

# SPECIAL DELLEVENTER OF THE SECOND AND CHILDREN

MAY-JUN 2014 | VOL 62 | ISSUE 03

#### EDUCATION

3 KKH partners medical school in curriculum design



Endometrial cancer: Singapore's No.1 gynaecological cancer

#### MEDICAL

New KKH food allergy clinic provides dual care for children GIVING

Grateful families pass on the gift of good health

# **TRAUMA-FOCUSED THERAPY FOR KIDS IN TOUGH SITUATIONS**

On a mission to strengthen care and support for children affected by traumatic events, Temasek Cares and the Psychosocial Trauma Support Service (PTSS) at KK Women's and Children's Hospital (KKH) have teamed up to pilot a programme to provide community-based therapy to children who have trauma-related emotional and psychological difficulties.

The Temasek Cares KITS (Kids in Tough Situations) Programme is a three-year pilot that aims to train 60 community-based social workers, therapists and school counsellors to provide trauma-focused cognitive-behavioural therapy (TF-CBT) to children within their environment in school and the community. The programme is supported by Temasek Cares, under its 'Stay Prepared' initiative to better prepare the Singapore community for emergencies.

The KITS Programme is expected to benefit 1,920 children and their caregivers. Outreach efforts will also be made to 7,000 children and adolescents, teachers, community-based professionals, parents and members of the public to raise awareness about trauma and its effects on children.

Continued on page 2..



PATIENTS. AT THE HE RT OF ALL WE DO.

Continued from page 1...

### EVIDENCE-BASED TREATMENT FOR CHILDREN AFFECTED BY TRAUMA

"In view of their developing coping mechanisms and lack of perceived and actual control of their circumstances, children and adolescents are very vulnerable to developing psychological and emotional difficulties following a traumatic event, such as the sudden loss of a loved one or witnessing abuse or violence," shares clinical psychologist Ms Lim Xin Yi, who is Deputy Head, PTSS, KKH, and Project Head of the KITS Programme.

"The impact of trauma, left unaddressed, raises a child's risk of developing behavioural problems, failure at school and substance abuse, among other potential emotional and psychological issues," says Associate Professor Ng Kee Chong, Chairman of KKH's Division of Medicine and Head of the hospital's Department of Emergency Medicine and PTSS. "Studies have proven that children exposed to trauma are nearly two times more likely to develop psychiatric disorders compared with those who are not." "While children with severe symptoms are currently being identified and referred for tertiary interventions, those with mild to moderate symptoms often remain undetected and unsupported, especially in the community setting. This vulnerable group needs timely therapy to develop resilience and recover," adds Prof Ng, who is also the Director of the KITS Programme.

TF-CBT is an evidence-based approach involving not just the child, but also the parents and sometimes other caregivers in the family, and has been proven effective when delivered in the community. KKH will help to train community-based therapists and school counsellors to identify and extend TF-CBT to children within their environment in school and the community.

### A TRAUMA CARE MODEL For Children In Singapore's community

"With the KITS Programme, we are developing a sustainable and scalable trauma support model for children in the Singapore community. The model will be evidence-based and adapted to the cultural context of Singapore," shares Ms Woon Saet Nyoon, General Manager of Temasek Cares.

"To build longer term sustainability we are taking the train-the-trainer approach. At the end of the programme, we will have five local TF-CBT trainers, who will in turn train more social workers, therapists and school counsellors. Our ambition for this programme is that it will significantly boost the long term capacity of the community to support children in the event of emergencies," Ms Woon adds.

The pilot programme started in February this year, with the first batch of 34 school counsellors and community-based social workers and therapists attending a basic course in TF-CBT. These therapists are now receiving clinical group supervision from KKH's TF-CBT-trained psychologists and medical social workers, and will attend an advanced TF-CBT course next year.

The KITS Programme is partnered by the Guidance Branch of the Ministry of Education, Singapore; the Clinical and Forensic Psychology Branch of the Ministry of Social and Family Development, and various voluntary welfare organisations including PAVE, AMKFSC Community Services, Fei Yue Family Service Centre and Tampines Family Service Centre.

# **COMMON TRAUMA SYMPTOMS IN CHILDREN**

Trauma symptoms and reactions in children are influenced by many factors, such as the child's developmental level, cultural factors, previous trauma exposure, available personal coping and social resources, and pre-existing child and family problems. Thus, children often vary in the nature of their responses to traumatic events.

