



Specialist in Focus



Dr Sue-Ann Ho

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Dr Sue-Ann Ho is a Dermatologist specialising in skin cancer surgery and general dermatology. Dr Ho graduated in 2005 from the National University of Singapore and obtained her Membership of the Royal Colleges of Physicians, United Kingdom (MRCP(UK)) in 2009. She underwent her Advanced Specialist Training in Dermatology at the National University Hospital (NUH) and National Skin Centre between 2010 and 2013. She was inducted as a Fellow of the Academy of Medicine Singapore in 2013.

During her clinical career, Dr Ho has performed hundreds of dermatological surgery procedures including complex flap reconstructions.

Currently, she holds the position of Undergraduate Director for Dermatology at NUH as well as a Clinician Educator at the Yong Loo Lin School of Medicine at the National University of Singapore. Dr Ho is a member of the British Association of Dermatologists, British Society for Dermatological Surgery, and Dermatological Society of Singapore. She also holds medical registration with the Singapore Medical Council and the General Medical Council in the United Kingdom.

She sees all general dermatology cases including acne, hidradenitis suppurativa, eczema, psoriasis with particular interest in skin cancers and dermatological surgery. Currently, she is setting up NUH's first Mohs Micrographic Surgery Unit which will be operational in January 2016.

Clinical Highlights

Mohs Micrographic Surgery for Non-Melanoma Skin Cancers

Non-Melanoma Skin Cancers

The most common type of skin cancer is the basal cell carcinoma (BCC) followed by the squamous cell carcinoma (SCC). These are also known as the non-melanoma skin cancers (NMSC) and are both derived from epidermal keratinocytes. Although, BCCs rarely metastasise, if left untreated, can lead to significant morbidity. Similarly, SCCs that are undiagnosed or not managed early are associated with significant morbidity and mortality. NMSCs are commonly found on sun-exposed areas of the skin, like the face, ears, lips, and the back of the hands.

Clinical features of NMSCs

The commonest subtype is the nodular BCC which are typically a pearly or translucent papule/nodule with a rolled edge and telangiectasia. As the lesion enlarges, ulceration may occur. Pigmented BCC is a variant of this. A less common subtype is the morpheic BCC. Clinically, this may appear as a scar-like indurated plaque with poorly demarcated borders. Often these have greater subclinical extension beyond what is visible on the skin surface.

The common presentation of SCC is an erythematous indurated keratotic papule/nodule usually on a background of photodamaged skin. High-risk sites for metastasis include the ear and lip. The incidence of metastasis also increases with size, immunosuppression or from lesions arising in scars or sites of inflammation.

Mohs Micrographic Surgery(MMS)

The goal of treatment is removal of the tumour cells. Skin cancers are typically removed by surgical excision. Some are still at risk of recurrence despite wide local excision. In some areas, where tissue conservation is important for functional and cosmetic purposes, wide local excision may also not be feasible.

Tumour characteristics

- Aggressive histologic features (morpheic BCC, micronodular BCC, poorly differentiated SCC, Perineural invasion)
- Poorly defined clinical borders
- Large tumour (tumours ≥ 6 mm in H zone of the face (chin, mandible, temples); ≥ 10 mm in other areas of the face (cheeks, forehead, scalp, and neck); tumours ≥ 20 mm on trunk or limbs)
- Recurrent tumour
- Incompletely excised
- Chronic scar

Patient characteristics

- Immunosuppressed
- Irradiated skin
- Genetic syndromes (e.g. Gorlin syndrome, xeroderma pigmentosa)

Anatomic location

- Areas where tissue preservation is essential (including eyes, nose, hands/feet and genitalia)
- Embryonic fusion lines (preauricular, nasolabial fold, inner canthus and philtrum)
- "Mask areas" of face (central face, periorbital, nose, lips)

The above are indications for MMS. MMS is now considered the treatment of choice for these high risk skin cancers. It is a specialised, highly effective technique to maximise rate of cure and maximise tissue conservation. It is designed to remove these cancers by tracking and removing the cancerous roots. It is recognised as the skin cancer treatment with the highest reported cure rate. During MMS, thin layers of cancer-containing skin are progressively removed and examined until only cancer-free tissue remains (Figure 1).

