KK Women’s and Children’s Hospital (KKH) has launched Singapore’s first sialendoscopy service to manage and treat salivary gland diseases in children as young as three years. Traditionally, treatment of recurrent salivary gland infections entails hospitalisation and antibiotics, resulting in frequent and lengthy hospital stays. Sialendoscopy provides a minimally invasive approach for the diagnosis and treatment of salivary gland diseases, with the added advantages of improved treatment success, shorter hospital stays, decreased need for antibiotics and greatly reduced recurrence of the infection.

Recently introduced to hospitals in Singapore, sialendoscopy is mainly performed on adults and older children for the removal of salivary gland stones. However, sialendoscopy is also particularly useful to prevent the occurrence of juvenile recurrent parotitis (JRP), which is a common cause of recurring inflammation of the parotid gland (a type of salivary gland), in young children.

**What is sialendoscopy?**
During a typical sialendoscopic procedure, miniature endoscopes (0.89mm wide) are used to enter the small ducts of the salivary system in search of the cause of obstruction. Using fine instruments manipulated through the working ports of the endoscope, the surgeon can also perform therapeutic procedures such as the dilatation of strictures, biopsies and removal of debris or stones from the salivary gland. This minimally invasive procedure is performed through the salivary duct opening via the mouth, which avoids causing external scarring to the face.

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**CASE STUDY**
Sialendoscopy for a three-year-old child with juvenile recurrent parotitis (JRP)

Three-year-old Alice (not her real name) experienced seven episodes of parotid gland infection over the course of a year, characterised by high fever, pain and swelling of her left parotid gland. Over three months, the frequency of infection increased to once every three weeks. Alice was treated with multiple courses of antibiotics, and was admitted to KKH for a week treatment with intravenous antibiotics, following a particularly severe episode. Alice was diagnosed as having possible JRP. She underwent a sialendoscopic procedure, and has not experienced a recurrence of parotid gland infection since.
Launching the new NICU facility at KKH on 6 July 2013, Minister for Health, Mr Gan Kim Yong, noted that this enhancement of KKH’s NICU facilities helps more babies in Singapore to benefit from advanced care, and furthers the hospital’s efforts to continually raise the standards of care for patients.

The new NICU at KKH is ergonomically planned, with advanced features and technologies that complement care for vulnerable newborn babies — many of whom are born premature, and can weigh as little as 436 grams at birth.

The NICU’s closed cubicle layout provides individualised bed space for each baby. Each bed is equipped with a ventilator and quick access to essential ICU equipment required for monitoring and immediate provision of advanced care for critically ill babies. This includes a dedicated facility to provide extracorporeal membrane oxygenation (ECMO) therapy for babies with reversible cardio-respiratory failure, and a facility for therapeutic hypothermia for babies who suffer brain injury as a result of oxygen deprivation.

The NICU is also self-sufficient, housing facilities to perform major surgeries and procedures on newborn babies, and a dedicated neonatal-surgical unit for babies who are recovering from surgeries or have open wounds, such as colostomies or tracheostomies, which require special care. This minimises the need for, and risks associated with moving these vulnerable babies out of the protected environment of the NICU.

The NICU also contains in-built isolation facilities with negative pressure for babies with contagious infections, and enhanced features such as touch-free opening and closing of doors.

Although JRP may resolve spontaneously at puberty, the child may have to suffer 10 to 15 years of recurrent attacks before it resolves, and may require multiple hospital admissions for intravenous antibiotics to manage the infection. In severe cases, an abscess may form and an incision and drainage may be required, resulting in a cosmetically unappealing scar over the face. This can have an adverse social impact on the child and their family.

Treatment for JRP

Prior to the advent of sialendoscopy, there was no definitive treatment for JRP to prevent recurrence, except for the removal of the entire parotid gland through a large incision over the face and neck. This procedure carried a significant risk of injury to the nerves supplying the face, resulting in weakness of the face on the affected side. With the introduction of the sialendoscopy service at KKH, minimally invasive intervention can be provided to children as young as three years, sparing them years of hospitalisation and the risk of open surgery.