# Common reactions displayed by children after a traumatic event include:

- Feeling fearful, worried or sad
- Sleep problems or nightmares
- Changes in appetite, eating problems
- Difficulty with concentrating (e.g. problems with schoolwork)
- Being easily startled or 'edgy'

- Being irritable or aggressive
- Having thoughts about the event 'pop up' at unexpected times
- Repeatedly talking or thinking about the traumatic event
- Avoiding places or things
  associated with the traumatic event
- Complaining of headaches, tummy aches or other minor illnesses
- Refusing to go to school or go out

#### Younger children may also display certain behaviours after a traumatic event, which include:

- Clinging to parents or other adults
- Fear of the dark or being alone
- Having regressive behaviours
  (e.g. bedwetting, thumb sucking)
- Crying or throwing tantrums
- Playing in a repeated way about the event or accident

When a child presents with the above symptoms, interpersonal, family and academic functioning can be negatively impacted to varying degrees. Early intervention by trained therapists has an important role in facilitating the recovery of children when traumatic events occur, and building their resilience in the long term. Parents who are concerned about their child's emotional adjustment following a traumatic event should seek medical advice from their child's physician.

EDUCATION 3

# KKH PARTNERS LEE KONG CHIAN School of Medicine In Curriculum Design

Continuing a longstanding legacy in education and teaching, KK Women's and Children's Hospital (KKH) has partnered the Lee Kong Chian School of Medicine (LKCMedicine) – a joint medical school by Nanyang Technological University and Imperial College London – to design the curriculum for the paediatrics, obstetrics and gynaecology disciplines for the school's undergraduate medical programme.

The innovative curriculum adopts team-based learning as its central teaching methodology. This educational model promotes a high degree of active teamwork, learning engagement, comprehension and application of knowledge and skills, and forms the basis for LKCMedicine students in Year One and Year Two.

Medical specialists from KKH have also been appointed as content experts, lecturers and tutors for paediatrics, obstetrics and gynaecology not only to impart medical knowledge and clinical skills, but also provide mentorship and models of professionalism to encourage the holistic development of students.

"Keeping alive our long tradition of academic medicine, we constantly seek to improve the care we deliver to our patients," said Professor Kenneth Kwek, Chief Executive Officer, KKH. "Such strong academic partnerships allow us to better equip and mentor our future healthcare professionals, inspiring them to push the boundaries of medical excellence."

As an academic healthcare institution, KKH is a major teaching hospital for all three medical schools in Singapore: Duke-NUS Graduate Medical School, Yong Loo Lin School of Medicine and the most recent Lee Kong Chian School of Medicine.

The hospital also runs the largest residency programmes for obstetrics and gynaecology, and paediatrics in Singapore. Both specialist training programmes are accredited by the Accreditation Council for Graduate Medical Education International (ACGME-I).

### CURRICULUM DESIGN AND REVIEW TEAM AT KKH

#### REPRODUCTIVE MEDICINE, OBSTETRICS AND GYNAECOLOGY

#### Dr Tan Heng Hao

Head and Senior Consultant, Department of Reproductive Medicine, KKH; Adjunct Assistant Professor, Duke-NUS; Adjunct Assistant Professor, LKCMedicine

#### Dr Matthew Lau

Consultant, Department of Reproductive Medicine, KKH; Adjunct Assistant Professor, Duke-NUS; Adjunct Assistant Professor, LKCMedicine

#### CHILD HEALTH AND PAEDIATRICS

#### Assoc Prof Tan Teng Hong

Head and Senior Consultant, Cardiology Service, KKH; Adjunct Associate Professor, LKCMedicine

#### Assoc Prof Fabian Yap

Head and Senior Consultant, Endocrinology Service, KKH; Adjunct Associate Professor, Duke-NUS; Adjunct Associate Professor, LKCMedicine



Paediatric burn injury trends seen at the Children's Emergency at KKH

Dr Gale Lim, Associate Consultant, Department of Plastic, Reconstructive & Aesthetic Surgery, KK Women's and Children's Hospital

Curious about their surroundings, and often having little to no awareness of safety, children are a very vulnerable group in the area of burn injuries. Caregivers are taxed by the demands of childcare and accidents can easily occur in a moment of divided attention.

Each year, the Children's Emergency at KK Women's and Children's Hospital (KKH) sees over 300 attendances for paediatric burn injuries. This number has seen a sharp double-digit increase from around 340 in 2009 to over 400 in 2012, and the trend continued in 2013.

