

Winter 2022

San Doctor

collaborating with our GPs
to provide coordinated
community care



Message from Brett Goods, Chief Executive Officer

We are delighted to see so many doctors actively participating in this edition of San Doctor, sharing a range of stories relevant to GPs – such as sciatica, eosinophilic oesophagitis and hypertension.

Other stories showcase new technologies at the San such as Mako software for increased accuracy in robotic hip surgery, the otological laser for more effective and safer ear surgery and the high-definition RoboticScope – an intuitive magnification system for micro-surgical procedures.

It's wonderful to have returned to full capacity since restrictions to elective surgery have been lifted. While COVID seems to be reaching its peak, we still want to remind everyone to get vaccinated to help take pressure off both primary and tertiary health services.

Our Mona Vale San Clinic has now been open for almost a year and is growing from strength to strength. If you have patients in the Northern Beaches who prefer to access care at the San, consider referring them to one of our clinicians there. More information can be found at sah.org.au/consulting-suites

Mona Vale San Clinic brings our leading specialists to the Northern Beaches community and provides fast-access pathways in cardiology, orthopaedic surgery, general surgery, colorectal surgery and other areas. San Ultrasound for Women at the same location offers services for women of all ages, while specialising in obstetric and gynaecological ultrasound and prenatal diagnosis.

Adventist HealthCare finally reached a new agreement with Australian Health Service Alliance (AHSA). The new three-year contract means that since 1 June 2022, members of AHSA funds have been able to come to Sydney Adventist Hospital and San Day Surgery Hornsby for treatment and receive the full benefit of their health insurance cover.

We are delighted to continue to provide the best possible care to our community.

Brett Goods, CEO
Chief Executive Officer
Adventist HealthCare Limited

AN ARTICLE
BY

**Dr Samuel
McGinness**

MBBS FRACS (ORL-HNS)

Thanks to the extraordinary generosity of the San Foundation, the Department of Otolaryngology and Head and Neck Surgery at Sydney Adventist Hospital has been able to purchase a state of the art TrueBlue blue light, fibre-guided surgical laser.

This revolutionary technology puts Sydney Adventist Hospital at the forefront of ENT surgical capability, both in NSW and nationally, with particular implications for otological (ear) surgery.

In 2019 I completed a Senior Clinical Fellowship in Otology and Lateral Skull Base Surgery, under the tutelage of Mr John Hamilton, in Gloucestershire Royal Hospitals NHS Trust, UK. This advanced ear surgical fellowship brought with it the particular emphasis on laser cholesteatoma and stapes surgery, an area that Mr Hamilton has pioneered. It is particularly gratifying to now have access to the same world-class equipment at Sydney Adventist Hospital.

Otological surgeons at Sydney Adventist Hospital now will have access to laser facilities for several procedures, most notably stapedectomy surgery for otosclerosis, and in cholesteatoma surgery.

Otosclerosis is a relatively common, debilitating condition where a patient may develop progressive, unilateral or bilateral conductive hearing loss, related to fixation of the stapes bone to the surrounding bone of the middle ear. In turn, this prevents adequate conduction of vibratory energy imparted to the tympanic membrane into the inner ear structures.

The gold standard surgery, known as stapedectomy (or, more correctly, stapedotomy) involves resecting the stapes superstructure, leaving the fixed plate in which a hole is then drilled and a prosthesis inserted through and attached to the incus, restoring mobility in the ossicular chain. Traditionally, cold steel instruments are used to mobilise the stapes superstructure, a heart-in-the-mouth manoeuvre that brings with it the risk of fracturing the footplate. This necessitates abandonment of the procedure and the very real risk of significant sensorineural hearing loss from vibration damage to the extraordinarily delicate inner ear hair cells, an irreversible occurrence.

Otological lasers far lessen this risk by allowing the surgeon to vaporise the bony attachments of the superstructure to the footplate, all without any direct physical contact to the bone. This allows easy and atraumatic mobilisation of the superstructure. The laser can then be used to vaporise a fenestration in the footplate with very minimal requirement for drilling, further decreasing the risk of hearing loss and improving the success rates of the procedure markedly.

Cholesteatoma by contrast is a rare condition whereby the external, keratinising squamous epithelium of the eardrum migrates medially into the middle ear space. The accumulation of this squamous debris in the middle ear, though not technically neoplastic, shows a unique ability to create havoc by the means of destruction of the bony structures in the area, not only the ossicular chain but the bony coverings of the facial nerve, vestibular system and indeed destruction of the skull base into the middle cranial fossa. It is a relentlessly destructive condition associated with recalcitrance to treatment, and significant morbidity in terms of hearing loss, chronic ear discharge, and rarely facial nerve palsy and intracranial complications such as meningitis.

Access to the otological laser will aid San surgeons in clearing disease more effectively, reducing the risk of recurrence of the disease and the need for repeated surgeries. In addition, risks of permanent hearing loss are lessened due to the decreased need for manipulation of the stapes and other ossicles to clear disease. This can be achieved by the unique ability of the blue light laser to vaporise cholesteatoma while minimising damage to sensitive surrounding structures.

On behalf of the Department of Otolaryngology, our heartfelt thanks once again to the donors of the San Foundation.



Dr Samuel McGinness

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Dr McGinness completed his internship and residency at Royal North Shore Hospital in Sydney, then was admitted to the Royal Australasian College of Surgeons ENT Training Scheme and gained his Fellowship after 5 further years of training.

He then completed further overseas subspecialty training in the UK at the Gloucestershire Royal Hospitals NHS Trust, where he developed further skills in the management of advanced middle ear disease including laser cholesteatoma surgery and minimally invasive (keyhole) surgical techniques.

Dr McGinness specialises in disorders of the ear, hearing and balance as well as nose and sinus issues and children's ENT.

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Head of ENT Department update

The ENT department thank the San Foundation for its generous donation that has funded the ENT laser allowing increased safety and precision in stapedectomy and major ear surgery. Embracing innovation and research, the department is going from strength to strength, currently only one of 3 hospitals in NSW trialling the robotic microscope for Cochlear Implantation surgery. The robotics microscope enables improved visualisation and ergonomics in microsurgery reducing surgical fatigue and increasing patient safety.

Laser Ear Surgery

AN ARTICLE
BY

**Dr Penelope
De Lacavalerie**

MBBS FRACS CSSANZ (prov)

COVID-19 Impact on Colorectal Cancer Screening in Australia and How We Can Help



Dr Penelope De Lacavalerie

The impact of screening

The COVID-19 pandemic has caused a considerable health crisis worldwide. In Australia, in comparison to overseas, the impact has been smaller but important nevertheless.

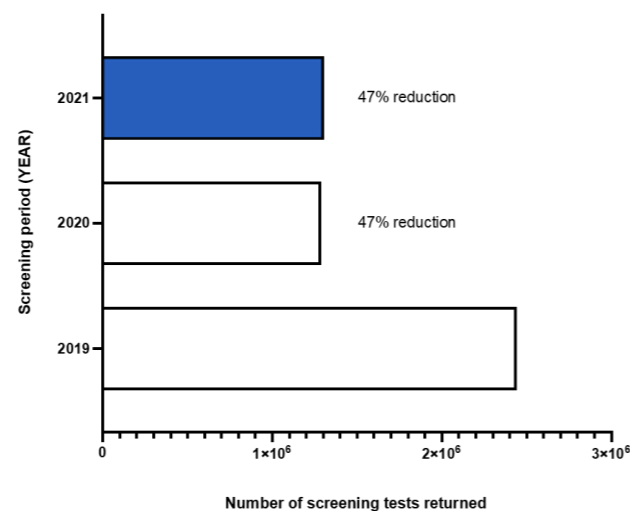
During this crisis, elective surgery and endoscopic procedures were restricted or suspended, including screening for colorectal cancer.

The National Bowel Cancer Screening Program (NBCSP) is targeted for people aged 50–74 years. Every 2 years a faecal immunochemical test (FIT) is sent to eligible people.