In addition, the new facility has special controls to manage light and sound, keeping them at levels that are comfortable and soothing for sensitive little newborns.

KKH is also the first hospital in Asia to have an MRI-safe incubator, which provides added protection, care as well as comfort for premature babies who require MRI scans.

Associate Professor Victor Samuel Rajadurai, Head and Senior Consultant at KKH’s Department of Neonatology, shared that “KKH’s Neonatal ICU is the main referral centre for newborn babies suffering from complex and high-risk medical conditions. It has been managing about 400 to 450 admissions a year, and operating at maximum capacity for a few years.”

“When intensive, multi-disciplinary care, including timely surgical interventions, our NICU has achieved a 93 percent survival rate and many babies go on to live relatively normal lives,” he added.

SIALENDOSCOPIC TREATMENT FOR JRP

Continued from page 1...

What is JRP?

JRP is a recurrent parotid gland infection caused by the narrowing of the salivary ducts and debris within the parotid duct, resulting in obstruction of normal salivary flow in it. The condition has a worldwide incidence of about one percent, and is the second-most common cause of parotid gland swelling in children, after mumps.

Symptoms of JRP

The typical child with JRP suffers from multiple episodes of parotitis, which presents with fever, pain and swelling of the parotid gland. Symptoms are usually one-sided, but may affect glands on both sides of the face. JRP can occur at any age between 3 months and 16 years, with a higher incidence among children between the ages of five and seven.

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Parenting support programme achieves sustained positive results

A three-year pilot programme to help parents and caregivers of children with developmental needs is producing positive results.

Introduced in 2011, the programme delivers a parenting support course called “Signposts for Building Better Behaviour” (Signposts), to help parents cope better and reduce children’s challenging behaviours.

In the two years since its roll-out in Singapore, the Signposts course has been conducted 108 times, reaching over 1,500 parents and caregivers of children with developmental needs. Participating parents and caregivers report feeling less hassled, stressed, depressed and anxious after attending the programme. These outcomes were maintained three months after completion of the course.

The pilot programme is led by KK Women’s and Children’s Hospital’s Department of Child Development (KKH DCD) and supported by a grant, Temasek Cares – IMPACTT (Involving and Motivating Parents and Caregivers Through Training), which allows for the course to be extended to parents and caregivers at a highly subsidised rate.

Helping families connect

Four-year-old Manoah was diagnosed with autism in 2012. At their doctor’s recommendation, his parents, Akhtar and Margaret Shaikh, signed up for the Signposts programme to gain skills on how to better understand and parent their son.

“The Signposts programme taught us how to manage Manoah at home,” said Akhtar Shaikh, Manoah’s father. “When he threw a tantrum…we were able to calm ourselves down and think before reacting. This helped us to handle the situation in a better way.”

“The tools and strategies shared gave us a deeper insight into Manoah’s world. We are now able to connect better with each other and love him even more.”

- Margaret Shaikh, Manoah’s mother.

Study suggests high levels of effectiveness among Singapore parents

An interim study, funded under Temasek Cares – IMPACTT, was conducted by KKH DCD on course participants between January 2011 and August 2012. Study results revealed a significant increase in parents’ and caregivers’ sense of parenting efficacy and parenting satisfaction, and a reduction in daily hassles in parenting and the children’s self-absorbed behaviours.

A total of 1,021 participants were administered three questionnaires to evaluate the programme’s impact on parenting experience and children’s behaviour. The measures were assessed across three time points, i.e. before starting the course, immediately after completion, and then again three months later.

Of these, 330 participants completed all three questionnaires. Parents rated themselves as significantly less hassled, in terms of aspects of child behaviours, as well as parent characteristics, noting improvements across all three time points.

Some of the child behaviours discussed in Signposts include temper tantrums, impulsivity, aggression such as kicking or hitting others, hyperactivity and being attention-seeking. Parents who attended the Signposts course reported a drop in ratings of non-compliance and disruptiveness in their child’s behaviour over time.