### COMMON PAEDIATRIC BURN INJURIES

The highest incidence of paediatric burn injuries occurs in toddlers in the age group of one to two years. They make up 34 percent of the total number of children seen for burns at the Children's Emergency. The most common injury sustained by this group is scalds, often caused by the child reaching for hot liquids or pulling on the cords of electrical appliances that contain hot liquids.

Very young infants up to 12 months also frequently present with scalds, often sustained near an adult holding a hot drink, where the infant's unpredictable movements cause the hot liquid to be spilt on them. Older children, between five and 18 years, tend to scald themselves during meal times or when preparing meals and hot beverages.

Another common injury is contact burns, with hot irons and utensils being the main culprits. Other, less common, burn mechanisms include flames, electricity, chemicals and exposure to intense light, the latter of which can cause corneal burns.



# INJURY ASSESSMENT AND CONSIDERATIONS

Fortunately, 88 percent of the burn injuries seen at KKH's Children's Emergency involve less than 10 percent of the total body surface area (TBSA). A relatively smaller 12 percent of burn injuries are severe and require immediate admission.

When a patient is admitted with a burn injury that exceeds a TBSA of 15 percent, resuscitation with intravenous fluids is initiated. In addition to the extent of the burn, the depth of the injury is also critical in the assessment of the intervention required.

First-degree burns are mainly erythema, such as a sunburn, and do not require much treatment except for monitoring for burn conversion. Second-degree burns are accompanied by blisters, which may form hours after the burn and tend to be painful when touched.

Superficial second-degree, or mid-dermal, burns have a blanching base while deepdermal burns do not blanch. Third-degree, or full-thickness, burns are pale, leathery, insensate and do not blanch.

Burns on the face, palms, soles and genitalia require tertiary management, as they may complicate feeding, function or nursing. Circumferential deep burns can cause compartment syndrome, due to increased pressure within the muscle compartment of the burn site, and may require tertiary management.

### BURNS-ASSOCIATED Injuries

Burns-associated injuries seen at KKH also include smoke inhalation injuries, which occur when victims are trapped in an enclosed burning space. Such patients require immediate assessment with nasoendoscopy, possible prophylactic intubation and intensive care management. Children who have burn injury-related feeding or pain management issues, or have burn injury patterns consistent with suspected nonaccidental injuries, are also admitted. HOT FACT

72% of paediatric burns take place at home and the kitchen is the most dangerous zone.

### SPECIAL CONSIDERATIONS For paediatric Burn injuries

There are some special considerations for burns in the paediatric population. This is because children have thinner skin and are more prone to burn conversion from superficial to deeper wounds. Children are also at higher risk for hypothermia due to their large body surface area relative to body size.

Additionally, lactic acidosis due to elevated levels of lactic acid in the blood is a concern, as children undergo non-shivering thermogenesis and their immature kidneys are not able to cope well with large shifts in fluid levels. Children are also more vulnerable to infections due to their immature immune systems.

# TERTIARY BURN INJURY MANAGEMENT

Prevention of burn conversion is an important concept in providing first aid for burns. Unfortunately, the administration of correct first aid by caregivers occurs in only 1.3 percent of child patients that the hospital sees for burns. The vast majority of caregivers do not render any first aid to the child. Many also hold the erroneous belief that toothpaste, soy sauce, aloe vera gel, face cream and edible oil contain therapeutic properties for burns.

At KKH, multidisciplinary teams of staff from emergency medicine and plastic surgery, provide the first line of care and management for patients with burn injuries. Foam silver dressings have been developed to improve healing, reduce infection risk and improve comfort in this unique group of patients. The use of allografts and negative-pressure dressings has also revolutionised care for burn wounds.

# REFERRAL CRITERIA FOR TERTIARY MANAGEMENT OF PAEDIATRIC BURN INJURIES

 Second degree burns involving more than 10 percent of TBSA

#### 2 Third degree burns

- 3 Burns involving the face, hands, feet, genitalia and perineum
- 4 Chemical or electrical burns
- 5 Inhalation injuries
- 6 Major concomitant trauma
- 7 Non-accidental injuries
- 8 Significant comorbidity

Very deep and complicated burn injuries require surgery. Tangential excision of the burn eschar and skin grafting is often performed to reduce the risk of infection, scar burden and scar contractures, and to hasten healing. Full-thickness circumferential burns may also require escharotomy urgently.

Post-operatively, close surveillance for scarring is important to facilitate early intervention. Scar modulation therapy can include massage, silicone, pressure garments and intralesional steroid injections. Contractures that develop over time may sometimes require surgical release and reconstruction.