During the past 2 years since the pandemic started, there has been a significant decline in tests returned (Table 1), with almost 50% reduction when compared to figures from 2019. Changes in health-seeking behaviour also meant that routine referrals from GPs reduced in volume because patients only presented when they had major concerns.

**Table 1. COVID-19 IMPACT on
Screening for Colorectal Cancer**

Reduction comparison to 2019



Source: Australian Institute of Health and Welfare: Cancer screening program: quarterly data

A report published in the Lancet found that without a catch-up screening of those missed during the pandemic in Australia:

- A 6-month disruption would result in 3552 additional diagnoses and 1961 additional deaths (a relative increase of 1.0%) and a
- A 12-month disruption would result in 7140 additional diagnoses (relative increase 1.2%) and 3968 additional deaths (relative increase 2.0%).

Delays in screening, diagnosis and treatment of bowel cancer can lead to preventable deaths. As such we need to encourage and ensure that participation rates return to previously observed rates and provide catch-up screening tests and colonoscopies.

The impact on procedures

In 2020, the observed number of services nationally for diagnostic procedures related to colorectal cancers was 13% lower than the observed procedures for 2019, with 73,390 fewer services (Table 2).

This was 12% lower than expected for NSW/ACT, with 26,855 fewer services (206,093 services observed versus 232,948 services expected) in comparison to 2019.

Table 2. Comparison of observed 2021/2020 to observed 2019 (pre-COVID-19) colorectal cancer diagnostic and treatment procedures in Australia

Procedure	2020	2021
Colonoscopy/ sigmoidoscopy 1	73,390	8,620
Bowel surgery	- 376	+120

Source: Data extracted from: The impact of COVID-19 on cancer-related medical services and procedures in Australia in 2020: Examination of MBS claims data for 2020, nationally and by jurisdiction. Analysis by www.bowelcanceraustralia.com.au

How can we help?

We at the San can help mitigate the impact on colorectal cancer deaths in our community by offering direct access colonoscopy (DAC) to our patients.

Current Cancer Council Australia recommendation requires assessment with colonoscopy within 120 days after a positive faecal occult blood test.

Planning for post-COVID-19 colonoscopy catch-up and ongoing capacity is urgently required to avoid cancer progression.

The DAC service has been present prior to COVID-19. It is a NSW Ministry of Health initiative and supported by the Cancer Institute to improve patient outcomes and experience. It is offered by both surgeons and gastroenterologists at the San.

Some of the eligibility criteria for this service are listed to the right. Being eligible for this pathway significantly reduces the wait-time between referral and colonoscopy.

In conclusion, as the worldwide COVID-19 pandemic continues, the health service pressure will continue to cause constraints in colonoscopy capacity.

By ensuring not only catch-up CRC screening with FIT on patients that missed their test in the past 2 years, but also offering easier access to bookings via a direct access pathways practitioner, a proportion of excess CRC-related deaths can be prevented through early diagnosis and treatment.

References available on request.



- Age <75 years old
- Iron deficiency ± anaemia
- Positive Faecal Immunochemical Test (FIT)
- Family history of colorectal cancer
- No history of diabetes, epilepsy, heart, lung, kidney, or liver disease
- BMI 40 or less
- No anticoagulant medication
- No previous difficulties with anaesthesia

Dr Penelope De Lacavalerie

MBBS FRACS CSSANZ (prov)

Dr Penelope De Lacavalerie is a Consultant Colorectal and General Surgeon at the San, and is passionate about providing comprehensive, personalised, and innovative care for all her patients.

Her areas of expertise include all aspects of Colorectal Surgery including Robotic Surgery.

Currently her main research interest is in the diagnoses, screening and treatment of HPV related anal dysplasia and anal cancer in high-risk populations.

She is an avid educator and researcher. She is the recipient of various grants and scholarships including the prestigious NHMRC Clinical Postgraduate Scholarship for her PhD studies at The Garvan Institute of Medical Research.

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AN ARTICLE **Dr Randolph Gray**
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Common Spinal Presentations – Sciatica



Introduction

Lumbar radiculopathy also commonly known as sciatica can be a very distressing symptom. Although the aetiology changes with age the presentation can be very similar. The commonest age of presentation is 45-64 years¹. The distribution of the pain follows a dermatomal pattern, which if mapped accurately allows one to make an accurate clinical diagnosis of the compressed and irritated nerve root (Figure 1).

Lifetime prevalence of lumbar radiculopathy is reported to be 5.3% in men and 3.7% in women^{2,3}. Natural history studies have shown that lumbar radiculopathy due to acute prolapsed discs resolve spontaneously in 23-48% of patients. Up to 30% will have pronounced symptoms after one year, 20% will be out of work and 5-15% will undergo surgical intervention⁴⁻⁶.

Assessment

It is important to accurately map the distribution of the pain. Using this diagrammatic representation of the pain it is often possible to make an accurate diagnosis of the level of pathology.

Segmental Innervation of Lower Limb Muscles

- L3± Knee extensors (quadriceps)
- L4± Ankle dorsiflexion (Tibialis anterior)
- L5± Long toe extensors (Extensor Hallucis Longus)
- S1± Ankle plantar flexion (Gastrocnemius, soleus)

Figure 1

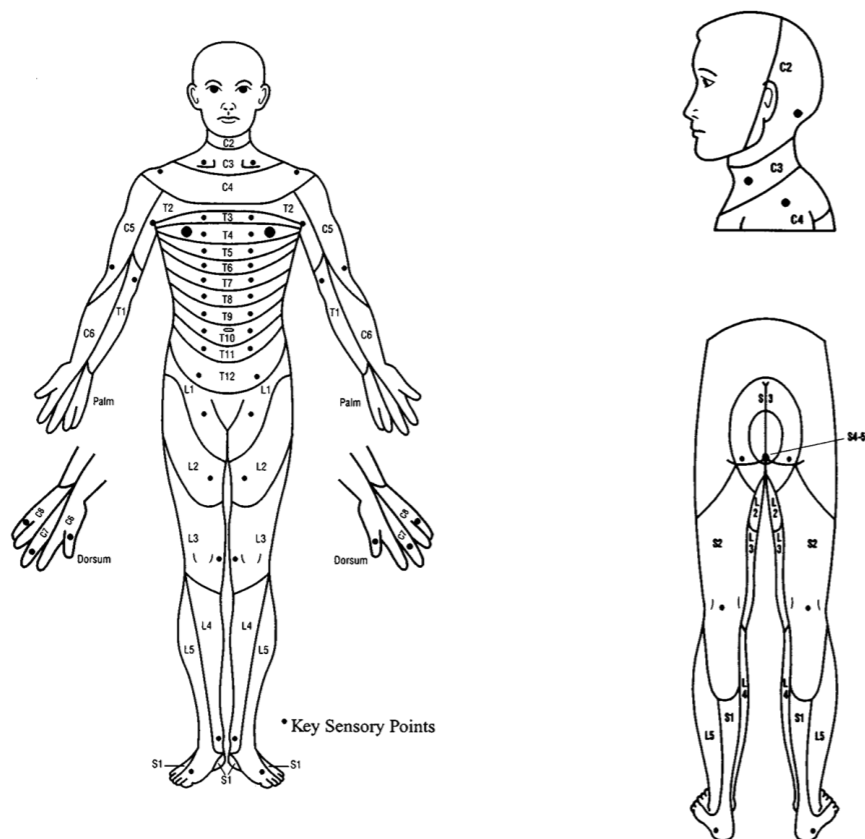


Table of MRC Grading and Myotomal Innervation⁷

A detail history of bladder and bowel habits is very important, as it could be the only sign of a cauda equina syndrome.

A comprehensive neurological assessment is imperative. This should include an assessment of myotomal power based on MRC grading (Table 1), sensation, reflexes and long tract signs. Specific tests for nerve root irritation (i.e. tension signs) such as a straight leg raise (SLR) and a cross leg SLR is useful in assessing the degree of nerve root irritation.

