Shoulder arthritis presents as a combination of pain and limitation of function with disability. The etiology can be idiopathic however secondary causes include post-traumatic (dislocation, fracture, iatrogenic malposition of screws/anchors), avascular necrosis, rotator cuff tears, and crystal arthropathy, post-infection and then other contributing diseases including inflammatory and metabolic conditions.

Diagnosis is by careful history, physical examination and radiologic imaging. The investigation of choice is a plain x-ray including anteroposterior views in internal and external rotation, a lateral view and importantly an axillary view which often shows posterior wear (Figure 1 and 2). There is little diagnostic benefit having an ultrasound of the shoulder though, if indicated, further investigation of the rotator cuff can be undertaken with an MRI and determination of bone wear/erosion using a CT scan.

Initial management of the patient includes identification of any causative factors, analgesia, anti-inflammatory medication, activity modification minimising heavy, jarring and repetitive loads, physiotherapy to maintain muscle tone and joint mobility (this is only beneficial in the earlier stages) and intra-articular steroid injection (used sparingly). Arthroscopic surgery can provide some pain relief by lavage, debridement of degenerative labral tears and chondral lesions, loose body removal, partial synovectomy and osteophyte excision, though these benefits are temporary and not always predictable (Figure 3).

Shoulder replacement is considered once the patient has severe pain disturbing their sleep with limited function. In 2013, over 4,000 shoulder arthroplasty procedures were performed in Australia with 70% being done in private hospitals. Females constitute a majority of the patients (two-thirds) and their mean age is 73.0 years compared with males who have a mean age of 68.3 years.

Shoulder replacement for arthritis can be a hemiarthroplasty, where only the humeral head is replaced or a total joint replacement where both the humeral head and the glenoid surface are replaced. The evidence shows total shoulder replacement with glenoid resurfacing is superior to partial or hemiarthroplasty with better functional improvement and a lower revision rate for failure. 75% of shoulder arthroplasties are total joint replacements. There are two types of
Adenomyosis is a benign disease of the uterus due to the presence of ectopic endometrial glands and stroma, deep within the myometrium with adjacent reactive myometrial hyperplasia. The disease can be diffuse or focal (adenomyoma).

The clinical findings are non-specific and therefore the diagnosis is difficult. Adenomyosis can cause severe menorrhagia and dysmenorrhoea. The patients are usually multiparous in their 40s, but can be younger, nulliparous, presenting with infertility. The uterus may be enlarged and tender. In research settings and practices with special interest in adenomyosis, transvaginal sonography (TVS) can achieve high accuracy. In real-world practice, many adenomyoses are missed or mistaken as uterine fibroids. Fibroids are present in 40% of women. Adenomyosis is also a very common finding on hysterectomy specimen. The presence of fibroids can mask the presence of adenomyosis on TVS. MRI is more accurate in detecting subtle diffuse adenomyosis and in differentiating fibroids from adenomyomas.

Focal adenomyosis or adenomyoma can simulate fibroid on TVS. Open, laparoscopic or hysteroscopic resections may have been attempted with the wrong pre-operative diagnosis. Unlike fibroid, the boundary with the adjacent myometrium is indistinct and therefore adenomyoma cannot be enucleated. The resection is often abandoned. Excision of a large part of the myometrium, as may be needed to remove all affected areas, may lead to difficulty in wound apposition, decreased expansive capacity of the uterus, weakness and ultimately uterine rupture during pregnancy. Endometrial ablation heats only a depth of few millimeters of tissue and is not useful except for the very superficial type of adenomyosis. It can seal off endometrial sinuses and potentially making dysmenorrhea worse. In the setting of painful menorrhagia and an apparently normal TVS, it is prudent to exclude adenomyosis by MRI before recommending endometrial ablation. Laparoscopy is performed when endometriosis is suspected on clinical and sonography findings (such as presence of chocolate cysts). Hysteroscopy is indicated for suspicion of endometrial pathology and polyps on TVS. These invasive procedures however are not indicated primarily for the diagnosis of adenomyosis. There is no specific blood test for adenomyosis. CA 125 may be raised but this is neither sensitive nor specific.