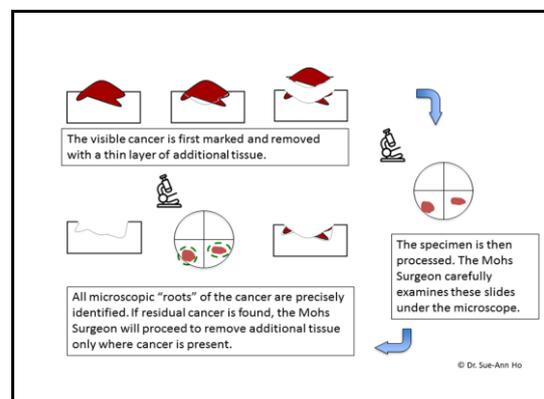


Figure 1: Mohs Micrographic Surgery process. This process is repeated as many times as necessary to locate any remaining cancerous areas. When microscopic examination confirms that there is no remaining cancer, the wound is then ready for repair. This allows the MMS technique to leave the smallest possible surgical defect as only tissue around the "roots" and extensions of cancer is removed.



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Specialist in Focus



A/Prof Raymond Seet

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Dr Raymond Seet is a Senior Consultant at the Division of Neurology at the National University Hospital, and Associate Professor at the Yong Loo Lin School of Medicine, National University of Singapore. After completing his undergraduate and postgraduate training in Singapore, he completed his advanced fellowship in stroke and neurocritical care at the Mayo Clinic, Rochester. He is a Fellow of the Royal College of Physicians (FRCP, Edinburgh) and the Academy of Medicine, Singapore (FAMS).

Dr Seet's clinical and research interests focus on:

- acute reperfusion treatment (intravenous thrombolysis and endovascular therapy) and the neurocritical care of stroke patients.
- stroke prevention strategies focusing on atrial fibrillation and intracranial stenosis.
- application of advances in stroke biology and technology to deliver personalized treatment to stroke patients.

Dr Seet contributes actively to medical education and lectures undergraduates, post-graduates and specialists. He has special interest in bedside clinical teaching and clinical assessments. He attended the Harvard Medical International and the Royal College of Physician Programmes for Physician Educators. In 2008 and 2014, he was awarded both the faculty and university awards for teaching excellence (Faculty Teaching Excellence Award and Annual Teaching Excellence Award).

Clinical Updates

Stroke

Asia faces a looming epidemic of stroke. Data from the United Nations indicate that newly developed countries in Asia suffer from a steeper gradient of ageing and the number of stroke patients is expected to climb into elderhood. The cost of stroke care is considerably expensive, one that is characterised by prolonged hospitalisation and rehabilitation, frequent visits to the Emergency Room and outpatient clinics, loss of employment and disruptions to our increasingly small family units.

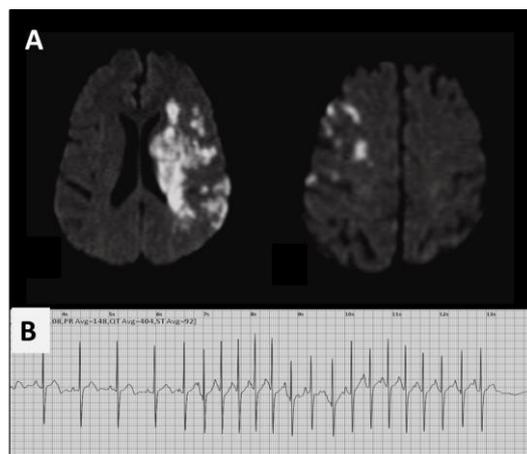
The quality of stroke care is heterogenous in Asia, especially in countries where the delivery of acute medical services is limited by the lack of a good ambulance system and trained personnel to manage medical diseases and complications associated with stroke. When delivered promptly and efficaciously, acute stroke reperfusion treatment can reduce and reverse the paralysis that is commonly encountered in stroke patients. Examples of this reperfusion treatment include intravenous thrombolysis ("clot-buster") and endovascular treatment ("clot-retriever").

