



Message from Brett Goods, Chief Executive Officer

Welcome to our Autumn edition of San Doctor. It's always great to share news of the work of our specialists and how they continually innovate to provide patients with the best possible outcomes and experiences.

This edition, which encompasses International Women's Day, features a wonderful birthing approach at the San, that is empowering mothers to be more actively involved in their own caesarean section and minimises any separation between mother and baby.

It was introduced to our hospital by one of our 506 female health practitioners - 103 newly accredited in the last financial year - and is an example of the leading role women continue to play in the provision of world class care here.

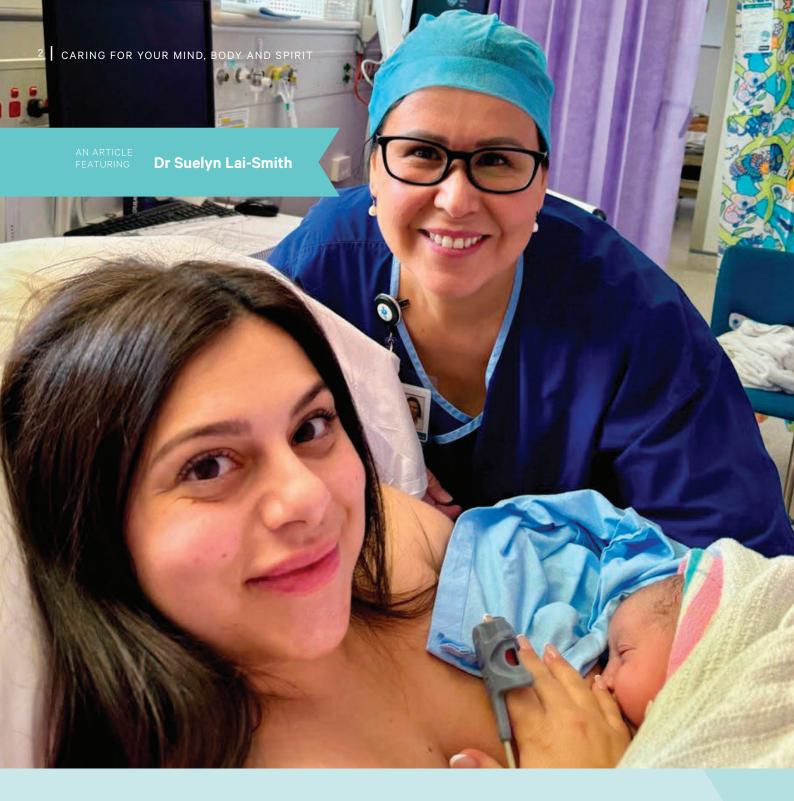
Other stories in this edition include the extended use of robots in upper gastrointestinal cancer surgeries, to improve patient recovery and a quicker discharge from hospital.

And we share the experiences of one our specialists who has returned from a Fellowship in China, where he trained in the very latest in advanced endoscopy techniques.

We're very thankful our specialists are so driven to devise or learn new and improved ways of working

Brett Goods, CEO

Chief Executive Officer
Adventist HealthCare Limited



Maternal Assisted Caesareans

A MATERNAL ASSISTED CAESAREAN IS SIMILAR TO A TRADITIONAL CAESAREAN SECTION BUT THIS CONTEMPORARY APPROACH TO CHILDBIRTH EMPHASISES STRENGTHENING THE IMMEDIATE BOND BETWEEN A MOTHER AND HER NEWBORN.

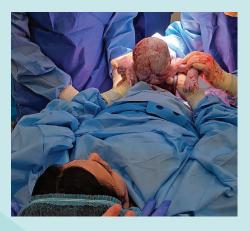
"A maternal assisted caesarean section aims to minimise any separation between the mother and baby and also enable the mother to be actively involved in her birth," said Dr Suelyn Lai-Smith, Obstetrician and Gynaecologist.

A mother will wear a sterile gown and gloves during the surgery and there is no drape in front of her blocking her view.

When it is time to deliver the baby, the obstetrician delivers the head and then the mother reaches down and places her hands under the baby's armpits and lifts the baby up onto her chest.

The midwife then covers the back of the baby with a warm sterile towel to keep them warm and performs the well-being check (Apgar scores) whilst the baby is kept on the mother's chest.

"A maternal assisted caesarean promotes early skin to skin contact and delayed cord clamping. This leads to better bonding and an increase in the rate and duration of breastfeeding. We also know that it mimics vaginal delivery, so it facilitates delayed cord clamping and physiological resuscitation."



Overall, mothers report higher satisfaction rates with their birth compared to a standard caesarean section, feel empowered and engaged with their birth and consequently have less rates of post-natal depression.

Caesarean section rates are now approaching 40% in Australia and there is starting to be more education and awareness surrounding birth trauma and informed choice.

Unfortunately, maternal assisted caesarean sections are not offered at all hospitals, nor are they supported by all obstetricians.