Adenomyosis is often neglected due to the lack of specific treatment. Clinicians have been focusing on symptomatic relief of menorrhagia and dysmenorrhoea. NSAID and tranexamic acid are used to treat menorrhagia. Oral progestagen might have been tried but may not be tolerated due to side effects such as headache, nausea, bloating sensation and mood changes. Low-dose, continuous combined oral contraceptives with withdrawal bleeds every 4-6 months maybe used for symptom control. Progestrogen-releasing IUD (Mirena) has patient satisfaction rate of 56% at 1 year, 66% at 2 year and 73% at 3 year. It may not be immediately effective. The side effects are irregular spotting or continuous bleeding in the first few months, acne, weight gain, bloating sensation and mood changes. Gonadotropin-releasing hormone (GnRH) agonist can be used only in the short term, due to its side effects of hypoestrogen state such as hot flushes, mood changes and osteoporosis.

In the past, hysterectomy is the only definitive treatment for adenomyosis. Since 1995 uterine artery embolisation (UAE) has been used to treat symptomatic fibroids. Its safety and effectiveness has been well established, including 6 randomised control trials, demonstrating no difference in quality of life outcome, compared with hysterectomy. The same procedure has been found useful in treating patient with adenomyosis. In our own UAE series, 29% of our patients have adenomyosis. Despite this, we have 96% success rate in controlling menorrhagia and 93% overall patient satisfaction rate. Currently we are reviewing our series of over 100 adenomyosis patients treated with UAE and our patient satisfaction rate is around 90%.

UAE data on adenomyosis is also available from 511 women from 15 studies (1999 – 2010). For pure adenomyosis, relief was achieved in 83% short-term and 65% long-term. For combined adenomyosis and fibroids, relief was achieved in 93% short-term and 82% long-term. The hysterectomy rate is around 13%, suggesting that 87% of women can potentially be spared of hysterectomy.

There were no deaths or serious adverse events reported. Minimal side effects, cost-effectiveness benefits, and retention of fertility render UAE an attractive treatment option.

CONCLUSIONS

Adenomyosis can be a debilitating condition significantly affecting women’s quality of life. Severe menorrhagia and dysmenorrhoea should raise the suspicion so that TVS is scrutinised. Presence of fibroids can potentially mask the presence of adenomyosis. MRI in selected cases maybe required to confirm the diagnosis. When a trial of simple measures failed, uterine artery embolisation is a safe, effective and much less invasive alternative to hysterectomy.

References available on request.
The incidence of renal tumour has increased by about 3% per year for several decades, this increase is partially related to advances in abdominal imaging, about 60% of newly diagnosed tumours are stage T1a (<4cm). Radical nephrectomy has been the gold standard treatment of localised renal tumours of nearly 40 years. However management for small renal tumours has evolved greatly in the past decade. In early stages, T1a and some T1b (4 to 7cm), renal cell carcinomas are highly treatable and can be managed by various nephron sparing techniques with a 5 year disease free recurrence of 90% in patients treated with energy ablation e.g. Radio Frequency Ablation (RFA) or over 98% in the case of Partial Nephrectomy (PN). Surgeons are able to perform Nephron Sparing Surgery (NSS) in most early stage renal tumours without compromising safety and oncologic efficacy.4,5 Minimally invasive surgery (laparoscopic and Robot assisted) NSS are technically complex but in experienced surgeon’s hands can produce equivalent oncologic outcome and complication profile as open surgery without the complication of a major abdominal incision.7

Long term chronic kidney disease (CKD) associated with nephrectomy is the focus of several retrospective studies demonstrating significantly reduced renal function in patients treated with total or Radical Nephrectomy (RN) compared with similar patient group treated by NSS. Concerns are being raised that the overzealous use of radical nephrectomy in patients with small renal masses could be causing or worsening pre-existing CKD.6,7

