

Adventist Health 港安

PULSE

EXTENDING THE HEALING MINISTRY OF CHRIST – PROFESSIONALLY WE SERVE, PERSONALLY WE CARE

JUL/AUG 2010



CEO/President Message: ACHS Accreditation

ACHS accreditation has now been achieved

Platelet Inhibition (Plavix)

P2Y12 Assay

TWAH New Building Progress

Latest update about our new building at Tsuen Wan



Content

1 CEO/President Message

Message from Dr. Frank Yeung, President/CEO of Adventist Health.

2 Medical News

Minimally invasive treatment for benign prostatic hyperplasia by Dr. Chan Lung Wai | Specialist in Urology, Director of Urology Care.

3 News From Departments



PLATELET INHIBITION ASSAY

3-4 **AH** | Latest news on Clinical Laboratories, Hong Kong Heart Center and Pharmacies.

5 **HKAH** | Latest news on Diagnostic Imaging.

6 Lifestyle Management Center



Nutrition for infants.

7 Hospital News



PARENT CRAFT – VIDEO ON DEMAND

7 **HKAH** | ATM Machine Installation.

7 **TWAH** | TWAH Accredited by HKCOG.

8 Event Highlights



CARDIOLOGIST APPRECIATION DINNER

8 **HKAH** | CME Workshop and Cardiologist Appreciation Dinner.

9 Forthcoming Events

World Heart Day and CME Workshops.

Matthew 7:7, BEV What you are searching for you will get



Thanks to all of you who have attended the Physician Dinner held in Kowloon Shangri-la. I am sure you enjoyed the great food, the entertainment, and above all the fellowship atmosphere as much as I do.



PHYSICIAN DINNER 2010

The Hong Kong Adventist Hospital is proud to be the first private hospital to introduce the Optical Coherence Tomography (OCT) system to Hong Kong. This cutting edge technology forms images by reflecting light inside blood vessels, and allows cardiologists to see what is going on inside the coronary arteries. What is the advantage over intravascular ultrasound? Since light travels faster than sound, OCT provides intravascular resolution at 15 micrometers, which is about the size of a neutrophil. The cardiologist can now see and define how much fat and clot there is in the actual plaque, check if existing stents are in place and observe their interaction with tissues inside the blood vessel. I am sure this FDA approved technology will be of benefit to your patients undergoing coronary angioplasty.

In August, Professor Kenneth Tsang and Professor John Simon held a media conference in Hong Kong Adventist Hospital to introduce the first successful case of ECMO, or Extracorporeal Membrane Oxygenation, carried out in private hospitals in Hong Kong. While we don't expect too many patients here will require this level of heart-lung bypass support, the success proved that the facilities, manpower, and expertise we provide are on par with top tier tertiary centers and teaching hospitals.



ECMO MEDIA CONFERENCE

While HKAH is exploring the frontiers of medicine, the Department of Obstetrics and Pediatrics in TWAH have introduced the "First Family Photo" and "Baby Memorabilia" projects to encourage parental bonding with their newborn babies. Biblical quotes in every page of the Memorabilia remind parents that the power to procreate is one of the highest privileges God has given to human beings. Working at the family and community level, TWAH is laying a strong foundation for the future as intense construction is underway for the new hospital wing. When completed, TWAH will be freed from physical constraints that had been hindering its development for decades.

Yours truly,

Dr. Frank Yeung

President/CEO | Hong Kong and Tsuen Wan Adventist Hospitals

Minimally Invasive Treatment for Benign Prostatic Hyperplasia

BY Dr. CHAN Lung Wai | Specialist in Urology, Director of Urology Care

The ancient Egyptians have described benign Prostatic Hyperplasia (BPH) causing urinary outflow obstruction since the 15th century BC. The word “prostate” comes from the Greek “προστατ”, which means “one who stands before or in front of”, which, in this case, means in front of the bladder. An exciting surgery called “Transurethral Resection of the Prostate (TURP)” received plenty of attention by both physicians and patients in the 1930s. Very soon it was discovered that TURP was a challenging procedure, and adequate training was necessary for its proper conduction. With the aim to decrease blood loss, inpatient hospitalization, and fluid absorption, various surgical alternatives to TURP were subsequently developed.

