angiography / cardiac catheterisation
- Percutaneous coronary intervention (PCI) – angioplasty, stent implantation and rotablator treatment
- Percutaneous device closure of atrial septal defect (ASD) / patent foramen ovale (PFO)
- Percutaneous balloon valvuloplasty of mitral, aortic and pulmonary valves
- Percutaneous aortic valve replacement
- Intraaortic balloon counterpulsation
- Intravascular ultrasound imaging (IVUS)
- Pressure wire measurement
- Percutaneous cardiopulmonary bypass
- Rotational coronary atherectomy

Our Specialists (Interventional Cardiology)

MEDICAL DIRECTOR AND SENIOR CONSULTANT
A/Prof Koh Tian Hai

HEAD AND SENIOR CONSULTANT AND DIRECTOR, INTERVENTIONAL CARDIOLOGY
A/Prof Lim Soo Teik

SENIOR CONSULTANTS
A/Prof Philip Wong Dr Aaron Wong

CONSULTANTS
Dr Paul Chiam Dr Yeo Khung Keong
Dr Jack Tan Dr Chin Chee Tang
Dr Stanley Chia Dr Ho Kay Woon
Dr Rohit Khurana (away for HMDP)

For a comprehensive list of NHCS services and specialists, please visit www.nhcs.com.sg.

Research Publications Jan – Mar 2011

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Winners of SingHealth GCEO Excellence Awards 2011



Professor Tan Ser Kiat, Group Chief Executive Officer (centre), SingHealth with NHCS' SingHealth GCEO Excellence Awards 2011 winners at the award ceremony on 25 March 2011. From left to right: Ang Saw Khim, Senior Manager, Human Resource – Outstanding Administrative Staff Award; Seah Boon Hee Eric, Patient Care Assistant – Outstanding Ancillary Staff Award; Chan Siok Tian, Chief Physiotherapist – Outstanding Allied Health Professional Award; Lee Chin Hian, Senior Nurse Manager – Outstanding Nurse Award; and Associate Professor Chua Yeow Leng, Senior Consultant, Cardiothoracic Surgery – Outstanding Clinician Award.

139 receive Singapore Health Quality Service Award



At the inaugural Singapore Health Quality Service Award (SHQSA) ceremony on 26 January 2011, 139 NHCS staff were recognised for their commitment in service excellence. Out of the 139 awards, 11 were star, 14 were gold and 114 were silver. The SHQSA is the first of its kind to evaluate exemplary service behaviour and recognise service champions in public healthcare.

Our Singapore Health Quality Service Award winners.

Appointment of Subspecialty Directorship



DR TAN SWEE YAW, Consultant, Department of Cardiology appointed as Director, Cardiovascular Rehabilitation and Preventive Cardiology with effect from 1 January 2011.

Promotion



DR CHAKARAMAKKIL MATHEW JOSE Associate Consultant, Department of Cardiothoracic Surgery

NHCS GP Heart Care Symposium on Acute Cardiac Care: Cardiogenic Shock Update



Medical professionals updating their knowledge on cardiogenic shock at the NHCS GP Heart Care Symposium on 19 February 2011.

Over 200 medical professionals attended the NHCS GP Heart Care Symposium Acute Cardiac Care: Cardiogenic Shock Update held on 19 February 2011. At the symposium, specialists from NHCS, SGH and Mount Elizabeth Medical Centre covered resuscitative measures such as extracorporeal membrane oxygenation, intra-aortic balloon pump, pharmacologic management and management of pulmonary embolism and atrial fibrillation in shock patients.

Understanding Heart Valve Disease

As part of its public education efforts on heart disease, National Heart Centre Singapore (NHCS) organised a public forum on heart valve disease. An overwhelming 230 people attended the forum on 26 February 2011 at the Grassroots Club. Through the engaging talks and question and answer session, participants gained a better understanding on the symptoms and treatments for the disease. The public also learnt about the importance of homograft donation and how it will improve the quality of life of heart patients.



Participants learning on heart valve disease at NHCS public forum on 26 February 2011 at the Grassroots Club.

Upcoming Events

PACES for Cardiology

Date 14 May 2011 (Saturday)

Venue NHCS

ACSM Certified Clinical Exercise Specialists Workshop and Certification 2011

Date 5 - 8 August 2011

Venue NHCS

For registration and event details, please check out www.nhcs.com.sg.

For feedback on Murmurs, please direct to

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