Table 1

Observed Power	MRC Grading
Total paralysis	0
Palpable or visible contraction	1
Active movement, full range of motion (ROM), with gravity eliminated	2
Active movement, full ROM against gravity	3
Active movement, full ROM against moderate resistance	4
(Normal) active movement, full ROM against full resistance	5
Not testable	NT

Patients presenting with sciatica associated with an acute neurological deficit or bladder and bowel disturbance (i.e. sphincter dysfunction) are best referred to and treated in the setting of an emergency department of a hospital providing an acute spinal service⁸.

Whilst acute lumbar disc herniation and degenerative lumbar spondylosis are by far the commonest cause of lumbar radiculopathy the other causes cannot be ignored.

Causes of Radiculopathy/Sciatica

- Lateral recess sub articular stenosis with no instability
- Spinal instability
- Spondylolisthesis
- Lateral listhesis
- Degenerative Scoliosis
- Lumbar spondylosis causing foraminal stenosis
- Trauma/Fractures
- Discitis or vertebral osteomyelitis with epidural collection
- Metastatic cancers with epidural disease
- Nerve sheath tumours^{9,10}
- Vascular malformations^{11,12}

Investigations

The investigation of choice for a patient presenting with an acute neurological symptom would be an MRI scan. An erect spinal radiograph is a useful adjunct to exclude spinal instability/deformity and for assessments of the alignment of the lumbar spine. Some of these subtle changes may be masked on the non-weight bearing supine MRI scan of the lumbar spine.

AN ARTICLE

Dr Randolph Gray

MBBS (Hons), FRACS (Orth), FAOrthA

Management

In the absence of a neurological deficit or evidence of a cauda equina syndrome the management of lumbar radiculopathy is essentially patient driven. The known natural history of lumbar radiculopathy would tell us that in most patients the symptoms would resolve with time⁶. Rest, NSAID's medication, and flexion based core exercises achieve symptomatic management in the initial stage if symptoms allow. If these measures do not relieve the pain satisfactorily then a CT guided perineural injection of corticosteroids can be considered¹³. However the efficacy of this has been questioned by some researchers, especially corticosteroids delivered to the epidural space¹⁴. My anecdotal experience echoes most of the studies that are supportive of CT guided trans-foraminal injections as an excellent intervention for acute sciatica¹⁵⁻¹⁸

Surgical intervention is reserved for those whose pain does not improve satisfactorily in a reasonable time frame. As to how long a reasonable time frame is very variable. It depends on the response to conservative measures, severity of the residual symptoms, patients need to get back to normalcy, his or her tolerance to pain, and the aetiology of the radiculopathy. It is always important to counsel the patients that in a far majority of patients acute onset radiculopathy symptoms would settle with symptomatic treatment. Studies have shown that in the short term, early surgery provides faster recovery and is likely to be cost effective

compared to prolonged conservative care^{19,20}. Long term follow up studies have failed to show a clinical difference at 1 and 2 years in the early surgery vs. prolonged conservative care groups^{5,20}.

Cauda Equina Syndrome (CES) may present in varying combinations of lower extremity weakness, sensory loss in the lower extremities and/or saddle area, pain in the low back and/or lower extremities, and visceral impairment of bladder, rectal, and or sexual function. Patients suspected with this form of presentation should be referred to an emergency department for further management⁹.

Surgical options

Acute lumbar disc herniation (ALDHA) is by far the commonest cause of sciatica in the age group 45-64. The offending fragments can either be contained or sequestered. Once conservative measures have been exhausted a micro discectomy is a reasonable option that would relieve most of the residual pain^{20,21}. This can be performed in a minimally invasive fashion using paramedian tubular retractors or in the conventional open technique through the midline. Whilst there may be some short-term benefits from the MIS technique for treatment of postero lateral LDH, no long-term benefits have been demonstrated compared to the open technique^{22,23}. A detailed discussion of the pros and cons of each approach is beyond the scope of this article.

**Dr Randolph Gray**

MBBS (Hons), FRACS (Orth), FAOrthA

Dr Gray is a fellowship trained Spinal Surgeon practicing in Sydney, who completed his Orthopaedic training in Sydney with the Australian Orthopaedic Association and was admitted to the Royal Australasian College of Surgeons as a Fellow in 2008. He trained further in adult and paediatric spinal surgery in Toronto, Canada. His scope of practice includes paediatric and adult spinal disorders including management of paediatric scoliosis, adult degenerative spine, spinal trauma and tumours. Dr Gray also has a special interest in Minimally Invasive Spinal Surgery (MISS) for which he has undergone specialised training in Toronto, Canada.

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The San achieves a new level in prostate care

The San has launched a new Prostate Centre of Excellence (PCoE), home to a team of expert clinicians and researchers working at the forefront of men's prostate health to deliver an outstanding service for patients.

ACHL Medical and Clinical Governance Director, Dr Jeanette Conley, says that a strategic approach – drawing on the San's long history of delivering high-quality prostate care – makes the PCoE a true centre of excellence.

"The centre will focus on five key areas that collectively deliver excellent outcomes for patients," said Dr Conley. "In addition to outstanding research, other areas of strength include having visible experts who are leaders in the field; ensuring advanced technology and infrastructure; and delivering seamless clinical services with excellent patient outcomes."

Urological surgeon Professor Henry Woo, Director of San PCoE, is a nationally and internationally recognised leader in the field of prostate health. He says that strong research capability is the key to building international recognition, and is at the core of maintaining outstanding patient care.

"The San is already part of the national prostate research agenda, with Professor Gavin Marx and myself actively involved as coordinators for several multi-centre studies," said Professor Woo.

"Our high-profile team has published extensively and is known for the innovation and quality of the clinical work we perform. We have a particularly strong national reputation for our work in prostate MRI, PSMA PET CT and PSMA PET MRI imaging, led by internationally trained Dr Lisa Tarlinton.

"In radiation oncology, Dr Amy Teh is pioneering the research and delivery of artificial-intelligence-driven adaptive prostate radiotherapy. The PCoE will allow us to expand these and other research interests."

High-level multidisciplinary team (MDT) meetings bring together surgery, radiation oncology, medical oncology, diagnostic nuclear medicine, radiology and pathology to discuss each patient's case. Allied health services, including prostate cancer-specific nursing and prostate patient clinical navigators, play a vital role in supporting patients.

"To ensure success, we have a variety of tools to continuously measure quality and clinical outcomes – with a real-time feedback process to be implemented this year," Dr Conley said. "We already contribute to the Prostate Cancer Outcomes Registry and Health Roundtable, a bench-marking group. And we are looking to join ICHOM, which would allow us to benchmark internationally. All these initiatives are designed to position us as a leader in Australian prostate care."

According to the most recent Bureau of Health Information report, the San leads NSW in oncology patient outcomes and patient-reported outcomes – a solid foundation on which the new PCoE will build.

Prostate cancer is a commonly diagnosed internal malignancy in men and the second most common cause of cancer-related death in men. About 3000 men die each year in Australia from prostate cancer. Benign prostate conditions will be experienced by the majority of ageing men, who will develop urinary symptoms as a result, with a significant number needing surgery and experiencing a huge quality of life impact.

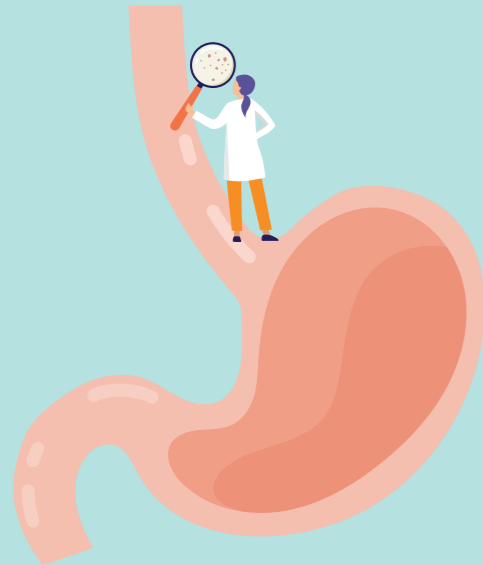
Upcoming GP educational events

Would you like to attend one of our GP education sessions?