CKD—defined as an estimated glomerular filtration rate (eGFR) of ≤60 ml/min/1.73m2 is increasingly viewed as a major public health problem and is considered an independent cardiovascular risk factor. Overall, the 5-year survival for patients with stage 4 and 5 CKD is poor (approximately 30%), with cardiovascular disease as the principle cause of death.8

Traditional risk factors for CKD include age >60 years, hypertension, diabetes, cardiovascular disease and family history of renal disease—all of which are common in the population of patients that develop renal cortical tumours. A retrospective study of over 600 patients with normal serum creatinine and two healthy kidneys underwent either RN or NSS for a renal cortical tumour <4cm showed 26% of patients had pre-existing CKD (eGFR 60ml/min) before their operation. Radical nephrectomy was associated with a 3-year probability of a GFR <60ml/min/1.73m2 of 65% and of GFR <45ml/min/1.73m2 of 36%, whereas partial nephrectomy was far better, with 3 year risk of a GFR <60ml/min/1.73m2 of 20% and a GFR <45ml/min/1.73m2 of 5%.9 A study of 648 patients treated with radical or partial nephrectomy for a solitary renal tumour ≤4 cm with a normal contra-lateral kidney from 1989-2003 reported a significantly increased risk of death following radical nephrectomy in 327 patients younger than 65 years, even after adjusting for medical co-morbidities and tumour histology.10 Multivariate analysis of Surveillance, Epidemiology and End Results (SEER) cancer registry database with Medicare claims in 2,991 patients older than 65 years with resected renal tumours of ≤4 cm (81% underwent radical surgery) from 1995-2002 showed that radical nephrectomy was associated with a 1.4-fold greater risk of a cardiovascular event and a 1.38-fold greater risk of death than partial nephrectomy.11

A 2012 meta-analysis of 51 studies involving >31,000 patients reported that partial nephrectomy was associated with a 19% risk reduction in all-cause mortality, a 29% risk reduction in cancer-specific mortality, and a 61% risk reduction in severe CKD, compared with radical nephrectomy.12,13 However, a European randomised controlled trial comparing PN (n=268) to RN (n=273) for tumours of ≤5 cm (T1a, T1b) has confused matters to some extent. After a median follow-up duration of 9.3 years, oncological events including death and tumour progression were uncommon. In this study the patients who underwent partial nephrectomy did not experience better overall survival (76% versus 81% in the radical nephrectomy group). Cardiovascular events were the most common cause of death, but, no benefit owing to cardiovascular causes was observed for partial nephrectomy. However, this study had a number of limitations—patient number, premature closure, >10% cross over, inclusion of T1b tumours, too many centers involved14.

Data from national databases and tumour registries indicate a marked overutilisation of radical nephrectomy for the treatment of small renal masses. Data from the Nationwide Inpatient Sample, SEER, and Medicare showed that partial nephrectomy only accounted for between 7.5% and 20% of nephrectomy procedures. The most common cause of death, but, no benefit owing to cardiovascular causes was observed for partial nephrectomy. However, this study had a number of limitations—patient number, premature closure, >10% cross over, inclusion of T1b tumours, too many centers involved14.

Accumulating evidence of disadvantages of reduced renal function and the lack of oncological benefit with radical nephrectomy have lead to the recommendation of nephron sparing options such as PN, ablation or even observation as alternative to radical nephrectomy in the treatment of patients with small cortical renal tumours. In 2015 patients with small renal tumours should be offered tailored management with nephron preservation high on the list of consideration.

References available on request.
Total knee replacement (TKR) surgery is regarded as a very safe and very successful procedure, enabling patients to return to a good quality of life following relief from the symptomatic pain and loss of function associated with degenerative joint disease. This surgery was first performed in 1968; so long-term survivorship of implants is now well established in the literature, as outcome studies have shown very low incidences of failure post surgery. The challenge is to now improve on already good results and try to match high patient expectations following TKR.