Ms Dorcas Yap, lead investigator of the study and Senior Psychologist, KKH DCD said: “These findings in Singapore reflect an encouraging outcome compared to those observed in a similar study on ‘Signposts for Building Better Behaviour’ conducted in Australia. Our data reflected relatively larger effect sizes, suggesting higher levels of effectiveness of the programme among Singapore parents.”

The number of fathers involved in attending the programme was also encouraging, with 36 percent of programme attendees in Singapore being fathers – twice as many noted in Australian data.

Associate Professor Lim Sok Bee, Head and Senior Consultant, KKH DCD, shared that “parents who attended the programme have also come together to form a support group, widening opportunities for mutual sharing and support, and furthering understanding and management of their children’s developmental issues and behaviour.”

“With these promising outcomes, we will be looking to expand the reach of this educational programme, and working with more agencies so that more parents can benefit from these strategies,” said Professor Ho Lai Yun, Programme Director of the Child Development Programme (funded by the Ministry of Health).

KKH DCD has trained 181 facilitators for the programme, including 61 social workers, psychologists, therapists and learning support facilitators from KKH DCD, and 120 facilitators from other hospitals and community partners. The programme aims to help 1,500 families in Singapore over the complete three-year period.

About the “Signposts for Building Better Behaviour” programme

The “Signposts for Building Better Behaviour” programme was originally developed and instituted as a statewide programme by the Parenting Research Centre, Victoria, Australia. The programme in Singapore is adapted to local needs, and imparted through facilitators from KKH DCD as well as community partners including Early Intervention Programme for Infants and Children (EIPIC) centres and Voluntary Welfare Organisations (VWOs). The training of facilitators from EIPIC centres and VWOs is funded and supported by NCSS with the WVO-Charities Capability Fund.

1 Hudson et al. 2008
**IMPROVING CARE FOR CHILDREN WITH TRACHEOSTOMIES**

Seet Soh Cheng, Nurse Clinician, Paediatric Homecare Service, KK Women’s and Children’s Hospital

To improve care for children with tracheostomies, nurse clinician, Seet Soh Cheng, and fellow medical staff from KK Women’s and Children’s Hospital spent six weeks in the United States, undergoing training in the multi-disciplinary management of paediatric patients with respiratory difficulties, including those with tracheostomies.

As a nurse clinician with the Paediatric Homecare Service at KK Women’s and Children’s Hospital (KKH), I am part of a multi-disciplinary team which helps families of paediatric patients requiring long-term medical care and technological support. Our objective is to provide these patients with a good quality of life at home.

Many of the children who require homecare services experience respiratory difficulties, which can impair their speech and oral intake skills. Thus a major part of my role in the Paediatric Homecare Service is the management of the breathing difficulties among these children, especially those with tracheostomies – an artificial opening in the windpipe. A tracheostomy tube is often placed through the opening to help the child breathe and allow the caregiver to remove secretions from the child’s lungs. This may also be accompanied by the use of a ventilator, which provides extra respiratory support for the child.

In September 2012, I travelled to the United States to undergo training in the multi-disciplinary management of paediatric patients with respiratory difficulties, with a particular focus on patients with tracheostomies.

I was accompanied by fellow KKH staff – speech and language therapist, Desiree Lau, and senior physiotherapist, Parveen Kaur. We spent six weeks with the Children’s Hospital of Philadelphia and the Kennedy Krieger Institute in Baltimore.

**Training at the Children’s Hospital of Philadelphia (CHOP)**

The Progressive Care Unit (PCU) at the Children’s Hospital of Philadelphia (CHOP) is a specialised unit that provides critical care to children with tracheostomies who require mechanical ventilation. I shadowed staff at the PCU for one week, observing their methods of care for tracheostomised patients and learning their best practices. I also visited the CHOP Home Care Department, Neonatal Intensive Care Unit, Children’s Intensive Care Unit and Pulmonary Ward, to observe nursing methods for paediatric patients requiring ventilator support.

The medical staff at CHOP introduced us to the Cough Assist Machine. This machine provides non-invasive assistance to patients who lack sufficient strength to cough on their own, helping them to clear their lung secretions. The Rehabilitation Department at KKH has since purchased two such machines, benefiting patients with tracheostomies and neuromuscular problems, as coughing helps patients to breathe better. The machine also reduces patients’ duration of hospital stay and improves their quality of life at home.