#### If a child sustains a burn:

Irrigate the burn wound with cool running water for 20 minutes. This simple therapy has been shown to reduce burn conversion rate, leading to faster healing.

Seek medical attention promptly to cover the wound and reduce infection risk.

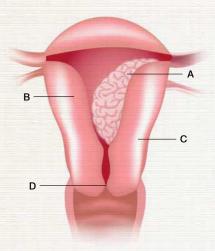


Dr Gale Lim graduated from National University of Singapore, completing a Master of Medicine in Surgery. She pursued advanced surgical training in plastic, reconstructive and aesthetic surgery and completed her fellowship in the Hospital for Sick Children in Toronto. Dr Lim's current subspecialty interests include paediatric plastic surgery and burns.

# ENDOMETRIAL CANCER: SINGAPORE'S No. 1 Gynaecological cancer

Dr Elisa Koh, Consultant, Department of Gynaecological Oncology, KK Women's and Children's Hospital

#### Endometrial cancer in the uterus



A. Endometrial cancerB. Lining layer or endometriumC. Muscle layer or myometriumD. Cervix

Endometrial cancer is a malignancy that arises in the lining layer of the uterus, which is also known as the endometrium. The most common gynaecological cancer in Singapore, endometrial cancer has doubled in incidence within the last 20 years. It is currently the fourth most common cancer in women in Singapore after breast, colorectal and lung cancers.<sup>1</sup>

In 2013, the Department of Gynaecological Oncology at KK Women's and Children's Hospital (KKH) managed over 220 newly-diagnosed cases of endometrial cancer, which constitutes about two-thirds of the total number of cases in Singapore.

Fortunately, more than 50 percent of patients with endometrial cancer are diagnosed during stage one – the earliest stage – which has an excellent five-year survival rate of more than 90 percent, according to a ten-year study (1998 - 2008) conducted by KKH's Gynaecological Cancer Centre.<sup>2</sup>

More recent statistics from the centre indicate that the five-year survival rate has risen to 95 percent. Therefore, early detection and appropriate treatment for endometrial cancer can be potentially curative.

# **DIAGNOSIS AND TREATMENT**

A diagnosis of the presence of endometrial cancer requires a biopsy to obtain a sample of cells from the endometrial lining (Figure 1). This can be done by a gynaecologist in the clinic, or through a dilatation and curettage under anaesthesia. Pelvic ultrasound and computer tomography scans may also be used to check for any obvious spread of the disease beyond the uterus.

In the majority of cases, surgery to remove the uterus, fallopian tubes and ovaries, as well as the pelvic lymph nodes, is the recommended mode of treatment. Minimally invasive surgery can be performed, using a keyhole method in suitable patients with early disease. This method of surgery results in less pain post-operatively and a quicker recovery (Figure 2).



Figure 1. For an endometrial biopsy, a catheter is inserted into the uterus through the vagina to obtain a sample of endometrial tissue for examination. This is done either in the clinic or in the operating theatre under anaesthesia.

After surgery, the patient may require radiotherapy or chemotherapy, or a combination of both, depending on the nature of the cancer and



Figure 2. The abdomen of a patient during keyhole surgery to remove the uterus. The skin incisions are small and less painful than conventional laparotomy incision for hysterectomy.

the stage of disease. A majority of women in the very early stages of endometrial cancer would be cured by the surgery alone.

### EARLY SIGNS AND SYMPTOMS OF ENDOMETRIAL CANCER

There is currently no effective screening method for the early detection of endometrial cancer. However, many indicators may signal the need for further assessment to detect endometrial cancer in its early stages.

Common signs can include:

#### **POST-MENOPAUSAL BLEEDING**

This refers to any form of bleeding occurring more than a year after the last menstrual period. This is a classic danger sign that must be evaluated early by a gynaecologist to exclude endometrial or cervical cancer.

#### **IRREGULAR OR HEAVY MENSTRUAL BLEEDING**

Any irregular or heavy bleeding, especially in a woman above 40 years, should be investigated by a gynaecologist – especially if the bleeding is not controlled with hormonal regulation. In women with irregular bleeding, it is important to exclude lesions in the genital tract as a cause for the bleeding before arriving at the diagnosis of dysfunctional uterine bleeding, which is due to hormonal disturbances.