Please visit sah.org.au/event-calendar



Eosinophilic oesophagitis



Background

Eosinophilic oesophagitis (EO or EoE) is a chronic allergic inflammatory disorder of the oesophagus, caused by a build-up of a type of white blood cell – eosinophils – causing inflammation and injury to the oesophagus. The first cases of oesophageal eosinophilia were described as early as the 1960s and 1970s. However, EO was formally recognised in a 1993 case series describing patients with oesophageal eosinophilia that lacked evidence of acid reflux.

Although the prevalence varies widely across the globe, its prevalence in certain parts of Europe is now estimated to be approaching approximately 40–56 cases per 100 000. There are no Australian prevalence data available, but anecdotal evidence from local gastroenterologists suggests prevalence is rising here as well.

Clinical Presentation

The clinical features of EO differ depending on the patient's age. Children are likely to present with difficulty feeding, failure to thrive or vomiting. Adolescents and adults generally complain of difficulty swallowing or food impaction. Other symptoms may include heartburn, dyspepsia and chest pain. Many patients come to attention after undergoing acid-suppression for presumed GORD, which results in minimal improvement in their symptoms.

As the first to see patients with these symptoms, GPs have a vital role to play in identifying possible EO and arranging prompt review for gastroscopy diagnosis so that diagnosis and treatment are not delayed. Damage from EO may cause food to become stuck after swallowing (dysphagia), as well as centrally located chest pain that does not respond to antacids. Symptoms may also mimic reflux. EO symptoms in infants may resolve in the first few years of life, particularly if only one or two foods are involved. However, when symptoms arise in older children and adults, they usually do not resolve.

The natural history of EO is largely unknown. Case-control series suggest that most untreated patients develop symptoms eventually, that their symptoms rarely self-resolve and, in most instances, worsen over time. If EO is left untreated, around 30-50% of children and adults with EO will eventually get food impaction/ food bolus obstruction, which may have to be removed in hospital. This can result in permanent scarring and narrowing of the oesophagus (stricture).

Patients with advanced forms of the disease are also at risk of spontaneous oesophageal perforation (Boerhaave's syndrome) and perforation during endoscopy, both of which have been reported in Australia.

Chronic EO is not known to induce intestinal metaplasia, or evolve into Barrett's oesophagus, and does not predispose to oesophageal adenocarcinoma.

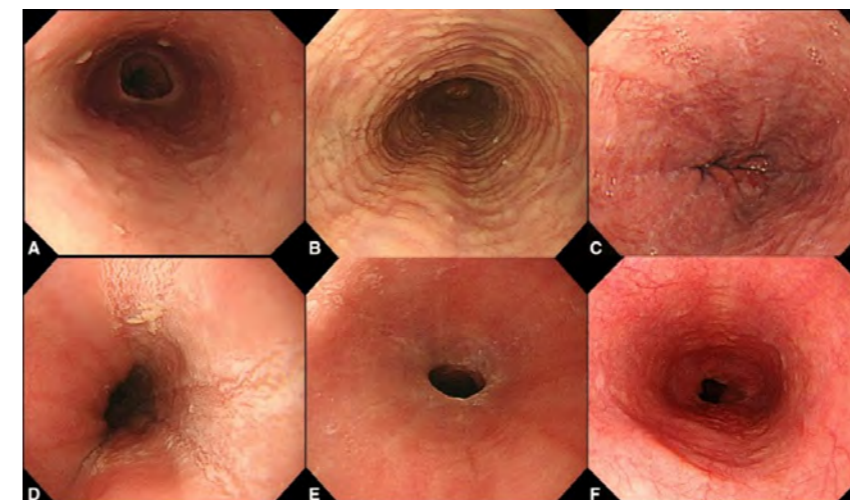
Symptoms of eosinophilic oesophagitis (EO)

Children	Adolescents and Adults
<ul style="list-style-type: none">• Slow eating• Food impaction/Bolus obstruction• Choking and gagging on food• Regurgitation of food/fluids• Abdominal pain	<ul style="list-style-type: none">• Trouble swallowing• Food impaction/Bolus obstruction• Reflux/heartburn• Chest pain• Drinking fluids to wash food down

Diagnosis

Endoscopy with biopsies is the mainstay of diagnosis of EO. The characteristic macroscopic feature is an oesophagus with distinct fixed rings indicative of underlying fibrosis. However, other more common features include strictures “narrow calibre oesophagus”, “crepe-like” fragile mucosa, vertical furrows, and whitish mucosal exudates (ie, eosinophilic-rich collections within micro-abscesses). The presence of oedema and fragility of the mucosal lining in patients with EO can result in spontaneous tears with mere passage of a gastroscop.

Endoscopic features of EO



Dr Saurabh Gupta

BSc (Med) MBBS (Hons) FRACP

Dr Saurabh Gupta is an Interventional Gastroenterologist, specialising in advanced diagnostic and therapeutic endoscopic procedures with a special interest in pancreatic and biliary disease including therapeutic EUS and ERCP, as well as endoscopic resection of advanced neoplasia, obesity endotherapy and assessment of small bowel disorders. He is strongly committed to teaching and training for advanced endoscopy, and passionate about optimising patient outcomes using minimally invasive techniques.

Dr Gupta is the Section Head of Gastroenterology at the Sydney Adventist Hospital. He is an executive committee member of the Endoscopy Faculty with the Gastroenterology Society of Australia (GESA) and a frequent invited speaker to national and international meetings.

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Discriminators of eosinophilic oesophagitis and reflux oesophagitis		
	Eosinophilic oesophagitis	Gastro-oesophageal reflux disease
Clinical	Food impaction in older children and adults Male to female ratio = 3:1 Usually atopic comorbidities	Food impaction rare Male to female ratio = 1:1 Occasionally atopic comorbidities
Oesophageal impedance and pH studies	Normal	Evidence of acid reflux
Endoscopy	Longitudinal furrows White exudates Friable mucosa Strictures Trachealisation	Distal oesophagitis
Histopathology	Proximal and distal inflammation Epithelial hyperplasia ≥15 eosinophils/hpf	Scanty eosinophils

Treatment of EO

Currently, there are three main approaches to therapy: anti-inflammatory (dietary or pharmacological) interventions or endoscopic intervention.

Although food allergens are known to be triggers, identifying putative food allergens using ex vivo allergy tests (such as skin patch or skin prick tests) or radio-allergosorbent testing (RAST) has been disappointing and is not recommended. As the main food groups that are potential triggers include wheat, cow's milk products, eggs, soy (including legumes), nuts and seafood, the only effective approach is to employ food elimination diets to induce complete histopathological remission, and then to organise a sequential food challenge followed by objective assessment with endoscopic biopsies to ascertain ongoing remission or relapse with each of the culprit food items as they are reintroduced.

While the standard six-food elimination diet (6FED) followed by sequential endoscopy does help identify specific food items provoking the allergic response, it can be time-consuming and expensive. Hence, a less vigorous modified approach has been suggested which only targets the most likely allergens, such as dairy and wheat (2FED), or a slightly broader approach, with inclusion of soy and eggs (4FED). This method may be less cumbersome and time consuming, but still requires serial endoscopies.

In some ways, EO mimics allergic asthma (I call it asthma of the oesophagus!). Hence, topical steroids have been used and rigorous clinical trials have demonstrated that this treatment is successful in inducing remission. The methodologies currently employed to deliver topical steroids to the oesophageal lining have required patients to either swallow fluticasone directly from an asthma inhaler, or to ask patients to create a home-made slurry by mixing budesonide respules with Splenda and then swallow the slurry to coat the oesophagus.

However, a more convenient and reliable way of delivering budesonide is via a new formulation as an orally disintegrating tablet (Jorveza; Dr Falk Pharma).

This is the first, Therapeutic Goods Administration-approved therapy for EO in Australia. Clinical trials have confirmed that budesonide orally disintegrating tablets are able to induce and maintain long term remission in patients with EO. Oesophageal candidiasis is a common side effect of topical steroid therapy and can occur in up to 10% of patients, and may require treatment with oral antifungal agents. The duration of therapy and/or the use of intermittent therapy must be individualised.