**Training at the Kennedy Krieger Institute**

Parveen and I also spent three weeks at the Kennedy Krieger Institute’s Pediatric Rehabilitation Unit in Baltimore. We observed their best practices in neurology-rehabilitation, particularly for paediatric patients with tracheostomies and swallowing problems. We also learned their practices for tracheostomy changes, chest physiotherapy, mechanical ventilation and removal of the tracheostomy tube (decannulation).

**Better care for patients with tracheostomies**

This team HMDP has enhanced my skills and knowledge, enabling me to provide improved care to the children in KKH’s Paediatric Homecare Service. KKH manages the care of children with tracheostomies as young as two weeks. We are currently working towards the early implementation of tracheostomy speaking valves for young patients, to enable them to develop their vocalisation and feeding skills as early as possible.

For tracheostomised patients who are not dependent on ventilators, we are working with Ear Nose and Throat (ENT) surgeons towards the gradual reduction of tracheostomy tube sizes, with a view to aid decannulation once the child no longer requires the tracheostomy.

**New Tracheostomy Clinic for children at KKH**

Desiree, Parveen and I have put our training to good use at the new multi-disciplinary Tracheostomy Clinic at KKH, which opened in February 2013. The clinic is a one-stop location for paediatric patients who have tracheostomies, including those on ventilator support, to be assessed by the ENT surgeon, along with the rehabilitation, homecare and dietetics teams. The clinic also allows medical staff to closely follow-up with patients, to ensure that they continue to receive the therapy and medical support that they need to achieve a good quality of life.
SCREENING FOR INBORN ERRORS OF METABOLISM BY TANDEM MASS SPECTROMETRY IN SINGAPORE
Dr James Lim, Chief Scientific Officer, Biochemical Genetics Laboratory and National Expanded Newborn Screening programme, Department of Pathology and Laboratory Medicine, KK Women’s and Children’s Hospital

A newborn may appear healthy at birth, but be at risk of serious health issues later in life due to an undiagnosed disorder. Newborn screening is a preventive health measure to detect and treat disorders that can result in early mortality or lifelong disability. In Singapore, newborns are screened for G6PD enzyme deficiency, congenital hypothyroidism, congenital hearing impairment, and more recently, inborn errors of metabolism (IEM).

The metabolic screen test

In 2006, a new newborn screening test was introduced to the public health system to detect IEM disorders. Called the metabolic screen, the test utilises tandem mass spectrometry (TMS) technology, allowing doctors to screen for many IEM conditions with a few drops of blood.

IEM disorders are collectively grouped as fatty acid oxidation disorders, amino acidopathies and organic acidemias. Left untreated, they can lead to prolonged ill health, learning disabilities or even death.

The metabolic screen is performed within days of a baby’s birth. A few drops of blood are drawn from the newborn’s heel (Figure 1) and sent to the Biochemical Genetics Laboratory at KK Women’s and Children’s Hospital (KKH).

There, the blood sample is screened for over 30 IEM conditions using a tandem mass spectrometer (Figure 2).

The metabolic screen has a sensitivity of 100 percent, a specificity of 99.8 percent and a positive predictive value of 20 percent. This means one in every five newborns with a positive screen is diagnosed with an IEM disorder.

To date, over 135,000 newborns in Singapore have undergone the metabolic screen, and 44 cases of IEM have been detected. Although each individual disorder is rare, the combined detection rate for the screened population is about 1 in 3,000. This incidence rate is similar to many other newborn screening programmes in the United States and the Australasia region.

Benefits of metabolic screening

Newborn metabolic screening enables early identification and treatment, so that mortality, morbidity and disability can be prevented.

Example: A recent newborn who tested positive for methylmalonic acidemia began to show biochemical signs of metabolic acidosis and hyperammonaemia even as he looked well during a clinical evaluation on day four of life. Acting on rapid follow-up laboratory and diagnostic findings, triggered by the metabolic screen result, on day three of life, doctors were able to initiate early treatment and appropriate management for this child. He is currently healthy and developing normally.