Prevention is the most cost-effective strategy to tackle stroke. Apart from recognition and controlling traditional risk factors for stroke (such as hypertension, diabetes mellitus, hypercholesterolemia and cigarette smoking), two stroke-specific risk factors are increasingly recognised: atrial fibrillation and intracranial stenosis.

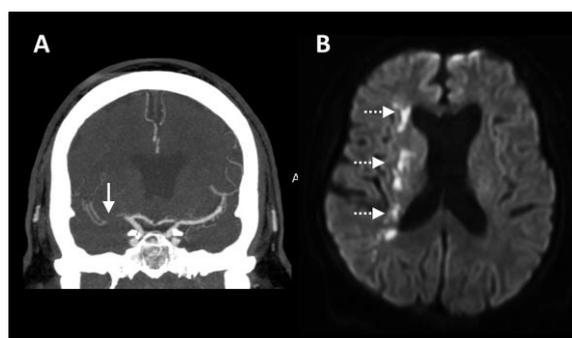
Atrial fibrillation is an irregular heart rhythm that results in the formation of a clot within the heart chambers. Clots associated with atrial fibrillation are typically large; these tend to block larger blood vessels and result in more severe stroke (Case 1). In carefully chosen patients, anticoagulation could significantly lower stroke risk associated with atrial fibrillation. The availability of newer oral anticoagulants (NOACs) such as dabigatran, rivaroxaban and apixaban allows safe administration of anticoagulation.

One in three strokes among Asians is associated with intracranial stenosis. The optimal management of intracranial stenosis depends on the severity and number of stenosis, whether the stenosis has resulted in neurologic symptoms, and whether alternative flow of blood (collaterals) has taken place (Case 2). In a small group of patients, surgical procedures to "rewire" the blood vessels of the brain may be warranted.

In summary, strokes can be prevented and reversed when acute treatment is quickly and safely administered.



Case 1. A 70 year-old man presented with grade 3/5 weakness in his right upper and lower limbs. His medical history comprised hypertension, hyperlipidemia and cigarette smoking. Magnetic resonance imaging (MRI) showed areas of restricted diffusion in both cerebral hemispheres (A). Prolonged cardiac monitoring detected an occult atrial fibrillation, suggesting a cardioembolic stroke mechanism.



Case 2. A 48 year-old woman presented with grade 3/5 weakness in her left upper and lower limbs. Her medical history included type 2 diabetes, hypertension and hyperlipidemia. Computed tomography (CT) angiography of the intracranial arteries revealed stenosis in the right middle cerebral artery (A, solid arrow) and magnetic resonance imaging (MRI) showed areas of restricted diffusion in the right subcortical watershed areas (B, interrupted arrow).



Shaping Medicine for the Future

CME Registration: <https://nuhcme.com.sg/>

News Updates

NUH makes room for sick kids' parents



The Ronald McDonald House Charities (RMHC) Singapore, with the support of the Paediatric Cluster at the National University Hospital (NUH), today officially opened the doors of its new Ronald McDonald Family Room (RMFR) in the hospital, just steps away from the newly expanded Paediatric Intensive Care Unit/ High Dependency (PICU/HD) ward.

The facility with a home-like atmosphere offers a place of rest and respite exclusively for families whose children are hospitalised in the PICU/HD ward, all at no cost.

The RMFR can comfortably accommodate 14 persons at any one time, allowing families to take a break from the ward, grab a bite to eat, take a quick refreshing shower, or even steal a quiet moment to nap, read, watch TV or go online with free WIFI access provided. The RMFR basically helps to augment the services of the existing Ronald McDonald House at NUH, providing families with greater support and care during the emotional journey of their child's medical crisis at the hospital.