"Women want more engagement and collaboration with their births and a traditional caesarean section can sometimes be a passive, clinical experience where the mother does not get to hold her baby until she is in recovery or back on the maternity ward."

Dr Lai-Smith is currently performing a pilot study at the San to look at the outcomes of Maternal Assisted Caesarean Sections, to improve the published knowledge in this area.

"I am seeing an increase in requests for maternal assisted caesarean sections by mothers that have had a standard caesarean section previously and want a different experience for their next birth, where they can hold their baby immediately and have delayed cord clamping," she said.

What are the risks associated - if any?

The risks of a maternal assisted caesarean section are essentially the same as a standard caesarean section.

Critics of the procedure will often cite a concern about infection risk if the sterile field is not well maintained.

From the small number of retrospective studies performed so far, there is no increased risk of infection seen.

There can be an increased risk of fetal hypothermia with a Maternal Assisted Caesarean section, as operating theatres are generally a cold environment. This is where adequate staff training and clear Work Instruction is essential, as the midwife present for the birth ensures that the baby is dried and covered immediately with a warm sterile towel once they have been born and are on the mother's chest.

Is there certain criterion for a patient to be eligible for a maternal assisted caesarean?

- Elective caesarean section (not an emergency)
- Full-term (greater than 37 weeks gestation)
- · Singleton pregnancy
- · Cephalic presentation
- Membranes intact
- Effective spinal or epidural
- Understanding of mother and partner to maintain a sterile field

Contraindications (not an exhaustive list)

- Placenta praevia, Vasa praevia
- Placenta accreta, increta, percreta
- Intrauterine growth restriction
- · Abnormal fetal dopplers
- Oligohydramnios, Anhydramnios
- Fetal anomalies
- Pre-eclampsia
- Haematological disease (mother or fetal)
- Suspicious or abnormal CTG
- Other serious maternal or fetal illness

Is there any information a GP should share with their patient at time of referral?

Making them aware that there are many different birth options out there, like water births, vaginal birth after caesarean section (VBAC) and maternal assisted caesarean sections.

If the GP is unsure if their patient is suitable for one of these options, then I would be happy to chat with them or their patient about the different options available for their individual circumstance.

A patient's perspective

A Sydney woman who helped deliver her fourth child in a maternal assisted caesarean at Sydney Adventist Hospital (the San), has described the birth as "an empowering and positive experience."

Rebecca* had heard of maternal assisted caesareans and was referred to Dr Suelyn Lai-Smith by another doctor.

"I had three previous c-sections where I didn't particularly enjoy the experience. I found that I felt very disconnected from my child. This time around the birth of my daughter was completely different. It was such a healing experience for me"

For many mothers, it is an opportunity to have more control and be more involved in their birthing process as well as enabling immediate bonding.

"I had goosebumps. I was crying the whole time because I was so happy. The feeling of being actively involved in her birth was surreal as it was so starkly different to the previous births. To have that time with her immediately was so special"

*Patient's name has been changed for privacy



Dr Suelyn Lai-Smith

BSc(Psych)Hons MBBS FRANZCOG

Dr Suelyn Lai-Smith is a highly skilled specialist obstetrician and gynaecologist who provides patient centred care. She completed her specialist training at two of the busiest tertiary hospitals in Sydney (Nepean and Westmead) and undertook a surgical fellowship year in advanced laparoscopic and open procedures in gynaecological oncology at the Royal Hospital for Women. This advanced training means that she can offer additional surgical options and advanced laparoscopic surgery to her patients.

Prior to studying medicine, Dr Lai-Smith worked as a psychologist, and subsequently has a caring and holistic approach to her patient care. She is confident managing both high and low risk pregnancies and engages collaboratively with her patients to involve them in all aspects of their care.

Dr Lai-Smith manages all general gynaecological conditions like abnormal pap smears, colposcopy, contraception, pre-conception counselling, infertility, polycystic ovarian syndrome, vaginal prolapse, menopause and post-menopausal bleeding.

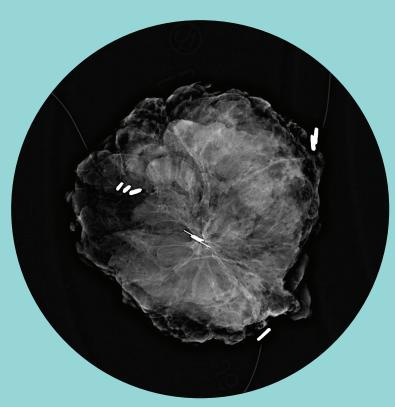
Dr Lai-Smith is a Wahroonga local, having lived there for the past 20 years with her husband and two children. She only consults and operates at Sydney Adventist Hospital, to ensure that she is always available for her patients.