#### ABNORMAL PAP SMEAR TEST

Although the Pap smear test is designed to detect cervical pathology, certain abnormalities may suggest the presence of endometrial cancer. Up to 50 percent of women with endometrial cancer have abnormal Pap smear test results stating the presence of atypical glandular cells, endometrial cells out of cycle or, less commonly, frank adenocarcinoma. All women with such results must be referred to a gynaecologist for early evaluation.

4

#### A HISTORY OF OLIGOMENORRHOEA

Women who experience oligomenorrhoea – infrequent periods of four cycles within a year – have an increased risk of developing endometrial cancer. They should be referred for further management by a gynaecologist, regardless of age.

There are no established measures by which endometrial cancer can be effectively prevented. However, risk factors associated with endometrial cancer include obesity, diabetes mellitus and hypertension. Women with these conditions should be vigilant for any abnormal bleeding and seek medical advice early.



### FERTILITY PRESERVATION

Although rare, endometrial cancer can occur in women younger than 40 years. Women of this age group often wish to preserve their uterus for fertility reasons. If the cancer is confined to the uterus with no invasion of the myometrium, the patient can be treated with progestogens for a few months under close follow-up. These hormones can suppress or control the cancer cells in about 80 percent of patients. A repeat assessment of the endometrium will be performed to check if the cancer is still present. If no cancer cells are detected, the patient can opt to undergo assisted reproduction, such as in vitro fertilisation.

However, this situation only applies to a very select group of patients and is not the standard treatment for endometrial cancer. These patients will eventually require removal of their uterus after undergoing assisted reproduction as there is a high chance that the cancer may recur and spread.

#### References

- 1. Statistics from the Singapore Cancer Registry Interim Report, 2008-2013
- Lim YK, Padma R, Foo L, Chia YN, Yam P, Chia J, Khoo-Tan H, Yap SP, Yeo R. (2011) Survival outcome of women with synchronous cancers of endometrium and ovary: a 10 year retrospective cohort study. J Gynecol Oncol 22(4):239-243.



Dr Elisa Koh graduated from National University of Singapore and pursued advanced surgical training at Singapore General Hospital. In addition to her appointment as Consultant, Department of Gynaecological Oncology, KKH, Dr Koh is Clinical Lecturer, Yong Loo Lin School of Medicine and Adjunct Instructor, Duke-NUS Graduate Medical School. Dr Koh's research interests include uterine cancers and the surgical management of gynaecological cancers.



# SOLVING A WOMAN'S Secret Problem

Diagnosis and treatment for vulvar dermatoses

Dr Namuduri Rama Padmavathi, Senior Staff Registrar, Department of Gynaecological Oncology, KK Women's and Children's Hospital

Vulvar dermatoses generally account for less than five percent of gynaecological conditions, but can have a significant impact on patients' quality of life.

Vulvar dermatoses can include a spectrum of dermatological conditions, such as lichen sclerosus, lichen simplex chronicus and lichen planus. Due to the inherent embarrassment of having to present with vulvar problems, many women suffering from these conditions do not seek medical help, often attempting to self-diagnose and self-treat with over-the-counter-medications. This trend of reticence may be connected to an underlying fear that vulvar problems may be related to sexually transmitted infections, malignancy, sexual dysfunction and/or reproductive morbidity.

Vulvar health is a unique area in which both gynaecology and dermatology specialties play equally vital roles. Should a patient complain of vulvar itching or burning, a gynaecologist may not immediately suspect a dermatological cause. Similarly, the comprehensive gynecological examination, which includes the vulva, vagina and cervix, may not be complete in a dermatological setting.

# VULVAR DERMATOSES TRENDS AT KKH

The Vulvar Clinic at KK Women's and Children's Hospital (KKH) incorporates both gynaecological and dermatological expertise to provide comprehensive management for vulvar conditions. It also plays an important role in improving public awareness and understanding of vulvar diseases, and educating patients to help improve their quality of life.

Over a period of 34 months, from July 2010 to April 2013, the Vulvar Clinic attended to 670 new patients with vulvar problems as their primary complaint. A comprehensive history was taken, followed by a detailed dermatological and gynaecological examination, which included colposcopy of the entire lower genital tract where necessary.

Of these patients, about 54 percent presented with vulvar dermatoses, including lichen sclerosus (18.5%), vulvar eczema (16.4%), lichen simplex chronicus (12.5%), intertrigo (4.9%), lichen planus (0.8%) and psoriasis (0.7%). Common presenting features included itchy vulva, white discoloration, swelling, pain, burning sensation, mass, pain during intercourse, redness, exfoliation of skin, raised lesions over skin, oozing, constipation, burning sensation during urination, ulceration, erosion and thickening of skin.