It is also not uncommon for an abnormal newborn screening result to uncover an undiagnosed maternal IEM condition. Since 2006, seven such cases have been identified - two cases of 3-methylcrotonyl-CoA carboxylase deficiency, two cases of vitamin B12 deficiency and three cases of primary carnitine deficiency.

Integrated care for newborns with IEM conditions

The metabolic screen is part of a much larger, integrated preventive system. Early detection, quick action and intervention are crucial for the process to succeed.

When the laboratory at KKH identifies a significantly out-of-range result for a newborn screening test, the metabolic team is notified, and a metabolic specialist contacts the baby’s paediatrician to discuss the result, outline the possible diagnosis and recommend additional tests for further investigation. The baby’s parents are informed of the abnormal result by the paediatrician, following which the metabolic specialist contacts the parents to explain the findings, provide advice and arrange for a clinic visit.

In the case of a definite IEM being diagnosed, a shared care model is offered together with the paediatrician. This entails general paediatric care such as vaccinations and developmental checks being carried out by the paediatrician, with patient visits to the metabolic clinics for advice about management of the IEM.

Risks for unscreened newborns

Newborn screening is not compulsory; however opting out of the test carries risks for newborns. Since the metabolic screen was introduced, six infants who did not undergo testing presented with clinical symptoms of IEM and received treatment at KKH. Unfortunately, most of these children suffered irreversible developmental and neurological complications.

CONCLUSION

The proportion of newborns undergoing IEM screening by TMS has increased to over 65 percent in 2012. Participation by public and restructured hospitals is largely universal. However, only half of the newborns in private hospitals undergo newborn screening despite a 50 percent share in the annual live birth population in Singapore.

It is likely that a significant number of undiagnosed IEM cases exist in the community, either because the test was not offered, or was declined or unavailable before 2006. Thus it is essential for obstetricians and paediatricians to educate prospective parents on the availability and need for newborn screening, to help them make an informed decision. The optimal result would be for all newborns to undergo newborn screening as part of their basic standard of care.

Dr James Lim is the Chief Scientific Officer for the Biochemical Genetics Laboratory and National Expanded Newborn Screening programme at KK Women’s and Children’s Hospital. He graduated in Australia, and pursued a clinical biochemical genetics fellowship at Mayo Clinic, Rochester, Minnesota, USA.

Dr Lim was the lead scientist in the implementation of the expanded newborn screening programme by tandem mass spectrometry in Kentucky, USA in 2005. His main areas of interest include genetic diseases and the diagnosis of inborn errors of metabolism.
Pursuing Better Ways to Care

At the recent SingHealth Excellence Awards, 50 clinicians, nurses and allied health, ancillary and administrative professionals across the largest healthcare group in Singapore were honoured for their exemplary contributions towards healthcare and the community. Special Delivery met up with 10 of the award-winners from KK Women’s and Children’s Hospital to discover their mission in healthcare, and their views on what is needed to advance medicine and patient care.

SingHealth Excellence Awards

**Tan Jack Thian**
Chief Operating Officer, KKH

*Distinguished Champion of Change Leader*

Change is the only constant, and is very often an operational imperative. Positive changes to existing work systems help us to deliver better care and service to our patients and colleagues. Seize every opportunity to initiate change for the better, convince everyone involved of the need for change, and show them ways to manage and embrace it.

**Prof Phua Kong Boo**
Senior Consultant, Gastroenterology Service, Department of Paediatric Medicine, KKH; Director, Education, Paediatrics Academic Clinical Program, SingHealth Duke-NUS

*Distinguished Mentor*

Students prefer approachable, easily accessible, committed and compassionate mentors who are willing to offer them guidance and assistance in their professional development and medical career. As educators of our nation’s budding doctors, our roles are to teach them to always have the interests of their patients at heart; to be keen to impart knowledge to their juniors; and to continue with lifelong learning. Be patient, be constructive and be humble.