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A/Prof Nicholas Ngui

New Scout device at the San locates non-palpable breast lesions without hookwires



THE SAN INTRODUCED THE SCOUT DEVICE INTO ITS CANCER SERVICES THIS YEAR, ALLOWING A MORE COMFORTABLE AND PRECISE WAY FOR BREAST CANCERS TO BE LOCALISED. THE INTRODUCTION OF SCOUT AS AN ALTERNATE OPTION TO EXISTING LOCALISATION METHODS HAS PROVIDED BENEFITS FOR PATIENTS AND SURGEONS, AND ENABLED BETTER SCHEDULING FOR RADIOLOGY AND OPERATING THEATRES.

"About one third of breast cancer patients have non-palpable cancers – cancers that cannot be felt," said Associate Professor Nicholas Ngui, breast cancer surgeon at the San. "Before surgery, these lesions have to be located and marked in some way, so surgeons know where the abnormal tissue is when they come to operate. For the past 40 years the prevailing method of marking where cancerous and pre-cancerous growths were located in the breast was to insert a hookwire into the lesion – under the guidance of ultrasound."

Some of the drawbacks of the hookwire include patient discomfort from having a wire protruding from their breast, and the risk of the wire dislodging. It also meant early starts for the patient and two procedures in one day, as the hookwire had to be inserted in the radiology department early on the morning prior to patients going to theatre to have the cancer removed.

In the past few years new technology has emerged which uses miniscule implantable markers as an alternative to hookwires. The San was the first hospital in the northern Sydney region to offer the Scout implantable marker system for patients undergoing surgery for breast cancer and pre-cancerous lesions.

What is Scout?

Devices like the Scout system have been used in the USA for a number of years, and more recently approved for use in Australia.

"The Scout device involves a small reflector 'seed' the size of a staple being inserted into the breast cancer in the days or weeks leading up to surgery, which stays in place until surgery," said A/Prof Ngui. "This acts as a marker so you can find the lesion. The Scout reflector seed is inert; it is not powered by battery and has no radiation. On the day of surgery to remove the cancer, we use a hand-held device – similar to a probe or wand – which emits radar, and the reflector seed reflects that radar signal and tells you exactly where the cancer is."

"This allows for greater precision in surgery," noted A/Prof Ngui. "With the hookwire, it can sometimes be hard to tell exactly where the cancer is because the wire can be quite long and you don't know how deep the wire is inside the breast. However with the Scout system, it will tell you exactly how far the reflector marker is from the tip of the probe – to the millimetre – and we can make the incision based on real-time information about where the actual cancer is."

A/Prof Ngui said Scout can help obtain clearer margins around the cancer and preserve healthy breast tissue. "With the hookwire, we sometimes had to take out tissue along the wire if you weren't sure exactly where the lesion was. With Scout, the reflector marker seed is right in the middle of the cancer, and so the surgery is much more accurate. Using the Scout probe we obtain a 3D map of how far away the margin is in all directions, and if the probe shows that the margin is only 1mm away, then we can take an extra shave of breast tissue from that spot. Scout gives you real-time feedback as to whether the margins are sufficient or not. Scout increases the accuracy of surgical resection by the surgeon, and therefore less requirement to have a second operation if the margins are close."

Scout can also be used in lymph nodes. "There is a group of breast cancer patients who have systemic chemotherapy before they have breast surgery. If they have positive lymph nodes before they start chemotherapy, a Scout reflector marker is placed inside the involved lymph node and just stays there during chemo. Often the cancer cells disappear after chemo, but the affected lymph node still has to be taken out. And even if you can't feel the lymph node anymore, the node can still be located because it has the Scout marker seed in it and can be easily found and removed."

Both the hookwire and Scout system involve some out-of-pocket costs for patients, with Scout localisation currently incurring slightly higher cost. "However I understand there are submissions in the pipeline to MSAC (Medicare Services Advisory Committee) for an item number for Scout localisations," said A/Prof Ngui.

A number of benefits

"We are very pleased to be able to offer Scout to our patients at the San, enabling a more comfortable and accurate way to mark the location of cancers in the breast," said A/Prof Ngui.

Patients benefit from localisation precision and greater margin accuracy, and it is also more comfortable to not have a hookwire protruding from the breast while they wait to go to the operating theatre. Because Scout can be inserted in the weeks leading up to surgery, there is less stress for the patient on the day of surgery. "Also Scout is useful with pre-cancers like DCIS (ductal carcinoma in situ)," said A/Prof Ngui. "The majority of DCIS – around 95% of them – are non-palpable, so Scout is beneficial in these cases."

For the surgeon, A/Prof Ngui said the benefits of Scout include more accurate incisions, better margins, and less re-operations. It also enables better surgical planning because Scout eliminates the need to wait for the patient to have a hookwire put in on the morning of surgery. "There can sometimes be unforeseen delays in the hookwire process, where we've had to wait an hour's delay in the operating theatre for the patient to arrive. That's a waste of resources and time. But now with Scout, because the reflector seed can be inserted days or weeks in advance, the patient just turns up to the operating theatre on the day and goes straight in. This is good for the patient and it also allows better surgical list planning and theatre efficiency."