### THE CHALLENGE OF DIAGNOSING VULVOVAGINAL COMPLAINTS

Diagnosis of vulvar skin conditions is often challenging due to several factors. Vulvar anatomy has a range of normal variants, which may be initially confusing for the medical professional. In addition, disease causes may be multifactorial, coupled with considerable overlap in the clinical morphology of various vulvar dermatoses, potential pre-cancerous conditions of the vulva and intraepithelial cancer.

As disease morphology on vulvar skin is different from other areas of the body and some serious symptoms may have subtle abnormalities on examination, this can lead to an initial misdiagnosis. Certain conditions which have a higher likelihood of initial misdiagnosis include vulvar intraepithelial neoplasia and Paget's disease of the vulva, which are commonly mistaken for vulvar eczema due to the similarities of their symptoms – pruritis and redness of skin. Certain rare cancers of the vulva, such as basal cell carcinoma of the skin, may also present as skin tags or eczematous plaques, and be initially mistaken to be moles or warts.

These challenges can lead to patients waiting many years before seeking treatment, which can negatively impact their clinical outcomes. It is recommended that any patient with a vulvar skin condition which is not responding to initial therapy be referred for tertiary assessment to rule out potentially serious underlying conditions.

To make an appointment at KKH's Vulvar Clinic, please call +65 6294 4050 or email centralappt@kkh.com.sg.

.....



Dr Namuduri Rama Padmavathi obtained her Doctor of Medicine in Obstetrics and Gynaecology from the University of Health Sciences in India, and is a member of the Royal College of Obstetricians and Gynaecologists, London. She further completed a graduate diploma in dermatology from National University of Singapore. Dr Padmavathi has a special interest in vulvar, gynaecological and dermatological diseases, including vulvar cancer and research involving vulvar disease.

# **SIGNS AND SYMPTOMS OF COMMON VULVAR DERMATOSES**

ТҮРЕ	CAUSE	CLINICAL PRESENTATION	RECOMMENDED ACTION FOR GENERAL PRACTITIONERS
Lichen sclerosis	Associated with immune dysregulation and autoimmune disease.	Presentation includes lesions resembling circumscribed ivory white papules and plaques, and atrophic or thickened skin with ecchymoses and haemorrhage from repeated scratching. A crinkled skin texture is classic and generally pathognomonic.	Any hypopigmented, scarring condition with architectural change requires prompt referral to seek tertiary management.
Vulvar eczema	Inflammation of the skin resulting from an external agent that acts either as an irritant or an allergen to produce a rash that can be acute, subacute, or chronic.	Presentation includes erythema, oedema and blistering for acute cases; erythema, scaling, excoriations and a variable degree of lichenification for chronic cases. Contact dermatitis is the most common type of vulvar eczema.	Management includes education on vulva hygiene, avoidance of irritants – such as soaps, condoms and sanitary napkins – and topical corticosteroids. Should the condition fail to respond to initial therapy within a month, the patient should be referred to seek prompt tertiary management.
Lichen simplex chronicus	Associated with the end stage of the itch-scratch-itch cycle and can be due to several underlying causes.	Presentation includes thickened leathery skin with increased skin markings. Crusting, excoriations and skin pigmentation changes may also be present.	Management includes breaking the itch-scratch-itch cycle, education on vulva hygiene, topical steroids, anti-histamine medication and investigation of the primary cause. Should the condition fail to respond to initial therapy within a month, the patient should be referred to seek prompt tertiary management.
Intertrigo	Skinfold dermatitis due to friction and worsened by super infection from the bacteria or yeast that is normally present on the skin.	Presentation includes erythema, maceration, fissuring and occasionally frank weeping accompanied by considerable odour. The surrounding skin may also show reactive post- inflammatory hyperpigmentation.	Management includes mild steroids with a combination of antifungals and investigation of the primary cause. The patient should be referred to seek prompt tertiary management if additional features such as lichenification or scaling are present, the condition does not respond to treatment, or if psoriasis is suspected.
Lichen planus	The exact aetiology is unknown.	Presentation includes erosions with scarring and vaginal involvement. The patient experiences pain and itch.	This condition is not to be treated like candidiasis. Patients with vulvar erosions and ulcers require prompt referral to seek tertiary management.
Psoriasis	The exact aetiology is unknown.	Presentation includes papules and plaques with a silvery white scale. Lesions may be bright red, often glazed and well-demarcated, involving the natal cleft.	The patient should be referred to seek prompt dermatological assessment.