Transurethral Resection and Vaporization of the prostate (TURVP) utilizes a special vaporizing loop to cut and vaporize prostate tissues. Holmium enucleation of the prostate (HoLEP) uses holmium laser energy to carve out the obstructive lobes of the prostate endoscopically. This method offers good hemostasis, but it can be quite time-consuming. Photoselective vaporization of the prostate (PVP) uses a high-power potassium-titanyl-phosphate (KTP) laser, also called the “green light” laser. KTP laser energy at 532 nm was highly absorbed by oxyhemoglobin and only penetrated 1-2 mm deep into the prostatic tissue. The hemostasis was excellent because the blood vessels were rapidly sealed. It can safely be performed with patients taking anti-platelet agents, which are considered a significant advantage over traditional TURP. Bipolar TURP stepped in recently using saline as irrigation fluid, so avoiding the TUR syndrome. Main advantages included blood loss reduction and decreased incidence of postoperative clot retention and blood transfusion requirement. Plasma Vaporization of the Prostate using the TURis resection system was a promising technique over the horizon. A high-energy plasma zone was generated on the special button electrode, which rapidly vaporized prostate tissue upon contact, and achieved good hemostasis. Modification of the skill yielded prostate tissue for pathological examination.

In recent years various minimally invasive therapies for BPH have been developed. Actively practicing urologists should be familiar with several methods, and offer the patient a technique that produces the best outcome. [A](#)



FIGURE 1 | CYSTOSCOPIC VIEW OF AN OBSTRUCTIVE PROSTATE. THE ENLARGED INTRAVESICAL MEDIAN LOBE WAS CLEARLY SHOWN IN THE MIDDLE OF THE PICTURE



FIGURE 2 | PHOTOSELECTIVE VAPORIZATION OF THE PROSTATE (PVP). IT IS APTLY CALLED THE “GREEN LIGHT” LASER



FIGURE 3 | PLASMA VAPORIZATION OF THE PROSTATE. THE ORANGE PLASMA ZONE PRODUCED RAPID TISSUE VAPORIZATION.

Clinical Laboratories/Hong Kong Heart Center Platelet Inhibition (Plavix) P2Y12 Assay

BY **Dr. Boron C.W. CHENG** | Specialist in Cardiology

Newly available information indicates that some patients vary in their genetic makeup in ways that may affect their response to clopidogrel (Plavix), and can prevent the medication from reducing their risk to a heart attack, stroke and even death. The Food and Drug Administration (FDA) recently added a warning to the information about this drug.

The FDA estimates that 2 to 14 percent of patients are “poor metabolizers” of the drug, thereby not benefiting fully from it. Although there is increasing information about specific genetic variations that might affect clopidogrel metabolism, leading to suboptimal clinical responses in some patients, there is not sufficient evidence upon which to develop specific recommendations related to genetic testing in patients. The recent ACCF/AHA report also sets forth broad recommendations for practice:

1. Adherence to existing evidence-based guidelines from ACC, AHA or other professional societies for using antiplatelet therapies should remain the foundation of care. (clopidogrel loading 600mg & clopidogrel maintenance 75mg daily)
2. Clinicians must be aware that in certain patients with either acute or chronic coronary artery disease, genetic variability in response to clopidogrel can affect its inhibition of platelet function.
3. Careful clinical judgment, including weighing the risks and benefits, is needed in considering all therapies. The newly boxed warning points out that for clopidogrel, if there is a lack of efficacy, the consequences can potentially result in fatal outcomes.
4. Results from ongoing clinical trials in large groups of patients will provide more information about the predictive value of genetic testing and better inform the role genotyping might play in personalizing medicine and optimizing outcomes.
5. Genetic testing to determine if a patient is a “poor metabolizer” may be considered before starting clopidogrel therapy in patients believed to be at moderate or high risk for

poor outcomes (e.g., patients undergoing elective high-risk PCI procedures). Platelet function assays is a reasonable alternative to genetic testing if it is not readily available.