"For radiologists, Scout generally doesn't require any new skills or complexity as radiologists are applying very similar skills as they'd use in the hookwire insertion or a biopsy," added A/Prof Ngui. "Radiologists have been supportive of the introduction of Scout. Some of the benefits include not having really early radiology lists on the morning prior to surgery to insert the hookwires before our operating lists start. Scout insertions can be inserted well ahead of surgery, at a time where it's less busy in radiology. Radiologists can also do a whole list of Scout insertions, instead of ad-hoc insertions, which helps with radiology management and theatre through-put."



A/Prof Nicholas Ngui

BSc (Med), MBBS (UNSW, Hons), FRACS

Associate Professor Nicholas Ngui is a highly experienced surgeon who has been working at Sydney Adventist Hospital since 2014, consulting at Northern Surgical Oncology (NSO) onsite at the San. He grew up in Sydney, went to James Ruse Agricultural High School and completed his medical degree with honours from the University of NSW in 2003. He did his surgical training in Sydney and was awarded his FRACS in 2011. This was followed by further postgraduate surgical oncology fellowship training in breast and endocrine surgery. He is a full member of BreastSurgANZ and ANZ Endocrine Surgeons.

Dr Nicholas Ngui is a Clinical Associate Professor with the Australian National University at the Sydney Adventist Hospital. He is heavily involved in the training of medical students, junior doctors and instructs on several courses with the Royal Australasian College of Surgeons. He attends weekly multidisciplinary cancer meetings with other health specialists, discussing the care and management of cancer patients to ensure that the most up to date, evidence-based treatment is provided. He is a strong advocate of practicing current up to date evidence based medicine.

Dr Nicholas Ngui specialises in the following areas:

- Breast surgery
 (breast cancer surgery, advanced oncoplastic
 & reconstruction, breast reduction surgery)
- Thyroid & parathyroid surgery
- Skin cancer surgery (melanomas and non-melanoma skin cancers)
- General surgery including laparoscopic and open surgery (hernias, gallstones)

Research

Associate Professor Nicholas Ngui is the principal investigator for several research studies, many coordinated through the San. He is an active clinical researcher and supervises numerous junior doctors in their research projects. He continues to publish numerous papers in international peer reviewed journals each year and regularly presents at international conferences on topics in breast cancer surgical oncology. His dedication to teaching and research has led to him achieving academic and teaching awards.

CONTACT INFORMATION

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A/Prof James Symons

New Medical trial introduced at the San

SAFETY AND FEASIBILITY DOSE ESCALATION STUDY FOR EVALUATION OF RT-310 FOR TREATMENT OF LOWER URINARY TRACT SYMPTOMS (LUTS) SECONDARY TO BENIGN PROSTATIC HYPERPLASIA (BPH)

Benign Prostatic Hyperplasia (BPH), or non-cancerous enlargement of the prostate gland is a health issue that becomes more common with age. In fact, BPH affects around 50% of men over the age of 40, and 30-50% of these will go on to develop bothersome lower urinary tract symptoms (LUTS) which will affect their normal activities and sleep due to the need to urinate suddenly/urgently. Men may restrict their fluid intake and often avoid activities where they do not have quick access to a toilet. They may also wake to urinate, and this disruption in sleep often causes daytime tiredness. Left untreated for a long enough period, the patient may lose the ability to urinate altogether, suffer with incontinence, or at worst develop renal failure.

Whilst there are currently several minimally invasive treatments for men with symptomatic BPH, many men will try to defer treatment. This deferral occurs for a number of reasons, and unfortunately over time the BPH and bladder dysfunction progresses.

A/Prof James Symons, director of Australian Clinical Trials (ACT), is running the RESURGE trial at the San, through ACT for men with moderate to severe Lower Urinary Tract Symptoms due to Benign Prostatic Hyperplasia BPH.

"The study uses a novel implant that is intended to treat BPH while minimizing side-effects. It offers a novel, minimally invasive, delivery of a small volume of study drug directly into the prostate gland where it will have a local effect, avoiding many of the side effects of current medical therapy," said Dr Symons.

Enrolled study participants will have placement of RT-310 and are followed thereafter for 180 days, though are expected to have improvements in their LUTS for significantly longer than this.

What are the benefits of this treatment to the patient?

Medical treatment has been the first-line treatment for many years, but is not effective for all men, and can become ineffective over time. Additionally, as conventional oral drugs effect the whole body, not just the prostate, they bring potential side effects such that make compliance a challenge – lethargy, dizziness, increased falls risk, anorgasmia, retrograde ejaculation, erectile dysfunction and gynaecomastia, to name a few.

Given the prevalence of the condition, trials evaluating treatment for men at the earlier stage of BPH are extremely important as there is an absence of effective minimally invasive options for these patients, and when the available options don't work or no longer work, the next option for most is more invasive, and often surgical.