**Prof Tan Chong Lim**
Emeritus Consultant, Haematology / Oncology Service, Department of Paediatric Subspecialties, KKH

*Distinguished Golden Achievement*

The science and art of medicine is constantly evolving. As a result, medical students need guidance and reassurance from their mentors on what they need to know and do. In seeking to advance medicine and patient care, education should function to stimulate a lifelong love of learning in our medical students, and mentorship is crucial to instil in them professionalism, respect and kindness.

GCEO Excellence Awards

**Assoc Prof John Tew Chee Seng**
Senior Consultant, Division of O&G; Director, Medical Student Education, OBGYN Academic Clinical Program, SingHealth Duke-NUS

*Outstanding Educator*

When I was a junior doctor, I was privileged to receive the guidance of many senior doctors, whose experience and dedication to teaching have benefited me throughout my years of practice. Teaching is now a part of my daily working life, and it gives me great pride to have a hand in nurturing new talent in the medical field. The tradition of mentorship is the cornerstone of medicine, and greatly improves healthcare standards.

**Prof Ho Tew Hong**
Chief of Gynaecology, Division of O&G, KKH

*Outstanding Clinician*

Medical research, both clinical and translational, allows evidence-based medicine to be practiced for the ultimate good of patients. Patience and perseverance are crucial to achieving quality outcomes; at the same time, clinicians need to continue to question norms and traditions. This serves to advance the frontiers of medicine – leading to better treatment, innovative medicine and better patient outcomes.

**Martha Kao I-Ming**
Nurse Clinician, Division of Nursing, KKH

*Outstanding Nurse*

Excellence in nursing starts with being a good listener, open-minded, sincere, compassionate and willing to learn. Beyond the daily tasks of being a Neurology Resource Nurse, my role is to identify parents, patients and staff who may need assistance or guidance, and provide suitable support. I function as a mentor for junior nurses, a tutor for caregivers and patients, and work closely with other hospital staff to encourage holistic care for our patients.

**Chan Pei Pei Carmen**
Principal Sonographer, Department of Diagnostic & Interventional Imaging, KKH

*Outstanding Allied Health Professional*

Allied health professionals (AHPPs) are trained to deliver dedicated care to an indispensible area of patient needs. As allied health evolves, AHPPs are taking on more advanced roles, to help provide high quality healthcare despite escalating demand. I take pride in helping our doctors to deliver holistic care and management for our patients, to help expedite their recovery.

**Makbul Basha S/O Hayat Basha**
Operating Theatre Technical Assistant, KKH

*Outstanding Ancillary Staff*

Ancillary staff are often at the frontlines of a united effort to uphold patient safety. Doing my part to ensure that the operating theatre environment is clean and all the equipment is in good functioning order, helps our medical team to provide every patient with a pleasant and safe experience.

**Kik Shian Yin**
Manager, Human Resources, KKH

*Outstanding Administrative Staff*

I am privileged to be in a role that allows me to understand issues from the perspectives of management and staff, and to address them appropriately. It is particularly meaningful for me to be able to support and partner staff who provide direct patient care. I see my role as that of a bridge connecting management and staff, and as a coach for my younger peers.

**Lim Kok Ai**
Manager, Patient Support Services, KKH

*Outstanding Administrative Staff*

As part of Patient Support Services at KKH, I am involved in the planning of emergency protocols, procedures and humanitarian missions; linking departments and coordinating between the hospital and external agencies. In this digital age, clear and concise electronic communication is key to providing the timely support that our KKH team needs to better outcomes and quality of life for our patients.
PAEDIATRIC SURGERY UPDATE

Dr Joyce Chua Hong Yiing, Consultant, Department of Paediatric Surgery, KK Women’s and Children’s Hospital

At a recent forum for general practitioners, specialists from the Division of Surgery at KK Women’s and Children’s Hospital (KKH) shared updates on some common surgical conditions encountered in their practice. A summary of these updates follow:

1. SURGICAL CAUSES OF ABDOMINAL PAIN IN CHILDREN

Dr Chiang Li Wei, Associate Consultant, Department of Paediatric Surgery, KKH

Acute appendicitis and intussusception are two of the commonest surgical causes of abdominal pain in children. Fortunately, both can often be definitively treated. Air enema reduction for children with intussusceptions has successful reduction rates nearing 90 percent. Laparoscopic appendectomy is now the standard of care for acute appendicitis in KKH, with excellent outcomes.