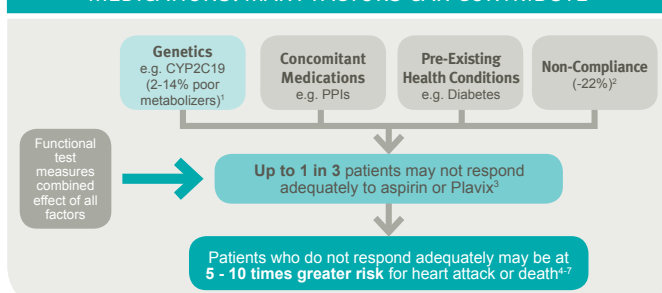
6. Using alternative antiplatelet therapies (Prasugrel) or altering the dosing of clopidogrel (maintenance 150mg daily) may be reasonable options in patients who experience an adverse event while taking clopidogrel and have been taking the drug as prescribed.

Commercial genetic assays are available from both research and clinical laboratories. However, cross validation of the techniques used and their reliability, specificity, and reproducibility are extremely limited. While results of commercial assays can be applied, they are not available in the acute phases of patient care. Point-of care assays for the common CYP2C19 polymorphisms are not available at this time.

Platelet function assays can measure the effect of ADP or P2Y12 activation on platelet aggregation, receptor expression, or the level of intracellular molecules (e.g., vasodilator-stimulated phosphoprotein phosphorylation), thereby directly or indirectly measuring the platelet inhibitory effect of clopidogrel (i.e., clopidogrel responsiveness or on-treatment reactivity). Functional test has the advantage of measuring the combined effects of all the factors as illustrated in Figure 1.

The Clinical Laboratory of Adventist Health offers a FDA approved test for assessing P2Y12- mediated platelet function, called Platelet Inhibition (Plavix) P2Y12 Assay. The VerifyNow P2Y12 assay measures platelet inhibition by thienopyridine class of drugs including clopidogrel and prasugrel. In addition, Platelet Inhibition (Aspirin) Assay is now available in our laboratory. [a](#)

FIGURE 1 | INADEQUATE RESPONSE TO ANTIPLATELET MEDICATIONS: MANY FACTORS CAN CONTRIBUTE



CLINICAL
LABORATORIES

FOR ENQUIRIES [HKAH] (852) 2835 0534

FOR ENQUIRIES [TWAH] (852) 2276 7386

HONG KONG
HEART CENTER

FOR ENQUIRIES [HKAH] (852) 2835 0578

Pharmacies



Watch Out for Vitamin B-12 Deficiency in Patients taking Metformin

Metformin is the most frequently prescribed first line therapy for patients with Type 2 diabetes. However it can induce vitamin B-12 malabsorption. Earlier short-term research had pointed to a casual association between Metformin and vitamin B-12 deficiency. A recent double-blind, randomized, placebo controlled study confirmed a decrease in vitamin B-12 level (19%) and an increase in homocysteine level (5%). The authors advocated routine assessment of vitamin B-12 levels in patients on long-term treatment with metformin.

The hazard ratio for developing vitamin B12 deficiency while on Metformin was 5.5 relative to placebo. The decrease is not transitory but persists and grows over time, although the biggest drop occurred within the first few months. Metformin appears to inhibit vitamin B-12 absorption in the intestine. Calcium supplements can reverse the malabsorption.

Symptoms of vitamin B-12 deficiency include fatigue, mental changes, anemia and neuropathy. Sometimes these symptoms may be mistakenly considered as part of aging or disease progression in the diabetic patient. If a patient is on long-term Metformin, checking of vitamin B-12 level and vitamin B-12 supplementation or other dietary counseling should be considered. ¹

REFERENCE: Jolien de Jager, et al. Long term treatment with metformin in patients with type 2 diabetes and risk of vitamin B-12 deficiency: randomized placebo controlled trial. *British Medical Journal* 2010;340:c2181

Prevenar 13 Vaccine Available in Pharmacy

The new pneumococcal vaccine is now available. It is intended for active immunization for the prevention of invasive disease, pneumonia and acute otitis media caused by *Streptococcus pneumoniae* serotypes (4, 6B, 9V, 14, 18C, 19F, 23F)* and 1, 3, 5, 6A, 7F, 19A in infants and children from 6 weeks to 5 years of age.

(* ALREADY CONTAINED IN PREVENAR)

Immunization Schedule of Prevenar 13 [SAME AS PREVENAR]

Age	No. of doses
2-6 month	3 (at least 1 month between doses)* + booster at 12-15 month
7-11 month	2 (at least 1 month between doses) + booster at 12-15 month
12-23 month	2 (at least 2 month between doses)
2-5 years	1

* RECOMMENDED TO BE ADMINISTERED ON THE SAME DATES OF OTHER MANDATORY VACCINATIONS I.E. AT 2 MONTHS, 4 MONTHS AND 6 MONTHS OF AGE

Transition Schedule for Previously Vaccinated with Prevenar

Children who have begun immunization with Prevenar may directly switch to Prevenar 13. The schedule will be exactly the same.