# NEW KKH FOOD ALLERGY CLINIC Provides dual care for children

Children with food allergies are benefiting from a new multidisciplinary food allergy clinic at KK Women's and Children's Hospital (KKH), which integrates medical and dietetic expertise in managing paediatric allergy.

Opened in October 2013, the one-stop food allergy clinic is staffed by a multidisciplinary team from KKH's Allergy Service and Department of Nutrition and Dietetics, enabling improved care coordination and swifter intervention and management for children with food allergies. "Many of the young patients we see in our allergy clinics suffer from food allergies," says Dr Rajeshwar Rao, Senior Consultant, Allergy Service, KKH. "They need to be on specific exclusion diets, for which early dietetics inputs and ongoing guidance are crucial."

"This multidisciplinary clinic, dedicated to managing food allergies, enables instant referral and discussion with a dietitian, which is particularly beneficial in cases, such as those involving babies and infants, for whom nutritional adequacy is paramount," adds Dr Rao. "The number of paediatric patients with food allergies seeking treatment and management at KKH has doubled in the last five years," shares Ms Christine Ong, Chief Dietitian at KKH. "Bringing together the inputs of the doctor and the dietitian enables more efficient and holistic care of patients, enhancing quality of care as well as the patient experience."

Common food allergies seen in children include cow's milk, eggs, peanuts, tree nuts – such as walnuts and cashew nuts – shellfish and fish. Other, less common, food allergies include wheat, soy, rice, sesame, lentils and bird's nest.



MEDICAL

11

# FOOD ALLERGY FACTS



Delaying the introduction of allergenic foods, such as eggs and nuts, into the child's diet may increase their risk of allergy.



Bird's nest is a unique cause of anaphylaxis in children in Singapore.



One in five children grow out of an allergy to peanuts.



Children who are allergic to cow's milk should not consume goat's milk, as it is likely to trigger a similar allergic reaction.



Strictly avoiding allergenic foods during pregnancy increases the baby's risk of allergy. A normal maternal diet reduces the baby's risk of allergy.

# **Q&A: FOOD ALLERGIES IN CHILDREN**

Experts: Dr Rajeshwar Rao, Senior Consultant, Allergy Service; Ms Phuah Kar Yin, Principal Dietitian, Department of Nutrition and Dietetics, KKH

# What are common symptoms that can indicate a food allergy?

Common symptoms include rashes; swelling of the lips, face, tongue, throat or other parts of the body; itching in the mouth; hives; itching of the eyes; eczema; abdominal cramps; mucus-stained or blood-stained diarrhoea; nausea; vomiting; giddiness; fainting or loss of consciousness, and in rare instances, anaphylaxis.

# Are certain symptoms specific to particular food allergies?

Certain symptoms that present in combination can suggest a particular food allergy. These include:

**Cow's milk:** Atopic eczema, hives, perioral rashes, diarrhoea, failure to thrive, "three-month colic" and gastro-oesophageal reflux.

**Eggs:** Vomiting, hives, wheezing and anaphylaxis. Symptoms are likely to be acute, although cooking may reduce the severity of the reaction.

Wheat and soy: Chronic diarrhoea, irritability and colic.

**Peanuts and tree nuts:** Hives, wheezing, stridor, shock and anaphylaxis. Symptoms are likely to be acute and cooking does not reduce the severity of the reaction.

#### What causes food allergies?

Food allergies are mainly due to various food proteins, to which the child could have become sensitised during pregnancy or breastfeeding, or on first exposure.

It is worth noting that a food allergy to shellfish can develop at any time in life, and a fish allergy may be specific to a particular variety of fish, with others being tolerated.

#### Are food allergies hereditary?

Food allergies are not hereditary; however atopy – the predisposition to any type of allergy – is.

# When should primary care be sought for a suspected food allergy?

The primary care physician should be consulted for any of the symptoms listed earlier. The younger the child is, the more likely they are to have a food allergy. This is particularly common for children younger than two years. However, most hives are not due to food allergies.

# When should emergency treatment be sought for a suspected food allergy?

Emergency treatment should be sought for breathing difficulty, repeated cough, fainting and for drowsiness, which is especially common in children younger than one year.

#### Are food allergies curable?

Most children with egg, cow's milk or soy allergies will eventually outgrow their food allergy. A small number of children with peanut or tree nut allergies may also outgrow their food allergy.