Who is a candidate for the BPH trial?

The study is designed for a specific group of candidates who are male, aged between 50-80 and who have a diagnosis of symptomatic benign prostatic hypertrophy.

"Anyone with previous BPH surgical procedure or implants, urethral stricture or surgical intervention of the prostate, previous pelvic surgery or irradiation, incontinence of urine, history of prostate / bladder cancer or compromised renal function is not considered a candidate for participation in this study," said Dr Symons.

Patients referred with LUTS are thoroughly assessed as per best practice, and their various treatment options are discussed.

"BPH treatment is tailored to both the patients' symptoms and their causes – it's important to note that not all men referred will benefit from intervention, as for many men lifestyle modification may be enough. Furthermore, whilst there are many current treatment options for LUTS, the BPH landscape is a challenging one as treatments are not readily interchangeable between patients."

Patient assessment includes a detailed history, urinary tract imaging, and exclusion of malignancy. As part of a comprehensive management plan patients are then assessed for suitability for current medical options, minimally invasive surgical options and more complex management.

If a patient is not considered a candidate for participation in the trial, they are still able to access treatment and further discuss alternative / current treatment options.



A/Prof James Symons

MBBS (Hons), BMedSci, MS (Urology), FRACS(Urology)

A/Prof Symons is an experienced urologist offering minimally-invasive treatments for complex urological problems, including laparoscopic and robotic procedures. James has long held interest in improving men's health, particularly in disorders of the prostate / bladder and male voiding dysfunction.

A/Prof Symons was one of the driving forces behind safer prostate cancer detection, writing the landmark paper on transperineal prostate biopsy in 2013 and the definitive chapter in the Hinman's Atlas of Urological Surgery.

Treatments offered include medical, lifestyle and minimally invasive surgical management plans for benign prostate hyperplasia (BPH) and lower urinary tract symptoms (LUTS). Prostate cancer is managed in a modern multi-disciplinary setting and aims to minimise the morbidity (and anxiety) of the disease and its treatment. A/Prof Symons strongly believes in a collaborative approach and works closely with expert oncologists, pathologists, radiologists and a broad allied health support team. He is chair of the San Prostate Multidisciplinary Team (MDT).

A/Prof Symons believes in tailoring a patient's care to their own unique circumstances, and strives to ensure that patients are fully informed and actively involved in the decision-making process. Prostate cancer patients treated at the San have additional support through the Prostate Cancer Centre of Excellence.

In addition to his clinical interests, James is involved in current research and education. He is the Co-Director of the San Prostate Centre of Excellence, and Director of Australian Clinical Trials, a private research group at the forefront of prostate-related research. He holds academic appointments with both a Senior Lecturer at the Australian National University and the University of Sydney. The latter is his alma mater, where he now leads the Surgical Endoscopy program in the Master of Surgery degree.

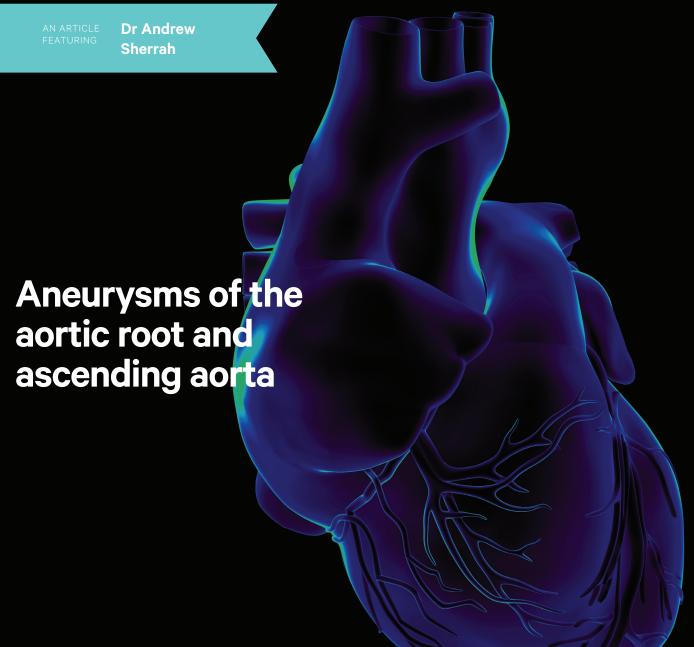
A/Prof Symons is a Fellow of the Royal Australasian College of Surgeons, a faculty member at the University of Sydney, a founding member of the St Vincent's Community Hospital Medical Advisory Committee, and holds membership with the Urological Society of Australia and New Zealand, Australian Medical Association, European Association of Urology, American Urological Association, Australian - Canadian Prostate Cancer Research Alliance, International Continence Society, Academy of Surgical Educators, and Royal College of Physicians & Surgeons of Glasgow.