Today we can categorise patients into two groups the “young elderly” (65 – 75 years) and the “old elderly” (over 75yrs). In times gone by, TKR patients were generally satisfied with a painless joint that could bend to 90 degrees. Whilst the old elderly may continue to be satisfied with this, the expectation of today’s active “young elderly” having TKR is not just a pain free joint but also returning to functional lives including sports activities such as golf, cycling and swimming. According to the American Academy of Orthopaedic Surgeons (AAOS) in 1999 approximately 30% of TKR were performed on patients younger than 65 years. In 2008 this has increased to 41%. Overall the trend for the “young elderly” undergoing TKR is escalating.

The aim of TKR is to provide a patient with a functional, pain free joint. To achieve this it is essential to restore four biomechanical aspects:
1. Mechanical axis
2. Joint Line
3. Patella Tracking
4. Ligamentous Balancing

Although knee surgery is a very successful operation on average around 1 in 5 patients report sub optimal results in relation to post-operative pain and function. Patient satisfaction is an important outcome measure, as it has a direct correlation to a patient’s ability to perform normal day-to-day tasks and leisure activities. If functional outcomes can be improved, what role can new technologies and implant designs play in improving overall patient satisfaction?

In my opinion the outcome of TKR is dependant on three elements:
1. The Patient: Timing is crucial. Ideally surgery should be considered necessary when the knee joint disease is adversely effecting the patient’s quality of life and before their general health deteriorates to a point where their recovery from the surgery can be compromised (not too early, not too late). Waiting for the complete destruction of the knee joint is unnecessary, may compromise the outcome of the surgery and the patient’s future quality of life.
2. Surgeon: Skill set and experience
3. Technology: Implant design and techniques

Since 1968, TKR technique and technology has evolved. Historically the restoration of the knee joint line and the mechanical axis could be achieved by using the surgeon’s sight, skill and manual instrumentation. Over the last ten years we have seen the introduction of Computer Assisted Surgery systems to navigate alignment of TKR’s. More recently Patient Specific Instrumentation (PSI) has been introduced, which utilizes CT or MRI imaging to produce patient specific cutting blocks for the same purpose. In isolation while these technologies have been shown to improve accuracy of alignment in certain patients, they have provided no real improvements in overall survivorship of total knee replacements.

PSI cutting blocks have an advantage of cutting down surgical time and instrumentation. Mechanical alignment instrumentation can achieve reasonable ligamentous balancing as well as satisfactory patella tracking. For improved functional performance the importance of obtaining good soft tissue and gap balancing in TKR surgery has also been well documented. Failure to achieve this can lead to either early revision or reduced performance of the joint. This is well illustrated by lower patient satisfaction when undertaking tasks such as ascending or descending stairs or getting out of a car or chair.
DEFINITION OF LIGAMENT BALANCING

Correct ligament balancing results in a “balanced knee”. A balanced knee comprises the following characteristics:

• A full range of movement
• Symmetrical medial-lateral balance at full extension and 90 degrees of flexion resulting in a rectangular tibiofemoral gap.
• Correct valgus/varus alignment in both flexion and extension.
• Balanced flexion-extension gap without medial-lateral tightness or laxity.
• A well-tracking patella during full motion.
• Maximal flexion occurring with the patella reduced and without excessive rollback of the femur on the tibia.
• Correct rotational balance between the tibial and femoral components.

A balanced knee has many postoperative advantages, and this is supported by the literature, although randomised control studies of ligament balancing are limited.

There is a technological solution to solve this conundrum, as we are now able to assess very accurately these important gap-balancing measurements with the latest Computer Assisted Surgery software platform. It is now possible to combine two important areas of total knee replacement surgery to ensure accuracy of alignment with the functional benefits of ensuring good soft tissue and ligament balance. It has been shown that the computerized gap balancing technique may result in better stability of the knee joint, which suggests improvements in the overall functional performance of TKR. We believe that this is a positive and assured step forward in our pursuit to make every TKR patient, a very functional and satisfied patient.