Primary healthcare providers should be on the lookout for red flags associated with these conditions, and refer the child for further imaging studies and early surgical intervention. Children with both of these conditions can present with significant dehydration and may require resuscitative measures before they are fit for general anaesthesia.

2. PAEDIATRIC SLEEP DISORDERED BREATHING

Dr Dawn Teo, Consultant, Department of Otolaryngology, KKH

Sleep disordered breathing (SDB) describes an array of sleep disorders, ranging from snoring to obstructive sleep apnea, and has a prevalence of up to 13 percent. Adenotonsillectomy is the first line of treatment for paediatric SDB. It is also crucial to aggressively treat symptoms of nasal obstruction in the atopic child with intranasal steroids.

Despite surgery, the obese child, or one with associated craniofacial abnormalities, may suffer from persistent symptoms of SDB. Such children should be referred for an airway assessment, and be encouraged to follow an effective weight management programme.

3. AN EMPTY SCROTUM OR A PAINFUL ONE

Dr Shireen Nah, Senior Staff Registrar, Department of Paediatric Surgery, KKH

An empty scrotum is of concern as undescended testicles are associated with subfertility and testicular malignancy. The current recommendation is to bring the undescended testicle down into the scrotum before the boy turns a year old. The risks of general anaesthesia in an infant have to be weighed against the potential risks of long-term damage to the testis.

Acute scrotal pain is the principal symptom in the time-sensitive surgical emergency of testicular torsion. In such cases, urgent referral to a paediatric surgeon is required as the risk of gonadal loss increases rapidly, reaching 100 percent at 24 hours after the onset of symptoms.

4. PAIN MANAGEMENT IN CHILDREN

Dr Siow Yew Nam, Consultant, Department of Paediatric Anaesthesia, KKH

Pain management in children is now recognised as being important. Effective, evidence-based, analgesic options that are simple to administer are now available to the general practitioner, and can be applied during childhood immunisations and other potentially painful procedures performed in the outpatient setting.

Management of paediatric chronic pain is now available at KKH. It requires a multi-disciplinary approach, aimed at restoration of function to the affected areas while offering support for the child and his/her family.

COMING SOON

Paediatric Surgery Forum

GP Forum for Paediatric Health 2013

Date : 16 November 2013 (Saturday)
Time : 1.00pm to 5.00pm
Fee : Free admission (Lunch and refreshments will be provided)
Venue : KKH Auditorium, Level 1, Women’s Tower

For more details, please call +65 6394-8746 (Monday to Friday, 8:30am to 5:30pm) or log on to www.kkh.com.sg.
Dietitians from KK Women’s and Children’s Hospital have teamed up with popular food blogger, Ju (The Little Teochew), to create a cookbook for expectant mothers.

**Everyday Recipes with a Healthy Twist**

Written from an Asian perspective, ‘Good Eats for Mums-to-be’ features 35 delicious, easy and nutritious recipes that are created to ensure adequate intake of Folic Acid, Vitamin A, Vitamin C, Iron, Calcium and DHA for the expectant mother.

The cookbook combines the best of local favourites like home-style fried kway teow and Burbur Cha Cha, with western flavours such as simple chicken pilaf, and fish and potato pie.

Clear step-by-step instructions, useful cooking tips and nutritional advice by KKH dietitians help contribute to a healthy pregnancy for mums-to-be.

All proceeds from ‘Good Eats for Mums-to-be’ go towards helping patients who are in need of financial assistance for medical treatment, through the KKH Health Endowment Fund (KKHHEF).

The Fund also supports education, research and disease prevention programmes to improve women’s and children’s health. For more information about KKHHEF, please visit www.kkh.com.sg/kkhhef or call +65 6394 2329.

‘Good Eats for Mums-to-be’ is available at all major bookstores (RRP$25), and also at the KKH Retail Pharmacy, Patient Education Centre and website for a special price of $20.

To purchase the book online, or for more information, visit www.kkh.com.sg/GoodEats.