Areas of interest:

- Robotic & Laparoscopic Surgery
- Prostate, Kidney, and Bladder Problems
- Family Planning (including Microsurgical Vasectomy Reversal)
- Medical Education & Research

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THE AORTA IS A REMARKABLE BLOOD VESSEL, TASKED WITH ACCEPTING ALL THE BLOOD THE HEART PUMPS OUT AND DISTRIBUTING IT TO THE REST OF THE BODY. DESPITE BEING THE LARGEST BLOOD VESSEL IN THE BODY, IT CAN SOMETIMES WEAKEN OR COME UNDER STRAIN, LEADING TO DILATATION, ANEURYSM AND DISSECTION.

Many of these issues come under the particular purview of cardiothoracic surgeons. "The things we worry about include enlargement, dilatation or aneurysms of the aortic root or proximal aorta," said Dr Andrew Sherrah, cardiothoracic surgeon at the San. "And more acutely, tears or dissections of the aorta which need to be addressed straight away."

Risk factors

The causes of aortic aneurysm are typically divided into two categories: congenital and acquired.

Congenital: There is a distinct correlation between certain syndromes and aortic aneurysms. "Specific elastic arterial wall issues occur in some less frequently seen syndromes including Marfan syndrome, Ehlers-Danlos syndrome, and Loeys-Dietz syndrome," said Dr Sherrah. There is also a strong correlation between patients who have a bicuspid aortic valve and aneurysms of the ascending aorta."

Acquired: Atherosclerotic disease and general cardiovascular disease, smoking, high blood pressure, age, obesity-related metabolic disorders, and poor diet can all contribute to the progression of dilatation. "Some less common risk factors include infection or inflammation which can cause acute aortitis. Deceleration injuries or traumatic injury from car accidents can cause both short and long-term aortic issues," added Dr Sherrah. "Addressing risk factors as much as possible, such as good blood pressure control, is vital."

Symptoms & Diagnosis

Aneurysms more commonly occur at the aortic root or ascending aorta than in the arch or descending thoracic aorta. They are often discovered incidentally on imaging when people are having investigations for other reasons. This is due to the fact symptoms related to aortic aneurysm are relatively uncommon and can be vague, even in the late stages.

"There may be some symptoms related to aortic valve dysfunction, in that if there's progressive aortic dilatation, the aortic valve will be distorted causing progressive abnormal regurgitation. This can cause symptoms such as dyspnoea, palpitations, presyncope, or chest discomfort," noted Dr Sherrah.

"Symptoms related to compression of the structures near the aorta can occur. For example, if the enlargement of the aorta distorts the location of the recurrent laryngeal nerve, it can result in voice hoarseness."

"However when people present with acute aortic dissection, they typically describe central crushing chest pain which can radiate through to the back. There may even be loss of consciousness, stroke or hemiplegia."

Long-term monitoring

The identification of people with aneurysms and the long-term monitoring of them is crucial in order to try and avoid spontaneous rupture or dissection. "The majority of these people can have their aneurysm surveillance annually, and hopefully won't require intervention like surgery," said Dr Sherrah. "We have to aggressively manage risk factors, and try to identify changes before they cause acute problems."

"The guidelines for Australia currently reflect the European and American guidelines, which recommend a cut-off point of 55mm of aortic diameter of the ascending aorta or aortic root, as an absolute indication for an operation. (A normal diameter is less than 40mm). We take everything into consideration including the rate of progression of dilatation, the patient's age and size, and other medical history. Certainly some patients may warrant surgical intervention at a reduced diameter cut-off, depending upon their co-morbidities and family history."

Dr Sherrah says it ultimately comes down to the balance of risks and benefits of any intervention. "With long-term monitoring of any dilatation, as well as the primary preventative measures instigated for these patients, ideally they won't ever meet the indications for surgical intervention. However when surgery is necessary, we replace the portion of the aorta that is dilated, before it becomes a problem. If we had a crystal ball we'd know with each patient when a problem was going to happen, but we don't, so we rely on essential hinge points – like the 55mm cutoff – through monitoring."

In the monitoring phase, annual checks involve CT imaging and in-person review with the specialist. "When stability is reached, we may sometimes move to MRI or echocardiography for monitoring, to avoid subjecting them to the radiation dose of a CT each year – particularly in younger people who will have monitoring for many, many years"

Blood pressure control is very closely monitored. "We counsel against exacerbators of dramatic increases in blood pressure such as weight lifting or high-impact sports. These need to be avoided in patients who have aortic dilatation. Indeed, pregnancy in women is ideally pursued only when the aortic diameter is less than 45mm."

The psychological element of not knowing when an aortic dilatation may become a dissection is obviously a lot for the patient to process. "Certainly the anxiety associated with aortic aneurysms is not uncommon and patients can benefit from psychological support and counselling. Some patients may err on the side of pursuing surgical intervention sooner rather than later," said Dr Sherrah.