Endoscopic dilatation is the most effective modality to treat oesophageal strictures that result from fibrotic remodelling of the oesophagus, and can achieve rapid symptomatic relief for patients with EO. It is a safe procedure when carried out by an experienced gastroenterologist, with the

risk of perforations estimated to be < 1%. As the durability of response is variable, repeat dilatations will be required for long term effectiveness. Anti-inflammatory treatments (diet or medications) should continue in patients receiving endoscopic dilatation.

Summary

EO is a chronic, relapsing, presumably food-triggered (or aero-allergen triggered) inflammatory disorder with increasing prevalence in Australia. The recognition of EO as a distinct entity is a major advance for patients presenting with dysphagia and food bolus obstruction.

EO requires long-term multimodal care. The general practitioner will often be required to coordinate a management plan with gastroenterologists and allied health practitioners. Structured evaluation and regular reassessment in primary care are fundamental for the successful management of EO.

Congratulations Professor John Watson, AM the new Director of the Eccles Institute for Neuroscience at the ANU



Emeritus Professor John Watson, AM has been appointed to establish a university-wide institute to harness excellence in fundamental, cognitive, computational, and philosophical neurosciences and related disciplines, and to develop key clinical and commercial partnerships.

Professor Watson is a consultant neurologist at the San, where he also serves as Chair of the Medical Advisory Committee and as a non-executive Director of the Adventist HealthCare Limited (ACHL) Board. In 2011, Professor Watson led the establishment of the original Sydney Adventist Hospital Clinical School (SAHCS) and spearheaded a successful philanthropic campaign that attracted significant government and external funding for the school. In 2021, SAHCS became part of the Australian National University (ANU) portfolio of Clinical Schools.

“We are delighted to see Professor Watson appointed to lead the Eccles Institute,” said AHCL CEO Brett Goods.

“John’s role will help to strengthen the AHCL’s partnership with the ANU, and he is ideally suited to facilitate collaborations that will see clinical and academic work come together to develop new understandings and new approaches to patient care.”

Dean of the ANU College of Health and Medicine, Professor Russell Gruen, says “Professor Watson has the skills and experience to lead the Eccles Institute to become an interdisciplinary centre of excellence in neuroscience that engages with the major challenges of our time – which is very much the vision of Eccles himself.”

AN ARTICLE
BY**Dr John Limbers**MBBS (HONS 1) BSC (MED)
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Functional Planning in Robotic Total Hip Replacement

Dr John Limbers

Total hip replacement has been a highly successful procedure for many years. In the last five years this has been combined with Mako assisted robotic technology, with the aim of using robotic technology to increase accuracy.

In the last 12 months the latest update in this technology has been released. This is the addition of functional planning. This is because the position of the pelvis and hip is influenced by the biomechanics of the spine when sitting and standing. The pelvis (and therefore acetabulum) should flex between 10° and 30° when changing from the standing to the sitting positions. This is measured as standing and seated sacral slope. In many hip replacement patients with coexisting spinal pathology this change in sacral slope from standing to sitting is reduced to less than 10° due to stiffness in the spine. This means that their pelvis (and therefore acetabulum) are relatively extended when they are seated. This increases the risk of hip dislocation in the sitting position in a technically well performed hip replacement. Functional planning allows this to be accounted for in hip replacement planning, with the aim of reducing this risk in patients with a stiff spine. There are also a number of non-robotic hip systems that utilise this planning technique.

A pre-operative CT scan is performed. This is segmented and loaded onto the Mako system software, to provide a patient specific 3-D CT model of the total hip replacement. Standing and sitting lateral X-rays are also performed. The sacral slope values are measured and also entered into the Mako software. This allows the virtual hip replacement to be taken through a range of motion in the standing and sitting positions, with the acetabular and femoral components in the exact positions that will be produced in that particular patient. Any impingement of the acetabular and femoral components on each other in the variable standing and sitting positions are a potential cause of hip dislocation. This impingement can be seen as red in the virtual plan (figures 1a and 1b). The surgeon

can then alter the plan to relieve the impingement (figure 2). In this example the anteversion of the acetabular component has been decreased from 20° to 16°, thus removing the impingement.

The surgeon then performs the approach to the hip joint. The technology can be utilised via any surgical approach. Navigation pins are inserted into the pelvic bone. This is followed by mapping the anatomy of the hip joint utilising a specialised probe. This information is detected by a specialised camera and passed to the Mako robotic unit. This allows the patient's hip joint to be matched to the individualised plan. The surgeon then reams the acetabulum and inserts the acetabular component under robotic control. The robotic technology ensures that the acetabular component is inserted with the same anteversion and inclination angles as the pre-operative functional plan. The femur is then broached and the hip reduced with a trial femoral stem and head in place. Further measurements are then taken with the specialised probe to check the leg length and offset. If these are correct then the definitive femoral stem and head are inserted. These are parameters that are critical to having a high long-term hip implant survivorship rate and a very low dislocation rate.

Robotic technology has previously been shown to achieve a high degree of accuracy in hip replacement surgery. The acetabular cup placement was examined in robotically assisted and conventional total hip replacement surgery in a comparative study. A statistically significantly higher number (30% higher) of acetabular cups were positioned within the desired range of anteversion and inclination in the robotically assisted cases but there is no evidence indicating that it leads to better outcomes.

Functional planning is the latest update in this robotic hip replacement technology. It allows assessment and optimisation of hip prosthesis position in each individual patient, based on their unique spinopelvic anatomy, in sitting and standing functional positions. This interplay between hip and spinal biomechanics is being increasingly recognised as an important factor in reducing total hip replacement dislocation. This functional planning has the potential to improve long term results of total hip replacement surgery, by ensuring optimal implant position and reducing the chance of dislocation. As always, further time and study will be necessary to see if this is clinically beneficial to patients.

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Dr John Limbers is an orthopaedic surgeon who specialises in hip and knee replacement surgery as well as reconstructive foot and ankle surgery. He has particular expertise in MAKO robotic anterior hip replacement surgery and MAKO robotic knee replacement surgery.

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Figure 1a. Impingement of the femoral and acetabular components posteriorly

Figure 1b. The posterior impingement visualised with the femoral component subtracted

Figure 2. The impingement relieved by reducing the acetabular anteversion

AN ARTICLE
BY

Dr Hilda High

BSc, MCH, MBBS(Hons), FRACP

Genetic testing is more important than ever.



Most doctors are familiar with molecular testing of tumours to guide cancer treatments. (Think BRAF V600E and melanoma, VEGFR and lung cancer, KRAS and bowel cancer and HER2 and breast cancer). This kind of somatic (tumour) testing has been around since the 1990s.

As more targeted treatments become available, and are used earlier in therapy, genetic testing has become more important than ever. And, as the cost of testing falls, more patients with advanced cancers are seeking whole tumour testing (often called genomic testing, cost \$2,500). The hope is that driver mutations that serve as druggable targets will be identified, allowing patients access to novel treatments or current research trials.

Similarly, greater awareness of hereditary cancer syndromes has led to a higher demand for germline (inherited) genetic testing (cost \$400 to \$650). GPs understanding of the importance of family history has led to more referrals of patients, even those diagnosed many years ago. Criteria has changed and many of these patients are now eligible for Medicare funded testing. Demand has also been driven by adult children of affected individuals, concerned about their own risks.

These case studies illustrate the expanding role of somatic and germline genetic testing.

Jim was diagnosed with prostate cancer. Unfortunately, his PSA continued to climb despite androgen blockade (castration resistant prostate cancer). PARP inhibitor therapy has recently been approved for men with advanced prostate cancer and BRCA mutations. Medicare-funded tumour testing demonstrated a BRCA2 mutation and he has responded well to therapy. Inherited BRCA2 mutations are associated with increased risk of prostate, breast (40 to 80% risk), ovarian (10 to 20% risk) and pancreatic cancer. Predictive testing of his relatives has allowed those that carry the BRCA2 mutation to significantly reduce their cancer risk, through screening, surgery and risk reducing medications.