"It is a common sight to see concerned parents keeping vigil by their child's bedside with some spending many sleepless nights at the hospital. We opened the Ronald McDonald Family Room to offer these families a place to rest and recuperate. When families walk through the doors of the Ronald McDonald Family Room, we want them to feel like they are no longer in a hospital, but rather in a room of a caring, peaceful home", said Pamela TorDas, President, RMHC Singapore.

The RMFR was established as part of NUH's renovation and expansion plan for their PICU and the opening was officiated by Professor John Wong, Chief Executive, National University Health System. The NUH is a member of the National University Health System. Funded by the Ministry of Health, the PICU/HD has increased its capacity from 11 to 18 beds. It is equipped with isolation capabilities and is able to scale up to 25 beds in the event of a flu pandemic or mass casualty incident. The expanded PICU/HD has been operational together with the RMFR since 2 November 2015.

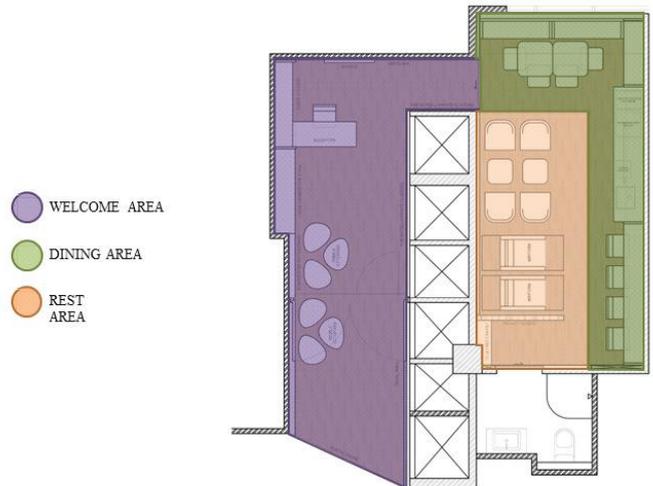
The strategic partnership between RMHC Singapore and NUH reflects a common vision to enhance the quality of support and care for children and their families in Singapore.

This is the latest in a partnership between NUH and RMHC Singapore. Three years ago, in January 2013, with the support of the Paediatric Cluster, the Ronald McDonald House (RMH) at NUH was opened to provide a "home-away-from-home" for families to stay and be close to their hospitalised child, all at no cost. Since the opening of the 4-bedroom House, it has served over 300 families (> 4,000 room nights). However, due to the limited rooms at the House, more than 130 families (> 1,200 room nights) have been turned away to date. With the expansion of the NUH PICU / HD, there is a need to serve more families whose children are hospitalised. The RMFR, with a home-like setting, will allow these families to step into a place of quiet respite.

"We are happy to partner RMHC Singapore in this worthy project. Research shows that a family's presence in the hospital helps children heal and cope better. With the opening of the Ronald McDonald Family Room, families will now have a quiet place to rest and regroup at the hospital. This is in line with our efforts to enhance the quality of patient care for children and their families in Singapore," said Associate Professor Daniel Goh, Head, Paediatric Cluster, National University Hospital.

Facilities of the RMFR include:

- Kitchen area equipped with a fridge, microwave ovens and water dispenser, with a variety of snacks and beverages provided
- Shower facilities with clean towels and basic toiletries provided
- Seating areas to dine, read or watch television
- Resting corner to relax, nap and recuperate
- Internet access



Source: Ronald McDonald House Charities Singapore

Source: Straits Times published on 6 January 2016



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News Updates

Myeloma cancer patients get option for treatment injections at home



VELCADE being administered to the patient at NUHS

Multiple myeloma patients at the National University Cancer Institute, Singapore (NCIS) can now choose to have their VELCADE® injections administered by a nurse outside the NCIS specialist outpatient clinics. Ten patients have signed up for the three-year pilot programme, named VELCADE®@Home, which is launched in August this year, and 55 home visits have been made as of 31 October.