A balanced knee is likely to have reduced wear and loosening. The patient with a balanced knee is likely to be more satisfied with an increased ROM and proprioception, and less pain. All these factors help minimise the need for revision surgery.

POST OPERATIVE RECOVERY

Immediately post op the patient will be in the post anaesthesia recovery unit until stable and then return to the ward. Vital signs will be monitored closely over the first 24 hours and wounds and drains checked for excess blood loss. Many patients undergo this surgery using combined spinal and general anaesthetic. A urinary catheter is also insitu. Combined intravenous and oral analgesia is common.

Post op protocols may vary slight from patient to patient. Generally day one post op, the drain and urinary catheter can be removed. The patient will be assisted by physiotherapy staff to start mobilising and performing gentle exercises. Early exercises help prevent stiffness and regain movement of the knee. In some cases (CPM) machines are used to provide passive movement of the knee through a range of motion (ROM) from 0 to 110 degrees. This is particularly helpful for the patient with multiple co-morbidities who may take longer to recover from the anaesthetic and surgery. Day 5 – 7 the patient may be transferred to an in-patient rehabilitation facility for a period of 10 days to two weeks or discharged home on an out-patient rehabilitation program. Initial recovery and resumption of activities of daily living including driving is achieved at 4 – 6 weeks post operation.

To conclude, Australian Orthopaedic trainees are fortunate to be exposed to all modalities of TKR surgical techniques. In my personal experience I have found that the use of computerised navigation knee replacement with ligamentous balancing provides reproducible results and high patient satisfaction.

References available on request.
DEEP INFILTRATING ENDOMETRIOSIS: CAUSE OF PELVIC PAIN

Dr Yogesh Nikam

Endometriosis is an inflammatory process, marked by the presence of functional endometrial glands and stroma at ectopic locations outside the uterine cavity. These implants are present in the pelvis but can occur nearly anywhere in the body. They are estrogen dependent and hence affect women of reproductive age group.

Endometriosis can present in a multitude of ways. The most common symptom is of pelvic pain, especially dysmenorrhea (80%). Other symptoms are dyspareunia (45%), dyschezia (29%), infertility (26%), endometrioma or ovarian mass (20%) and dysuria (6-10%). Some women can also be asymptomatic.

The actual prevalence of endometriosis is unknown, due to the diversity of symptoms. Studies estimate the prevalence to be around 10%. However, this increases to 30-50% in women with infertility and to 45-50% in women with chronic pelvic pain. Currently, endometriosis can only be reliably diagnosed by visual inspection at laparoscopy, with subsequent biopsy of suspect lesions for histological confirmation. The sensitivity approaches 97%, and specificity is 85%.

There are three distinct forms of endometriosis

1. Superficial or peritoneal endometriosis
2. Endometriomas - Ovarian cysts lined by endometrial tissue and
3. Deeply Infiltrating Endometriosis (D.I.E)

In this article, I limit my discussion to the topic of D.I.E.

The revised American Society for Reproductive Medicine (eASRM) classification system is the most widely used classification system for endometriosis. Endometriomas & D.I.E (eASRM Stages III & IV) are considered the severe forms of the disease and pose a difficult surgical challenge for the treating gynaecologist.

Deep infiltrating endometriosis (D.I.E) is a particular form of endometriosis that penetrates greater than 5 mm beneath the peritoneal surface. D.I.E lesions are considered to be very active. They are strongly associated with pain, altering the quality of life. D.I.E implants located in the posterior cul-de-sac and can involve important structures such as uterosacral ligaments, bowel and ureters that result in severe pain at menstruation, intercourse and defecation. Lesions anteriorly in the pelvis can involve the bladder and may be responsible for recurrent UTI’s and or cyclic hematuria.