Jane developed kidney cancer in her 30s. IHC testing was performed and there was loss of staining for the SDHB protein. Germline testing is recommended for everyone diagnosed with kidney cancer before age 40. It guides screening for contralateral renal cancers as well as other syndromal tumours. In Jane's case, the loss of staining is highly suggestive of a germline mutation associated with hereditary paraganglioma and pheochromocytoma syndrome. A germline mutation was detected. Predictive testing of her parents identified the same mutation in her mother, where screening detected a carotid paraganglioma, early enough to allow safe surgical resection.

Jack, a non smoker, was diagnosed with a bladder cancer in his 50s. Due to his young age, Medicare funded MMR IHC testing was organised on the stored tumour block, as it had not been performed at diagnosis. There was loss of staining of MSH2, suggestive of Lynch syndrome. Germline testing confirmed a pathogenic mutation. Lynch syndrome is associated with a high risk of colon (30 to 40%), uterine (33%), ovarian (10%) and other cancers. Effective risk management is available. Jack's sister had predictive testing and was found to carry the same mutation. Her colonoscopy screening detected an occult, minimally invasive colorectal cancer. Jack's germline MSH2 mutation also means that PD-L1 inhibitor therapy (immune therapy) is likely to be effective, if required.

Jenny was diagnosed with high grade serous ovarian cancer at 59. She had no family history but her Manchester score of 15 meant she was eligible for Medicare funded germline testing. She was also eligible for tumour testing and this was ordered concurrently by her medical oncologist. No somatic (tumour) BRCA mutations were detected. However, a BRIP1 mutation was detected on the 13 gene germline panel. The BRCA genes work with BARD1, BRIP1, PALB2, RAD51C and RAD51D to correct double strand DNA breaks (homologous repair). Research indicates that PARP inhibitors may be effective when there are mutations in these genes. This information will be important if Jenny's tumour recurs. In addition, BRIP1 is associated with a high risk of ovarian cancer (5 to 10%) and this has significant implications for her female relatives.

Genetic testing is more important than ever. For guidelines on who to refer, see sydneycancergenetics.com.au/FAQ/who-should-be-referred/.

Germline testing should be considered when there is:

- Young onset
- Rare type
- Family history
- Somatic variant detected
- Loss of staining on IHC testing

Somatic testing should be considered:

- Routinely IHC testing for many cancers at diagnosis
- Via targeted gene testing at cancer progression
- Via larger panel / genomic testing when new treatments are sought

Dr Hilda High

BSc, MCH, MBBS(Hons), FRACP

Dr Hilda High is a Genetic Oncologist. Dr High sees patients at the Integrated Cancer Clinic at The Sydney Adventist Hospital as well as via Telehealth anywhere in Australia.

Dr High is a key member of the Australian Government's eviQ committee, developing and maintaining the national guidelines on genetic testing and risk management of heritable cancer syndromes.

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ACHL-ANU collaboration

Our Student Doctors

Australian National University (ANU) medical student Lucy Thawley was amongst the inaugural group of students last year to complete rotations across several medical and surgical areas. This year, she was the first in the program to complete an elective, choosing acute care, which covers the ICU, anaesthetics and emergency.

"After completing my one-week rotation in ICU, I opted to do an additional two weeks there during the holidays," said Lucy. "It's a very interesting area of medicine and because it is so complex, I wanted to spend more time there learning."

"In ICU, patients come in with such a wide range of conditions from all the major medical and surgical disciplines. You get to put into practice everything you have learnt in medicine. It's also a specialty where you can see your treatments and interventions working in real time, which can be very rewarding."

Lucy says she found both administrative staff and medical supervisors at the San to be very supportive, enhancing her learning experience. They were a major factor in her wanting to extend her rotation. Admin staff created opportunities for her, while doctors were generous with their knowledge, and actively created useful clinical learning opportunities.

"Because of Covid, electives have been limited or cancelled for most medical students," explained Lucy. "I feel lucky to have been able to complete an acute care elective at the San. It's been an amazing experience."

The ACHL-ANU collaboration commenced in 2020, with a focus in education, research and clinical service. While medical students are the backbone of the education component, long-term plans include placing ANU students in health executive and administration training positions.

AN ARTICLE
BY**Dr Kenny Lewis**

MBBCH, Dip. ABA, FANZCA, GAICD

Cognitive changes after Surgery in Elderly Patients



It is often remarked by friends and relatives that patients were never the same after surgery or an accident. A dramatic event like surgery can direct attention to a family member's subtle cognitive decline.

Behaviour which was previously accepted as eccentric may now be interpreted in the harsher light of organic pathology. Without specific neuropsychological tests before and after surgery, it is hard to confirm or refute these allegations.

Types of Neurocognitive changes after surgery

- Delirium is an acute confusional state occurring within 72 hours of surgery. Up to 50 % of older patients can be affected. Factors affecting the incidence are the patient's underlying cognitive reserve, the invasiveness of surgery, drugs, metabolic changes, sepsis, sleep disruption, sensory deprivation and a disorientating environment. Patients who develop delirium have higher mortality, slower mobilisation and recovery from surgery, longer hospital stays, and are more likely to have cognitive deficits at 1 month after surgery. 30-40% of cases of delirium are preventable. A multicomponent intervention like the Hospital Elder Life Program (HELP) is effective in preventing delirium by 40% and preventing functional decline in hospital by 67%.
- Postoperative Cognitive Dysfunction (POCD) is a reduction in cognitive function on neuropsychological tests, arising after a surgical procedure and persisting for weeks or months. A review of 19 studies found an incidence of 11% at 3 months. In patients with normal preoperative cognitive function, cognitive deficit 12 months after surgery was not significantly different from age-matched controls, suggesting that anaesthesia or surgery did not have a lasting effect on these patients¹.
- Dementia is a permanent and progressive deterioration in cognitive function beyond what might be expected from normal ageing. Studies have shown no association between POCD and dementia on follow up over 11 years². There was also no statistically significant association between cumulative exposure to general anaesthesia (multiple anaesthetics) and the development of Alzheimer's Disease.

The Impaired Brain and Surgery

In a prospective observational trial, 300 elderly patients were tested for cognitive impairment prior to hip replacement surgery. Those who demonstrated pre-surgery cognitive decline were significantly more likely to have further deterioration 12 months after surgery than patients who were cognitively normal on pretesting ($p < 0.0001$)³.

Data derived from the Oxford Project to Investigate Memory and Ageing (OPTIMA) appeared to show a significant decline in cognitive function in patients with prior cognitive impairment who had surgery (figure 1).

What causes accelerated decline in these patients? Factors like neuroinflammation, vascular disorders and the direct effect of anaesthetic agents are being considered. There is laboratory evidence that anaesthetic agents may interact with Alzheimer's pathology at multiple levels in the involved pathways but human evidence is lacking. The prevailing view is that there is a subset of cognitively-frail patients who are uniquely susceptible to the adverse effects of anaesthetic agents in a dose-dependent manner. Within the specialty of anaesthesia, randomised controlled trials have not yet established a particular technique, monitoring method or type of anaesthetic (general, regional, or sedation) as superior in avoiding further cognitive decline in

these patients⁵. The opportunity for an individual anaesthetist to make a difference, no matter how skilled, is very small. Anaesthetists need to function more as physicians than operating room specialists. As such, the traditional art of history taking remains their most useful tool. Missed diagnoses are common, cerebrovascular disease may have been overlooked, and drug interactions may be present.