“While we have previously extended care to patients at home, it is mainly for transitional care - helping patients to settle in at home after their hospital stay or assisting caregivers in learning to take care of the patients themselves. Now we are going a step further by providing treatment to patients at home,” said Professor Chng Wee Joo, Director and Senior Consultant at NCIS, and a multiple myeloma specialist who is spearheading the programme.

How the VELCADE @ Home programme works

The VELCADE®@Home programme is a partnership between NCIS and Johnson & Johnson Pte Ltd, which markets VELCADE® in Singapore, with the objective of enabling cancer care and treatment to be more convenient and accessible for patients.

VELCADE®, also known as Bortezomib, is a chemotherapy drug commonly used to treat multiple myeloma. It is usually administered once or twice a week with four injections per treatment cycle.

Suitable patients are identified by the NCIS doctors who will explain the VELCADE®@Home programme to them in detail. Home administration starts from the second cycle where patients can have their VELCADE® injections done up to three times at home per cycle.

A nurse will contact the patient on the same day of the scheduled home visit to perform phone triage if he or she is fit to receive the injection. A nurse will then visit the patient’s home, examine the patient, administer the VELCADE® injection and report his or her progress to the doctor if necessary

Patients and caregivers welcome benefits of treatment at home

Not only do patients experience the same excellent standard of care, this new delivery of treatment also means more convenience for them and their caregivers. They make fewer trips to the clinic, thus spend less time travelling and waiting at the clinic.

There is less stress as they are able to experience greater comfort at home, and both patients and their caregivers can continue with their lives with minimal disruptions.

Indeed, feedback has been positive and patients have expressed that they are happy with the programme. Said Mr Gwee Choon Huat, 64, the first patient on the new initiative, “I am really relieved that the VELCADE® injections can be done at home. It saves me a lot of time and effort; I have to wake up at 5.30am if I want to leave the house at 7.00am to reach the clinic at 8.00am, and the train is usually jam-packed at that time. At home, there is also less risk of contracting airborne infectious diseases, especially as my immunity level is low. VELCADE®@Home is a big step forward for our healthcare industry in Singapore.”

Being at the patients’ homes also provides the nurses with the unique opportunity to observe the patients in their home setting. Said Kelly Lai, a senior staff nurse in the Division of Oncology Nursing at NCIS, “We are able to see the environment and conditions they live in and identify potential health and medical issues which we can then highlight to the patients and the medical staff.” She is one of the three nurses who administers VELCADE® for patients at home.

Continual development of homecare services for cancer patients

The fact that multiple myeloma is a relatively rare cancer that affects a smaller number of patients is a factor in choosing VELCADE®, explained Prof Chng. “NCIS sees about 100 patients with multiple myeloma in our clinics each year, of which an average of between 20 and 30 are newly diagnosed cases. VELCADE® is one of the standard treatments in multiple myeloma given to about 70 patients each year at NCIS. We wanted to pilot this programme on a smaller group of patients first and assess how well it works before moving on to other treatment drugs for more common cancers with a bigger pool of patients.” Another consideration was that similar initiatives for VELCADE® done overseas have proven to benefit patients.

Besides the VELCADE®@Home programme, NCIS has also pioneered new ways to deliver treatment. NCIS performed the first outpatient autologous stem cell transplant in 2011. Stem cell transplant is now available on an outpatient basis, allowing patients to recover from such a procedure at home while enjoying the same standard of care as inpatients. Besides the comfort of recuperating at home, patients also save significantly on hospitalisation costs. NCIS is also the first centre in Southeast Asia to offer Accelerated Partial Breast Irradiation, a new convenient treatment that offers early stage breast cancer patients new hope.

Source: Straits Times (published on 12 November 2015).

Upcoming CME Events

Date	Topic
30 Jan '16	NUH Orthopaedics Updates

Registration & Lunch will start at 1pm

Event Venue:
NUHS Tower Block, Auditorium, Level 1
1E Kent Ridge Road, Singapore 119228

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