1 st Dose 2 MONTH	2 nd Dose 4 MONTH	3 rd Dose 6 MONTH	Booster 12-15 MONTH	Supplemental Dose
P7	P7	P7	P13	No (ACIP)*
P7	P7	P13	P13	No (ACIP)*
P7	P13	P13	P13	No

P7- PREVENAR (PCV7); P13- PREVENAR 13 (PCV13)

* ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES (ACIP) RECOMMENDED THAT NO ADDITIONAL PCV13 DOSES ARE INDICATED; WHEREAS PRODUCT INFORMATION RECOMMENDED ONE ADDITIONAL DOSE (AT LEAST 8 WEEKS AFTER THE BOOSTER DOSE) IN ORDER TO COMPLETE THE IMMUNIZATION SERIES OF THE 6 ADDITIONAL SEROTYPES. DATA SHOWED A SCHEDULE OF 3 DOSES OF PCV7 FOLLOWED BY 1 DOSE OF PCV13 VERSUS 4 DOSES OF PCV13 MAY RESULT IN LOWER IGG ANTIBODY LEVELS FOR 6 ADDITIONAL SEROTYPES BUT OPA[^] RESPONSES ARE COMPARABLE AFTER 4TH DOSE. CLINICAL RELEVANCE IS NOT KNOWN.

[^] OPA IS OPSONOPHAGOCYTOSIS ASSAY WHICH IS USED MEASURE THE FUNCTIONALITY OF GBS-SPECIFIC ANTIBODY AND TO MONITOR THE VACCINE EFFICACY ¹

REFERENCE: <http://www.cdc.gov/vaccines/recs/acip/downloads/mtg-slides-feb10/03-1-pcv13.pdf>

REMARKS: Parents may choose to continue immunization with Prevenar for their children. Pharmacy has reserved some stock for these patients.

FOR ENQUIRIES [HKAH]
(852) 3651 8812

FOR ENQUIRIES [TWAH]
(852) 2276 7366

Diagnostic Imaging




After years of planning and equipment upgrade, works are underway in the HKAH Diagnostic Imaging department to install a new Picture Archiving & Communication System (PACS).

Installation has started in July 2010, and expected to be completed by September 2010. In the first phase, all images in the Department will be stored and archived in digital format. Modules will be installed to allow for automate appointment notification, automate notification of reports by fax and email, as well as online reporting.

"It is a mammoth task. The system must fit into existing workflows and integrate seamlessly to other patient care

applications," said Mr. Danny Leung, who is the Director of the Diagnostic Imaging Department in HKAH.

After completion of the first stage, works will start in the hospital to allow for online image review and retrieval of previous examinations for comparison. Such infrastructure will pave the way for doctors to share medical reports, images and data filmlessly and paperlessly throughout the hospital. 

Nutrition for Infants

Food is especially important for newborn babies, as it is essential to keep them healthy as well as providing them with energy. Breast-feeding is always the preferred choice for infants as it contains the necessary vitamins and minerals for the newborn. Breast-feeding also reduces the risk of the baby getting infections and catching diseases.

Breast Feeding – The BEST NATURAL FOOD for Babies

When a mother chooses to breast feed her baby, she has chosen the best option for her baby. This natural food contains all the nutrition the baby needs, especially the colostrums, (breast milk) which is produced by the mother in the first few days after giving birth. This is of vital importance to the health of the newborn.

Compared to other forms of milk available, babies find it easier to absorb the proteins from breast milk. Babies are more capable of absorbing nutrients like calcium and iron in breast milk whilst their digestive systems are still developing. Research has indicated that important nutrients from breast milk such as carotene, lutein and zeaxanthin etc, greatly develops a babies visual system.

The levels of lactose and albumin are much higher in breast milk than in any other milk and infants find these proteins much easier to absorb and digest. Breast milk contains large amounts of Acid taurine and semi-amine bladder, which are two important amino acids that assist in the health development of premature babies. From a vitamin perspective, breast milk contains lots of vitamin D and E, which enhances the cell and brain development of newborn babies. Studies also state that breast fed babies have a lower probability of being over weight when they get older.