Surgery

Dissections or tears that involve the aortic root or the proximal ascending aorta are pathologies that need urgent cardiothoracic intervention. "Obviously we try to avoid this by monitoring patients who are potentially at known risk of developing any of those issues," said Dr Sherrah. "Certainly these days the surgery to correct aneurysms is much safer, and best performed in an elective setting rather than emergency."

"The acute pathology that arises in this portion of the aorta is, at least for the moment, only treatable with open approach – open heart surgery. There are endovascular approaches for other areas of the aorta, however surgery on the aortic root and proximal aorta requires an open approach, typically via median sternotomy, to replace the dilated portion of the aorta with a Dacron graft." After surgery, ongoing surveillance of the portion of the aorta immediately adjacent to the graft is necessary.



Dr Andrew Sherrah

MBBS, PhD, FRACS

Dr Sherrah graduated from the University of Sydney in 2009 and embarked on his early medical training at Roya Prince Alfred Hospital in Sydney. NSW.

Following his initial medical training, Dr Sherrah continued his academic journey at the University of Sydney, where he pursued a PhD after being awarded a research fellowship grant from the Baird Institute. The Baird Institute is Australia's only specialised institution dedicated to cardiothoracic surgical training and research. During his research, Dr Sherrah focused on developing innovative strategies for managing thoracic aortic disease, employing advanced imaging techniques and fundamental scientific methodologies

In 2022, Andrew was awarded his Fellowship in
Cardiothoracic Surgery from the Royal Australasian College
of Surgeons. He completed his training at esteemed
institutions including Royal Prince Alfred Hospital, Royal
North Shore Hospital, and Westmend Hospital

Areas of interest

- Minimally invasive thoracic oncology surgery
- Aortic aneurysm/dissection repair
- Cardiac device implantation & lead extraction
- Teaching of medical students & junior doctors

Research

For more information on Dr Sherrah's research publications please see www.researchgate.net/profile/Andrew-Sherrah.

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AN ARTICLI

Dr Hunter Wang

Endoscopy training with the world's best in Shanghai

AT THE SAN, WE CELEBRATE OUR SPECIALISTS AND THEIR ONGOING EFFORTS TO LEARN THE LATEST GLOBAL TECHNIQUES IN THEIR FIELD TO THE BENEFIT OF OUR PATIENTS.

For Gastroenterologist and Interventional Endoscopist Hunter Wang, the opportunity of completing a Fellowship at a world-renowned endoscopy centre in Shanghai, was enriching and incredibly valuable, as a training opportunity in advanced techniques.

We caught up with Dr Wang to learn more about it.

Tell us about your Fellowship and what you were doing in Shanghai?

I had the privilege of working in Shanghai Zhongshan Hospital of Fudan University for six months last year, where the focus is on cutting edge endoscopy techniques.

Shanghai is a vibrant metropolis of 25-million people and a global leader in finance, science, and technology. Government and university investment in Zhongshan Hospital has enabled it to flourish too - as a pioneer in advanced endoscopic techniques, allowing diseases that historically required invasive surgery to be managed endoscopically.

These techniques are not yet widely practiced in many parts of the world, especially in the West, where there is a shortage of training opportunities.

I was able to work alongside some of the world's leading experts in the field including Professor Zhou Ping Hong. The work was intensive, however incredibly rewarding, and augmented my initial advanced endoscopic resection experience under the tutelage of Professor Michael Bourke at Westmead Hospital, another internationally renowned centre of endoscopic excellence.

What techniques were you practicing?

The management of early gastrointestinal neoplasia and benign conditions like achalasia and submucosal tumours have undergone significant transformation with the advent of advanced endoscopic resection techniques. Lesions that previously required invasive surgery can now be safely and effectively managed endoscopically.

Techniques like endoscopic submucosal dissection (ESD) allow for the removal of early-stage tumours, preserving organ function, significantly reducing recovery times, and minimising complications. The target lesion is marked, and a solution is injected in the submucosal space to lift it away from the muscle layers of the gastrointestinal tract. The lesion is then carefully dissected with an electrosurgical knife and removed in one piece (Figure 1). This technique allows for complete removal of the lesion, which is important for accurate pathological analysis and minimising the chance of cancer recurrence (Figure 2). Additional radical surgery can be performed without compromise if required.

Furthermore, elderly or comorbid patients who are poor surgical candidates can now undergo endoscopic resection with meaningful survival benefits. Contemporary international guidelines recommend endoscopic resection as the primary modality of treatment for advanced neoplasia or early gastrointestinal cancers following multi-disciplinary discussion. Significant investment in tools that facilitate advanced endoscopic resection and global research continue to improve the efficiency and safety of these techniques.

Another well-established technique is per oral endoscopic myotomy (POEM) for the treatment of achalasia, a condition where the muscles of the oesophagus fail to relax, making it difficult for patients to swallow. During the procedure, a small incision is made in the inner lining of the oesophagus, and the muscle layers responsible for the tightness are cut, allowing the oesophagus to relax and improve the passage of food into the stomach. POEM offers an alternative to traditional surgery (such as Heller myotomy), with less recovery time, no external incisions, and excellent long-term outcomes for patients. POEM is also effective for patients who have failed Heller myotomy.