Dysmenorrhea is the most common predictor of endometriosis, correlating in 80% of the patients with endometriosis. However, it does not correlate with the severity of the disease. Patients with D.I.E may present with the classic symptoms of dysmenorrhea, dyspareunia, dyschezia and infertility. Physical examination often reveals positive findings such as a palpable tender nodule in the rectovaginal septum or the posterior cul-de-sac. Similarly, thickening of the uterosacral ligaments, fixed and retroverted uterus that is painful on bimanual examination are also suggestive of D.I.E.

A good quality transvaginal ultrasound is the first-line study in women with chronic pelvic pain. However, it can identify ovarian endometriomas and D.I.E, which accounts for only 20% of patients with endometriosis. Fortunately, with good quality ultrasounds, D.I.E can be diagnosed with a high degree of accuracy (sensitivity 91% specificity 98%). This gives the treating surgeon a preoperative diagnosis and leads to better outcomes for the patients by allowing thorough preoperative preparation and counseling. If a recto-vaginal D.I.E nodule is noted on ultrasound, the pre-operative counseling involves discussion of a possible bowel resection.

Serum Ca 125 levels is high in patients with endometriosis (greater than 35 IU/ml) and hence not a sensitive indicator of the extent of disease.

Management of D.I.E is based on the needs of the patient. Treatment is aimed to alleviate pain and improve fertility. Preoperative counseling involves a comprehensive discussion carefully considering the desire of future fertility, side effect of medications, risks associated with proposed surgery and personal preferences.

Endometriosis is an estrogen-mediated disease. Hence, progestins can be considered as the first-line medical therapy.

Second-line medical therapies involve the use of LNG IUCD (Mirena) and GnRH agonist. For D.I.E, medical therapies have been reported to be ineffective or transiently effective for pain management. Naturally, these treatments are not recommended for women who want to conceive. Long-term compliance is difficult due to the nature of the disease and the side effects of the medical therapies.

Surgery for D.I.E in a patient with infertility: The goal of surgical therapies involves the removal of visible implants, restoration of anatomy in order to improve fertility. Excision of the implants has been shown to improve the conception rate over the background rate in between 10-25%. The current evidence does not demonstrate improvement of pregnancy rates in women undergoing surgical management of rectovaginal endometriosis.

Surgery for D.I.E in a patient with pelvic pain: Conservative therapy involves the removal of visible implants and restoration of anatomy. Definitive treatments consist of Hysterectomy with or without bilateral salpingo-oophorectomy. This is highly advantageous for pelvic pain control, reduction of dysmenorrhea, and hence the patient satisfaction rates are high.

D.I.E involving the bowel requires a multidisciplinary approach involving a colorectal surgeon for successful management. Patients who undergo bowel resection report symptoms resolution up to 70%. However, these procedures are also associated with a significant risk of complications such as pelvic abscess, anastomosis leakage and fistula formation. In summary, for a woman with pelvic pain, dyspareunia or painful defecation, suggestive of D.I.E, surgical therapy is appropriate and successful than medical treatment. It is important to understand that surgical results are variable and are highly dependent on the experience of the treating gynaecologist.

References available on request.
total shoulder replacements, anatomic and reverse. In patients with arthritis and intact rotator cuff tendons, a “conventional” anatomic shoulder replacement is recommended where the humeral head is replaced as well as a cemented polyethylene component reproducing the original joint anatomy (figure 4). More recently there is a trend to using cementless metal backed glenoid components however these cases are still in the minority. A reverse replacement is considered when the rotator cuff is deficient. Here the glenoid surface is replaced with a spherical component rather than a concave fossa and the humerus has a prosthesis with a concave fossa (figure 5). This configuration is able to compensate for the abnormal forces and inability to elevate the arm. There is an increasing trend to managing difficult arthritic shoulders with a reverse replacement. In 2013 50% of total shoulder replacements in Australia were of the reverse type.