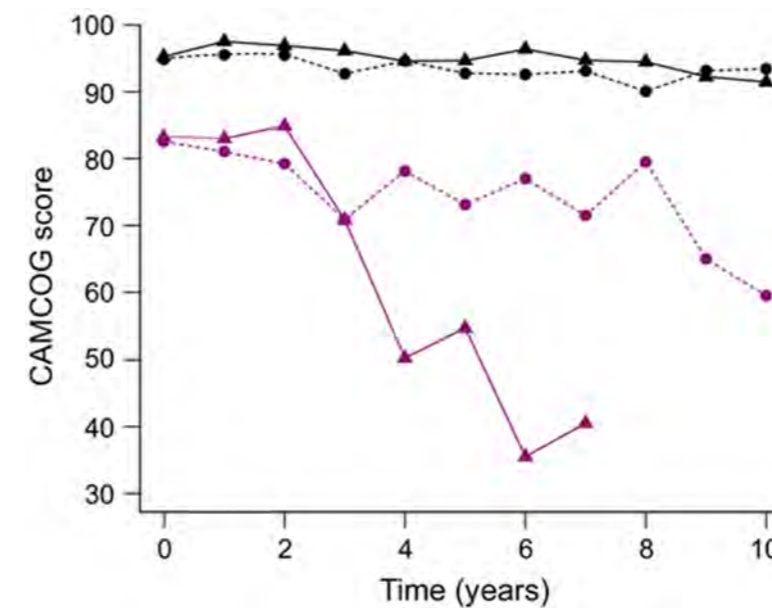
“ Prehabilitation by utilising the guidelines of the WHO⁶ may increase patients' resilience to anaesthesia and surgery⁷. ”

Patients' cognitive condition should be formally assessed when indicated and all elderly patients should have a baseline screening test such as the Mini-Cog as part of their preoperative assessment.

Conclusion

Anaesthesia does not appear to cause lasting cognitive effects on patients with normal cognitive reserve. In patients with impaired reserve, the stress of anaesthesia and surgery may worsen their condition. There is no anaesthetic technique that is shown to be superior in avoiding this deterioration. The pre-anaesthetic assessment is an opportunity to identify and address any issues that may be contributory to their condition. Patients should be informed of the risk of delirium and POCD and the decision to proceed with surgery should be based on the urgency, severity and consequences of their surgical condition and the conservative management options available.

Figure 1. Cambridge Cognition Examination (CAMCOG) scores for participants in the OPTIMA study showing the time-course of CAMCOG scores over the first 10 years of the study.



Black lines: participants with a CAMCOG 86 or higher at recruitment
Purple lines: participants with a CAMCOG 85 or lower at recruitment.
Dashed lines: no surgery within the 10 year period
Solid lines: participants who received an episode of surgery within the 10 year period; surgery occurred a mean of 3 and 5.1 years after recruitment
From Patel, Anaesthesia 20164.



Dr Kenny Lewis

MBBCH, Dip. ABA, FANZCA, GAICD

Dr Lewis trained in Medicine in South Africa and in Anaesthesia in the USA and in Melbourne. He has additional training and qualifications in chronic pain management. He works in clinical anaesthesia practice at Sydney Adventist Hospital and Norwest Private Hospital and worked as a clinical instructor in anaesthetic crisis management at the Sydney Simulation Centre at Royal North Shore Hospital. He has interests in regional anaesthesia and anaesthesia for obstetrics and gynaecology.

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AN ARTICLE

Dr James Wong
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The (*dangerous*) Faces of Hypertension

Almost everyone, especially our patients, has heard of white coat hypertension (WCH) but not everybody is familiar with masked hypertension (MH) or masked uncontrolled hypertension (MUCH). While WCH may be a relatively benign finding, MH and MUCH are dangerous and common situations whereby high blood pressure is missed and therefore uncontrolled, often for many years resulting in serious complications including stroke, heart attacks, heart failure and dementia.

What is masked hypertension?

It is true hypertension where elevated BP is missed because office BP appears normal. Office BP measuring devices are often inaccurate in diagnosing of hypertension. Elevated BP may only become apparent with out of office readings either by ambulatory blood pressure (ABP) monitoring or by home blood pressure (HBP) recordings or when disease manifests.

Masked uncontrolled hypertension (MUCH) means that blood pressure control is ineffective in a hypertensive patient already on BP lowering therapy. Both the doctor and patient think that hypertensive control is adequate but actually it is not. Office blood pressure seems to be satisfactory or normal on treatment but in fact out of office readings (by ABP or HBP) are not and overall BP control is not effective.

How common is masked hypertension?

The literature indicates prevalence of 10-30% for masked hypertension which means that it is unclear but it may be very common.

For masked uncontrolled hypertension the following provides an insight as to its prevalence.

An editorial in the journal, Hypertension, AHA August 2020, reported the findings of The Global Blood Pressure Screening Campaign of the International Society of Hypertension 2019: there were 1.5 million screenees of which 34% had hypertension; of those with hypertension 23% had untreated or inadequately treated hypertension (to <140/90mmHg).

It is concerning that despite the availability of BP lowering therapy, uncontrolled hypertension (MH and MUCH) remains the leading risk factor for cardiovascular deaths and morbidity.

Why is elevated blood pressure missed?

Hypertension is silent. Without symptoms the subject may not be aware or informed or motivated to seek assessment.

There are other reasons including the nature of individual blood pressure variability (which may make detection of elevated blood pressure difficult) and the limited accuracy of all the usual office blood pressure measuring devices.

The recommended standard of detecting high blood pressure is 24 hour ambulatory blood pressure monitoring (ABP) and this investigation is not readily available and its cost is yet to be reimbursed although this is intended by Medicare. It is underutilised currently.

Home blood pressure monitoring is helpful in diagnosis of hypertension although it is subject to bias.

What are the consequences?

Ineffective hypertensive control leads to all the manifestations of cardiovascular disease including ischaemic heart disease, stroke, chronic kidney disease, cerebral small vessel disease, cognitive dysfunction and dementia.

What about nocturnal hypertension (NH)?

This is another aspect of hypertension which may be missed or unrecognized without 24 hour ABP study. Nighttime BP should dip 10-15% and nondippers have significantly higher frequency of complications such as stroke.

The presence of nocturnal hypertension is a marker for poor future prognosis. It is not uncommon in obstructive sleep apnoea, diabetes mellitus and CKD.



Dr James Wong

MBBS (Hons), FRACP, FCSANZ

Dr James Wong is a clinical cardiologist who has been a visiting medical officer at the Sydney Adventist Hospital for more than 35 years. His main focus is Clinical Cardiology with interest in hypertension and preventative cardiology. He consults within Sydney Cardiology group (sydneycardiology.com.au) at Chatswood, Bella Vista and Parramatta locations.

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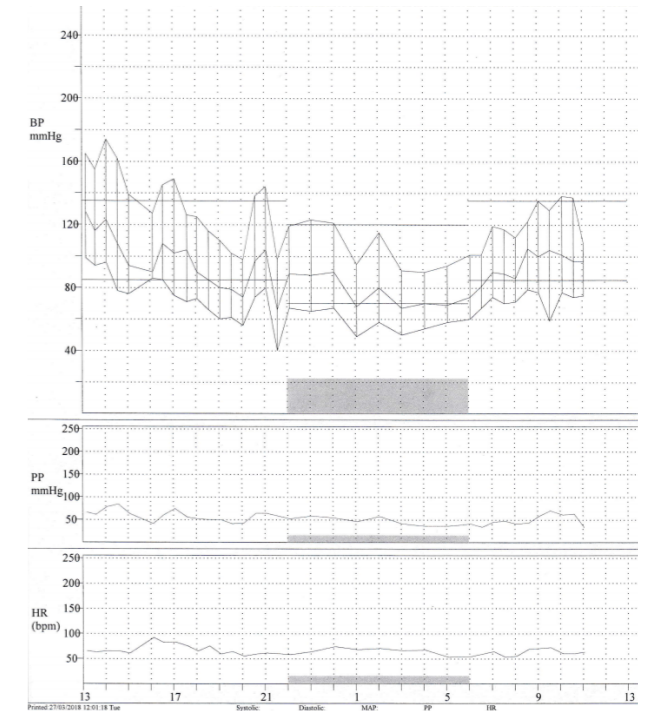
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BP variability