The advanced skills required for ESD and POEM can be extended to other complex and emerging gastroenterological or endoscopic indications, such as managing submucosal tumours, strictures, and other motility disorders, broadening the range of minimally invasive treatment options for patients. Bringing these skills back home means that my patients can access cutting-edge treatments that are less invasive and achieve better quality of life.

What are the benefits of participating in these types of programs?

Participating in fellowships like the one in Shanghai offers immense benefits on multiple levels. For me as a specialist, it provides the opportunity to stay at the cutting edge of medical advancements, refine existing techniques, and continuously enhance my expertise. In a field like gastroenterology, where technology and best practices evolve rapidly, this ongoing learning is essential. For patients, the benefits are clear—they gain access to the latest, most effective treatments that may not yet be widely available. Ultimately, this leads to improved patient outcomes and quality of life, with the application of more advanced, minimally invasive, and safer treatment options.

Is this an example of evidence-based research driving innovation in care?

Definitely. The outcomes of ESD procedures are continuously studied and monitored, contributing to a growing body of research that supports their efficacy, safety, and long-term benefits compared to traditional surgical approaches. As more data is collected, ESD helps refine treatment protocols, optimise patient selection, and improve clinical outcomes.

As a part of my thesis, I have published pioneering research in ESD for early gastric cancer for out of indication (relative indication) cases.1 Although ESD has been well established as the preferred modality of treatment for small and pathologically favourable early gastric cancer (absolute indication), less is known about relative indication lesions in patients who may not be surgical candidates. In a prospective study of 149 patients, we demonstrated that ESD for relative indication early gastric cancer was equally safe and efficacious whilst conferring survival benefits even if a curative resection was not achieved. Furthermore, accurate staging was provided by ESD and did not exclude patients from radical surgery if required after careful calculation of their lymph node metastasis risk. Therefore, patients are offered potential cure, personalised therapy and management options backed by research evidence. Similar outcomes have been achieved with advanced endoscopic resection for other early gastrointestinal neoplasia including Barrett's adenocarcinoma, oesophageal squamous cell carcinoma and colorectal adenocarcinoma. By applying these techniques in my practice, I not only enhance patient care but also contribute to ongoing research efforts that help establish new management paradigms.

In the next decade, I see endoscopy playing an increasingly pivotal role in the management of gastrointestinal diseases, particularly as technology continues to advance, potentially allowing for more personalised and precise interventions that reduce the need for invasive surgery.





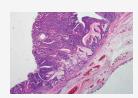




Figure 1. Endoscopic submucosal dissection of 20mm Barrett's adenocarcinoma.



Figure 2. A, En bloc resection of lesion. B, curative RO resection of moderately differentiated T1bSM1 adenocarcinoma



Wang H, Nguyen M, Gupta S, et al. Long-term outcomes after endoscopic submucosal dissection for relative indication early gastric cancer in nonsurgical candidates. Gastrointest Endosc. Apr 3 2024;doi:10.1016/j.gie.2024.03.032



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Dr Hunter Wang is a Gastroenterologist and Interventional Endoscopist at Sydney Adventist Hospital. He is interested in all aspects of gastroenterology and hepatology, and his expertise spans a wide range of conditions including early detection and management of gastrointestinal cancers, pancreatic and bile duct cancers, chronic liver disease, gastrointestinal bleeding, reflux disease, Barrett's oesophagus, complex polyps, and pancreaticobiliary diseases. He has conjoint accreditation in gastroscopy, colonoscopy, endoscopic retrograde cholangiopancreatography (ERCP) and endosonographic ultrasound (EUS).

Dr Wang graduated from the University of Sydney and trained at leading hospitals in Sydney and Canberra. He then completed multiple fellowships in advanced endoscopy including at the internationally renowned Westmead Hospital and Zhongshan Hospital, Shanghai where he mastered complex endoscopic resection, ensuring optimal outcomes for early gastrointestinal cancers utilising the latest endoscopic techniques.

Dr Wang is a member of the Gastroenterological Society of Australia, American Gastroenterology Association, and the American Society for Gastrointestinal Endoscopy. His research contributions have been published in peerreviewed journals and presented at both national and international conferences. He completed his thesis at the University of Sydney focusing on innovations in endoscopic resection of the upper gastrointestinal tract.

Dr Wang is passionate about improving patient outcomes and dedicated to delivering evidence-based care with a holistic approach. Beyond his clinical practice, Dr Wang remains committed to medical education, teaching students at Sydney Adventist Hospital, and physician trainees at Concord Hospital.

Dr Wang encourages phone or email communication from referrers for urgent or complex cases. Rapid access endoscopy and colonoscopy is available. He is fluent in Mandarin and Shanghainese.

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