The surgical procedure usually requires admission to hospital for 2-3 days with optional transfer to a rehabilitation unit, if home circumstances necessitate. A sling is worn for 4 weeks with limited physiotherapy initially however after the sling is discarded, physiotherapy is increased over a further 2-3 month period. Patients usually have a rapid decrease in pain and improvement of function over the first 3 months with further improvement occurring slowly over the next year. Patients are able to perform most standard activities of daily living with minimal or no pain in 95% of cases.

The general recommendation for the patient regarding activity following total shoulder arthroplasty is to avoid contact sports and high-impact loading sports. Activities such as golf, doubles tennis, bowling, cycling, low-impact aerobics, swimming and down hill skiing are allowed in patients with anatomic shoulder replacements once they have fully rehabilitated their shoulder. Patients with a reverse arthroplasty often have weakness despite a significant improvement of range of motion and hence may have difficulty with overhead or repetitive activities such as swimming, golf and tennis. The longevity of shoulder replacements is good with only a 4% revision rate at 6 years.

NEWLY ACCREDITED SAH SPECIALISTS

**Dr Gunjan Aggarwal**  
BSc (Med) MBBS, FRACP  
Cardiologist  
Dr Gunjan Aggarwal is a general adult Cardiologist with a special interest in non-invasive cardiac imaging (including complex valvular disease, transoesophageal, 3D contrast echocardiography), cardiac CT and preventative cardiology.

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**Dr Kavita Enjeti**  
BSc, MBBS (Hons Class 1), FACD  
Dermatologist  
Dr Kavita Enjeti is a consultant Dermatologist with experience in all aspects of skin care. Her special interests are skin cancer diagnosis and treatment, hyperhidrosis, psoriasis, eczema, contact dermatitis, paediatric skin disorders, women’s health and laser.

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**Dr Benjamin Ng**  
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Respiratory and Sleep Physician  
Dr Benjamin Ng is a Respiratory and Sleep Physician specialising in interventional bronchoscopy (e.g. endobronchial ultrasound and bronchosscopic lung volume reduction), pulmonary fibrosis and is participating in the new pulmonary hypertension service at Sydney Adventist Hospital.

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**Dr Jeffrey Persson**  
MD, FRANZCOG, CREI  
Fertility Specialist  
Dr Jeffrey Persson is the Clinical Director at IVF Australia based at Sydney Adventist Hospital. He has over 20 years’ experience in both male and female fertility issues. In 1995 he received his Fellowship of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists and his Certificate in Reproductive Endocrinology and Infertility.

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**Dr Dylan G Wynne**  
PhD (Lon), MBBS (Syd), BSc (HONS), FRACP  
Interventional Cardiologist  
Dr Dylan Wynne is a General and Interventional Cardiologist specialising in diagnostic and complex coronary interventions. Following advance fellowships both in Sydney and the UK, he has gained special academic and technical training in minimally invasive technologies for structural heart disease including atrial appendage occlusions and correction of congenital heart defects. He has a special interest in transcatheter aortic valve implantation, a revolutionary, surgery-sparing valve replacement technology.

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To find a San Specialist visit www.sah.org.au.
NEWS FROM SYDNEY ADVENTIST HOSPITAL

- The Sydney Adventist Hospital Clinical School of The University of Sydney graduated its first cohort of medical students in December last year. The 12 students completed MBBS after undertaking 4 stages of study at the San. The school is the first fully-fledged private hospital clinical school in NSW.

- Several members of the San Hospital community were named in the Australia Day 2015 Honours List announced by Governor-General Sir Peter Cosgrove AK MC (Retd). Awardees include Professor John Watson AM, Associate Professor David Baines AM, Dr Neil Street AM and Mrs Norma Rosenhein AO.