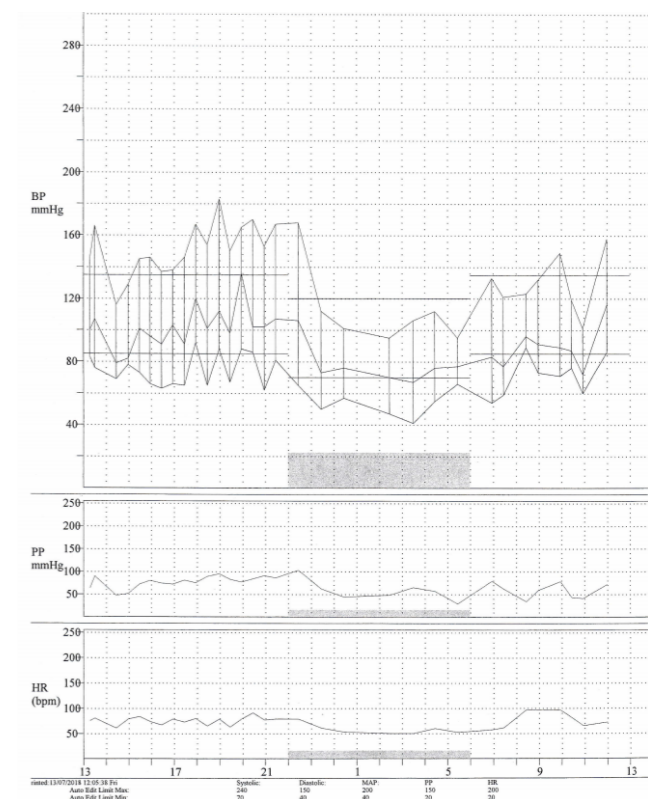
Normal individual

Average BP 123/70
Day average 128/73
Night average 106/59



Hypertensive individual

Average BP 138/69
Day average 145/73
Night average 113/54



The ABP profiles above show considerable BP variability in a normal person and also a hypertensive person. Note that both have normal and elevated readings.

Have your patients had their health checks?

Skin Cancer screening at Icon Cancer Centre Wahroonga



Located on-site at Sydney Adventist Hospital, Icon offers the latest in skin cancer screening technology to give your patients peace of mind, ensuring an early, accurate diagnosis and ongoing monitoring of their skin. Icon's qualified doctors use advanced screening technology to undertake skin cancer checks and full body mole mapping, helping protect their future health. If skin cancer is identified, Icon's team will discuss a personalised treatment plan for the patient. This may include a referral to a co-located specialist or the option of the latest radiation therapy, depending on the individual and their cancer.

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San Blackout and Faints Clinic



Blackouts, faints and unexplained falls can cause serious injury, disability or worse. San Blackouts & Faints (Syncope) Clinic is designed to provide a comprehensive patient assessment and to help identify the cause of syncope. This streamlines the process for patients, eliminating visits to multiple specialists at multiple locations, reducing appointment times and consultation costs, cutting out duplicate testing and limiting the anxiety associated with waiting for a diagnosis. Patients will need a referral from their General Practitioner (GP) to make an appointment at the clinic. All patients will be bulk-billed for their appointment and associated tests performed at the clinic. The clinic appointment must be made prior to arrival. Patients are advised to allow at least two hours for assessment and if possible to bring someone who has witnessed one of their faints or unexplained falls.

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Breast Imaging at San Breast Care



San Breast Care is a comprehensive multidisciplinary breast care service located at the Sydney Adventist Hospital. Our high-volume service enables us to have dedicated facilities and people, and streamlined pathways for our patients. The service offers imaging for women with no breast problems they are aware of but want thorough checks and reassurance, plus assessment and management for those who have noted a change in their breasts. With state-of-the-art imaging and diagnostic equipment offering mammogram, ultrasound and MRI as needed, dedicated technical and nursing staff and specialist breast radiologists, if an abnormality is found we ensure the patient is immediately informed and a management plan co-ordinated with the individual and their GP or referring doctor, and one of our breast specialists if required.

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 Appointments
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 Request Forms
 Please scan below:



Australian First: Hands-free digital exo-scope ushers in new era



San urological surgeon Dr Philip Katelaris has performed the first vasectomy reversal in Australia using the RoboticScope® – an intuitive exo-scope with head-gesture controlled 3D visualisation.

Now in use in more than 20 countries, the innovative RoboticScope® arrived in Australia earlier this year and brings significant advances for micro-surgical procedures because of its intuitive ability to adjust quickly and accurately to changes in depth of field. Ergonomically, the system also provides a relaxed working position. These advanced features are made possible by a Head Mounted Display (HMD) that detects the head gestures of the surgeon.

“When using a traditional surgical microscope, the surgeon has to refocus the microscope during the case,” said Dr Katelaris, who has performed vasectomies and micro-surgical vasectomy reversals at the San for more than 35 years. “This can be frustrating and affect concentration.

“RoboticScope®, however, automatically refocuses to a new depth of field, with the hands-free adjustment allowing the surgeon to stay fully focused on the surgical field. In microsurgery, where you are working with anatomical structures as fine as the hair on your head, this undistracted focus is incredible.”

The full digital camera offers live 3D imaging with about 0.03mm precision, merged 4K resolution and 11x zoom lens. The RoboticScope® is on loan to the San for clinical assessment and is currently the only one in Australia.

Richard Brookhouse, Business Development Manager (Imaging and Enabling Technologies) at LifeHealthcare – manufacturer of the new exo-scope – said that the company is very pleased to be partnering with the San.

“We are grateful to the San for their participation in clinically evaluating the RoboticScope®,” said Mr Brookhouse. “Dr Katelaris performed the first urological case in Australia and New Zealand with this technology and we are looking forward to building on this in the coming weeks with additional procedures. Eventually, we hope to see the exo-scope used in other clinical areas, such as plastic surgery, where high-definition intuitive magnification can be of significant benefit.”

The San is a well-established centre for outpatient vasectomy and micro-surgical vasectomy reversal. The introduction of the RoboticScope® demonstrates the team's commitment to continuous improvement for patients.

Dr Katelaris performs vasectomy using the minimally invasive Li technique – a no-scalpel procedure that reduces the instance of haematoma and infection. Virtually pain free, it is also extremely reliable. The 10-minute procedure is performed under local anaesthetic and remains the gold standard since it was introduced 40 years ago. Dr Katelaris and his operating team have been working together successfully for more than 30 years.



Dr Phillip Katelaris

FRACS (Urol) MBBS

Dr Katelaris trained first as a general surgeon and then sub-specialised as a urological surgeon. His practice, Katelaris Urology, offers comprehensive urological services for both men and women including management of prostate cancer, male and female urinary incontinence, urodynamic evaluation, erectile dysfunction with particular expertise in performing penile prosthetic surgery and management of kidney stones. He is the director of the Prostate Cancer Rehabilitation Centre that provides a multidisciplinary approach to managing sexual and urinary function following prostate cancer treatment.

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Update to the San Swaddle program



Our much-loved San Swaddle maternity package, offering no out-of-pocket costs apart from hospital excess for eligible HCF members, will unfortunately end on 31 January 2023.

Patients must be booked into Swaddle by this date to experience this package. After this date, HCF members will still be entitled to access the usual HCF benefits for obstetrics services provided they have appropriate cover and all terms and conditions are met.

Both parties have been delighted with the success of this program. AHCL and HCF continue to work together and are actively exploring alternative iterations of the model, including known gap obstetrics packages.

We want to take this opportunity to thank everyone involved in this outstanding program. None of what we have achieved in both the establishment and rollout of the program would have been possible without the vision, support, and engagement of our incredible team of clinicians. This innovative first to market model has been an industry game-changer. But, more importantly, it has provided an alternative to patients who may have otherwise opted out of the private system to have their babies.

Should your patients have queries about the program, please refer them to our website's frequently asked questions page for further information.

Patients can also email swaddle@sah.org.au with queries that they may have.

Emergency Care - Open 24/7

The San has the most extensive and busiest private emergency facility in NSW, treating approximately 18,000 patients annually. The service is supported by 24/7 Radiology and Nuclear Medicine services 365 days a year with a broad range of imaging services for patients who require an x-ray, CT, ultrasound or emergency interventional procedures and MRI services seven days a week. The fee for the service is \$335, however Sydney Adventist Hospital waives this \$335 gap for patients arriving by ambulance.

For more information visit sah.org.au/emergency-care