Apart from the nutrition that breast-feeding provides a baby, it also forms a close relationship between the mother and the baby. Both Mother and baby will feel a close bond and enjoy the security and comfort that breast-feeding provides.

“Allergic” Children Below the Age of Three should Avoid Nuts and All Seafood

Parents should bear in mind that children aged between 1 to 3 years of age should absorb around 500ml of calcium per day. Dietary fiber is important after three years of age because it can enhance a babies immunity against diseases. For infants under the age of 1, they should avoid consuming foods like egg, citrus fruits or juices, cows milk, honey etc. For children under 3 years of age, they should avoid foods like peanuts, tree nuts or even seafood, to avoid any food allergies.

Research states that breast milk can prevent allergies. If your baby is sensitive to milk, then soymilk can be an option. However, if you have any enquires on food intakes for infants, do not hesitate to consult your pediatrics doctor or registered nutritionist. ^a


FOR ENQUIRIES [HKAH] (852) 2835 0555

FOR ENQUIRIES [TWAH] (852) 2276 7331

HKAH



ATM Machine Installation

To better facilitate our customer's needs and to provide more comprehensive services to them, we installed an ATM machine in early August, 2010 at the entrance of the hospital building. This new service will be of great convenience to our customers. 

TWAH

TWAH Accredited by HKCOG



The Department of Obstetrics in TWAH has once again been re-accredited by the Hong Kong College of Obstetricians and Gynecologists, shortly after the Adventist Hospitals received formal accreditation by the ACHS. It is the first private hospital in the New Territories to be accredited by the College since 2000.


"Providing high quality care is a team effort. I must thank everyone for their hard work," said Dr. Peter Lo, Chairman of the Obstetric Clinical Management Committee in TWAH. "It is a great endorsement of the hospital's commitment to its patients."

Miss Sharon Chan, Manager of the Obstetric Department in TWAH, recalled that the inspection team from the College was especially impressed by the Department's emphasis on parental bonding and various ingenious applications of technology to infuse high quality health education to patients.

When Miss Sharon Chan took up her post last year, it was at the height of the Swine Flu outbreak. Whilst rooming-in was not an option, she initiated the "First Family Photo" and "Father Cut Cord" services. Pictures were taken as soon after delivery as possible and given to parents together with a beautifully designed and bound

volume of "Baby Memorabilia" to encourage recording of beautiful memories of the child's early life.

For human beings, bonding is not something that is limited to a narrow period after birth. It is a byproduct of everyday care-giving by confident parents to a helpless infant. Working with Paediatric Consultants Dr. Charles Wong and Dr. Anthony Ng, Sharon launched a special bilingual parent-craft TV channel in TWAH. Patients can watch programs on topics such as hygiene, breastfeeding, infant care, cord care, infant immunization and care of various baby ailments whilst recuperating comfortably on their hospital beds. All materials have been screened by medical staff to ensure that information is accurate and up to date. A "Parentcraft Video-on-Demand" interactive multimedia station is also established in the Postnatal Ward.

"We have been providing excellent obstetrics service in this locality for almost half a century. Formal accreditation objectively recognizes that the Department of Obstetrics at TWAH is a centre of excellence with international standards of staff qualifications, administration procedures, leadership, patient safety and health education," concluded Dr. So Kon Ping, Consultant Obstetrician in TWAH. 

**CME**DATE 22nd June, 2010**CORD BLOOD STORAGE**SPEAKER Dr. Robert Hanes STEVENSON
SPECIALIST IN OBSTETRICS & GYNAECOLOGY**RHESUS ISOIMMUNIZATION**SPEAKER Dr. Shell WONG
SPECIALIST IN OBSTETRICS & GYNAECOLOGY**Cardiologist Appreciation Dinner**DATE 24th June, 2010

To celebrate our Cardiac Catheterization Interventional Center performing a record number of cardiac procedures last year, and to thank the great support of our cardiologists, we held an appreciation dinner on 24th June, 2010. We had great fun on the night, and we always look forward to providing the best possible medical care to our patients.