- AHCL’s Group Chief Executive Officer Dr Leon Clark has announced his retirement to take effect as at July this year. Dr Clark, who trained and practiced as a gynaecologist and obstetrician, has been in medical administration at SAH since 1991 and was appointed as CEO in 2002 and Group CEO of Adventist HealthCare in 2012. He has been a driving force in the San’s growth, its reputation as a centre of excellence, and the milestone Redevelopment.

- The official opening of the San’s ‘Healing Garden’, purpose-built for cancer patients, was celebrated in December. Garden donor Mrs Norma Rosenhein and over 100 SAH community members gathered for the ceremony in the Garden dedicated in memory of Ms Rosenhein’s mother and sister, Dulce and Mavis Hunt.

- The San is one of the first hospitals in Australia home to a ‘TomoTherapyEdge’ machine; the most advanced radiation treatment machine available in the world today. TomoEdge Therapy reduces treatment times to seven minutes, greatly minimises side effects, treats multiple tumours at the same time and can retreat patients who otherwise could not have further radiation treatment on standard equipment. www.radiotherapy.com.au

- San Education provides a comprehensive education program designed to support both the needs of hospital staff and members of the wider community. RTO San College of Education offers specific, nationally recognised training packages, qualifications, courses, and individual ‘units of competency’. www.sah.org.au/education

- The San is the first private hospital in NSW to provide intern training to new graduates to obtain the clinical training they require to be qualified to practice as doctors. In 2015, 30 interns will undertake five, 10 week placements in specialties like Maternity, Orthopaedics, Emergency Care and Urology.

- Sydney Pain Management Centre on site at SAH helps people manage and live with pain. Contact 9687 9633.

- IVF Australia is now on-site at SAH offering consultations with Dr Rob Lahoud and Dr Jeffrey Persson complementing existing fertility specialist services. Contact 9425 1780.

- Open Heart International volunteers from the San’s Coronary Care Unit organised a 20km coastal trek and raised $30,000 for the program’s life-saving surgeries in Cambodia.

- After an extensive refurbishment, Dalcross Rehabilitation services are operational at Dalcross Adventist Hospital. The rehabilitation service is comprehensive providing access to dietician, social work, physiotherapy, occupational, nursing and rehabilitation services. Contact Anne.Carroll@dah.org.au.

- San Radiology also installed new GE High-Resolution (3T), wide bore MRI scanners, considered amongst the best-in-class to identify significant prostate cancer.

- San Radiology is the first imaging provider in NSW to collaborate with Professor Jelle Barentsz, a world-renowned expert in prostate MRI, and the prestigious Radboud University Nijmegen Medical Centre in the Netherlands giving the San official recognition as a ‘Centre of Excellence’ for prostate imaging.


- Chief Scientist at the San’s Australian Research Institute, Dr Ross Grant shares health facts about the human body, medical treatment and technology, health and wellbeing on 2GB Radio every Monday, Wednesday and Friday morning www.sah.org.au/healthfacts

- SAH is hosting the Biannual Wound Conference on 26 June 2015. The conference featuring national and international experts offers information which is directly applicable to the clinical setting, allowing medical, nursing and allied health delegates to immediately enhance their wound care practice within their workplace. Register online at www.sah.org.au/ conferences

SAH GRAND ROUNDS [all GP’s invited.]

29 April
Dr John Gallo- Medical Potpourri from a country haematology practice

5 May
Dr Kathy Benson- Pituitary Tumors

Grand Rounds are held in the Tulloch Building in the Level 2 Conference Room from 12.30 – 13.30pm. (Light refreshments available from 12.00pm. Please register on arrival.)

GP CONFERENCES [CPD points available with proof of attendance]

April 29 Urology
May 26 Orthopaedic
23 June Cardiac
21 July GIT
19 August Neurosciences / Spine
16 September Respiratory
21 October Ophthalmology

FREE PUBLIC FORUM [everyone welcome]

May 10 Women’s Health
September 2 Men’s Health

Dates and topics are subject to change. Contact 9487 9871 to register or visit www.sah.org.au for further details.

EVENTS

15 November San Run for Life

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