Until the child grows out of the food allergy, avoidance of the specific food is critical. Some cooked forms of foods may be tolerated, and indeed encouraged, to help the child to develop tolerance. In this area, a dietitian's advice on what foods may be allowed is important.

At KKH, children with food allergies are regularly monitored by paediatric allergy specialists to determine when they have grown out of their food allergy.

Parents are then advised to gradually introduce the previously allergenic food item into the child's diet, to enable the child to benefit from the nutrients it contains. In many cases, this is only done under direct supervision in the hospital's food challenge clinic.



We GIVE because every woman and child deserves good health.

# **GRATEFUL FAMILIES PASS ON THE GIFT OF GOOD HEALTH**

The Chans\* were very anxious when their young son, Jhun\*, was admitted to KK Women's and Children's Hospital (KKH) for Kawasaki Disease, an illness that involves the skin, mouth and lymph nodes.

However, they were greatly encouraged by the dedicated care provided by the teams of doctors, nurses and staff that attended to Jhun.

"All the nurses and staff in Jhun's ward were very competent, very meticulous and most of all, very patient and friendly in attending not only to our son, but also to our family

while we were there. We did not get every nurse's name, but then again, they were all fantastic," shared Mr and Mrs Chan.

"All the doctors were very empathetic and forthright in explaining the disease and treatment to us. This helped to comfort us a great deal, and we knew Jhun would be in good hands."

To express their appreciation for the excellent care given to their son, the Chans organised thank you cards to be presented to the medical staff who had cared for Jhun and made a gift to the KKH Health Endowment Fund in support of medical treatment for needy patients.

"We made (this) donation to express our gratitude to the staff who cared for Jhun and also to wish upon those who are needy, the same excellent care and treatment that Jhun received."

**Mr and Mrs Chan** Parents of KKH patient, Jhun

\*Names have been changed to protect identities

Medical Editorial Committee

Associate Professor Anne Goh Head and Senior Consultant, Department of Paediatrics, Allergy Service, KK Women's and Children's Hospital Adjunct Associate Professor, Duke-NUS Graduate Medical School

Adjunct Associate Professor Nancy Tee Head and Senior Consultant, Department of Pathology and Laboratory Medicine, KK Women's and Children's Hospital Academic Vice Chair (Clinical), Pathology Academic Clinical Program Adjunct Associate Professor, Duke-NUS Graduate Medical School



(Right to left) Dr Lena Das; staff nurse, Ms Gan Yu Ying and nurse manager, Ms Zheng Jiahui receiving thank you cards from Ms Audrey Lau, Director, Corporate Development, KKH.



The KKH Grateful Patients & Families GIVE Programme aims to help patients and their families to recognise the special staff who demonstrated outstanding care and service during their hospital stay, by making a gift in support of the KKH Health Endowment Fund (KKHHEF).

The KKHHEF supports medical treatment for needy patients at KKH and furthers education and research targeted at women's and children's health.





Dr Jonathan Choo and Assistant Director, Nursing, Ms Lau Gek Muay (centre), receiving thank you cards from Ms Audrey Lau, Director, Corporate Development, KKH.

Dr Serene Lim

Senior Consultant.

Department of Paediatric Anaesthesia

KK Women's and Children's Hospital

Associate Professor Tan Thiam Chye

KK Women's and Children's Hospital

Head and Senior Consultant, Inpatient Service,

Associate Professor, Duke-NUS Graduate Medical School

Assistant Professor, Yong Loo Lin School of Medicine, NUS

Department of Obstetrics and Gynaecology,

Deputy Campus Director, Education Office,

and Children's Pain Service,

For more information about the KKH Grateful Patient & Family GIVE Programme or the KKHHEF, please contact Christine or Xian Hui at +65 6394 2329 / 8439, or

email development@kkh.com.sg.

Scan this code with your smartphone to find out more or visit www.kkh.com.sg/ GIVE.



**Contact Information:** 

KK Women's and Children's Hospital 100 Bukit Timah Road Singapore 229899 Tel: + 65 62255 554 | Fax: +65 6293 7933 Website: www.kkh.com.sg Email: corporate.communications@kkh.com.sg We are on facebook. 'Like' us for updates and news about KKH. www.facebook.com/KKH.sg

If you would like Special Delivery to be delivered to another address, please contact us at corporate. communications@kkh.com.sg or 6394 8048.

MICA MCI (P) 117/11/2013 | REG NO 198904227G