CME

DATE 14th September, 2010

OPTIMAL USE OF CURRENT EQUIPMENT IN THE INTERVENTIONAL LABORATORY

SPEAKER Dr. Patrick KO, SPECIALIST IN CARDIOLOGY

WHAT'S NEW IN INTERVENTIONAL TREATMENT FOR VALVULAR HEART DISEASE

SPEAKER Dr. Boron CHENG, SPECIALIST IN CARDIOLOGY

TIME 19:00 – 22:00

VENUE American Club, 49/F Two Exchange Square Central, Hong Kong

MANAGEMENT OF FEEDING DIFFICULTIES

SPEAKER Dr. LEUNG Ying Kit
SPECIALIST IN PEDIATRIC GASTROENTEROLOGY

DATE 29th September, 2010

TIME 14:00 – 15:00

VENUE 1B, Seminar Room, La Rue Building, HKAH



RSV BRONCHIOLITIS IN YOUNG INFANTS Update on Management and Prevention

SPEAKER Dr. Barbara LAM
SPECIALIST IN PAEDIATRICS

DATE 7th October, 2010

TIME 14:00 – 15:00

VENUE 1B Seminar Room
La Rue Building, HKAH

DATE 12th October, 2010

ERECTILE DYSFUNCTION

SPEAKER Dr. Peter HO, SPECIALIST IN UROLOGY

SURGICAL MANAGEMENT OF BPH IN 2010

SPEAKER Dr. CHAN Lung Wai
SPECIALIST IN UROLOGY

TIME 19:00 – 22:00

VENUE American Club, 49/F Two Exchange Square Central, Hong Kong

FOR BOOKING (852) 3651 8837



World Heart Day 2010

DATE 3rd October, 2010

TIME 12:00 – 18:00

VENUE Happy Valley Hong Kong Jockey Club

ADMISSION FREE

To promote healthy hearts and to raise the awareness of heart health to the general public, we are going to join the annual World Heart Day this year. The Lifestyle Management Center at HKAH will manage a booth to provide health body checkups to the visitors. You are more than welcome to join us.

TWAH

CME

THE COMMON NEUROLOGICAL DISEASES WITH THE DIAGNOSTIC USE OF NCT/EMG/EEG MACHINE

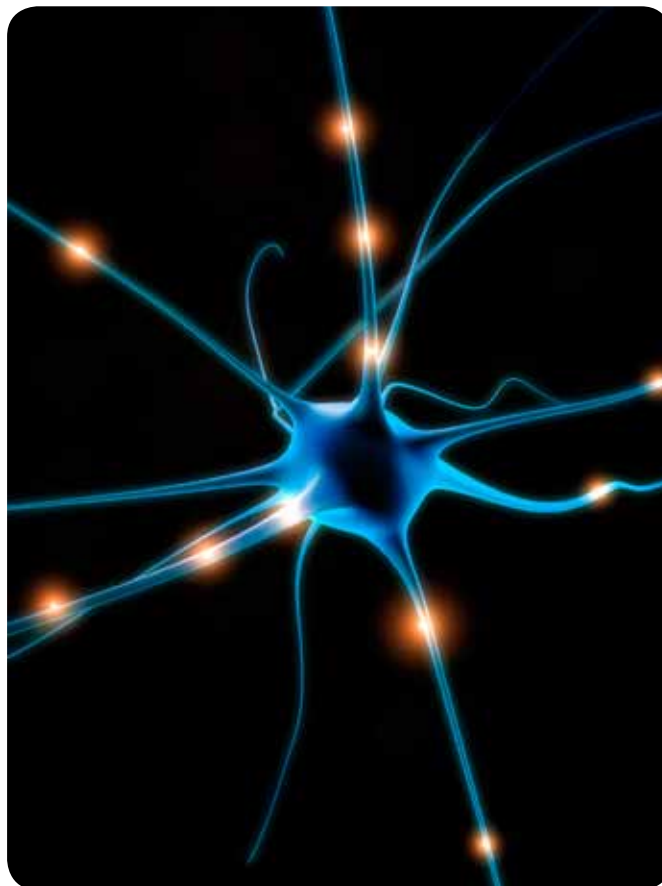
SPEAKER Dr. Sally Yiu

SPECIALIST IN NEUROLOGY

DATE 8th October, 2010

TIME 13:00 – 15:00

VENUE Function Room 2, 11/F, L' Hotel, Tsuen Wan



FOR BOOKING (852) 2276 7185

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