GP INTELLIGENCE
THE QUARTERLY MAGAZINE FROM THE HOSPITAL OF ST JOHN & ST ELIZABETH
SUMMER 2014

GPi

ADVANCED SPINE UNIT

New techniques and one stop service offered by leading specialists in purpose built facility

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Hospital of
St John & St Elizabeth
150 years of compassion and excellence supporting St John's Hospice

GPi

SPRING 2014

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Dear all,

Welcome to the Summer 2014 edition of GPi magazine

2014 has been so far extremely promising for the Hospital, with January recording our second highest number of patients in nearly a decade. This builds on the success we enjoyed in the last half of 2013, which is helping us to fund a number of exciting projects across the organisation, including the refurbishment of our 1.5T MRI scanner and the current expansion of our Physiotherapy and Cardiology Units.

We have also just increased staffing for our urgent care centre, Casualty First, yet again as patient numbers continue to grow. In fact, Casualty First had its busiest month ever in April as patients enjoyed its ability to treat all minor illnesses and accidents on a walk in basis with virtually no waiting. Please note its Consultants, who are all experienced A&E Doctors, are always available to assist you. Patients enjoy swift referral within the Hospital on both an inpatient and outpatient basis.

Thanks to all of you who attended our Hot Topics Symposium in March; details of the rest of our education programme for 2014 are on page 22.

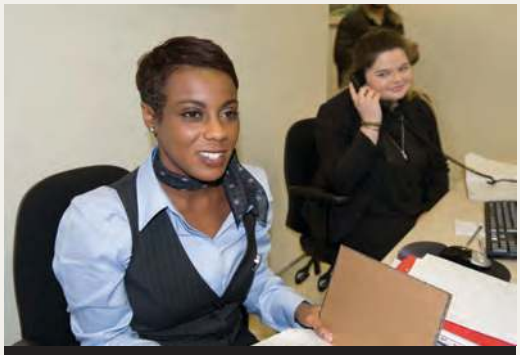
Each referral to us helps fund our onsite St John's Hospice, which cares for over 2,000 terminally ill patients and their families every year for free.

As ever, our Palliative Medicine Consultants as well as the Hospice's community teams are available to support you with your patients, please see pages 8 and 9.

Thank you once again for your ongoing support of the Hospital as it's very much appreciated.

DAVID MARSHALL CHIEF EXECUTIVE

Casualty First



Casualty First has its own dedicated reception

26,500 patients have now been treated since our 2011 opening

Dr André van Nierop with two members of his team

Casualty First has become London's leading private walk-in, self-pay urgent care centre since opening in Sept 2011. A recent patient survey found that 99% of patients rated their experience as good or excellent. Continual expansion of Casualty First has been necessary due to ever increasing demand and the need to keep waiting times to a minimum. This has included the addition of a third consulting room, re-designed reception area and the recruitment of more full-time staff. Casualty First is able to treat minor injuries and illnesses on a walk in basis, with most patient problems being remedied at their initial consultation. Nearly one in five patients have been instantly referred on to one of the 600 specialist Consultants who work at the Hospital of St John & St Elizabeth. Most commonly this is for specialist orthopaedic referral, scarless wound closure and paediatric allergy.
Our doctors are also available to you if you need advice on one of your patients. Simply call Casualty First on the number below.

OUR A&E DOCTORS HERE TO OFFER ADVICE

WHAT WE TREAT

- Sports injuries
- Fractures, soft tissue injuries, sprains and strains
- Wounds
- Cuts and grazes
- Ear, nose and throat conditions
- Gynaecological conditions
- Respiratory and chest complaints
- Stomach, bowel and bladder problems
- Eye conditions
- Ear consultation and ear syringing
- MMR vaccines
- Flu vaccines
- Travel vaccinations and advice. Plus many other medical issues on a walk-in basis.

casualtyfirst@hje.org.uk or telephone 020 7432 8300

CASUALTY FIRST
Hospital of St John & St Elizabeth

WHAT YOU NEED TO KNOW ABOUT BREAST CANCER: DIAGNOSIS

Worldwide, more than a million women are diagnosed with breast cancer every year

PROFESSOR MO KESHTGAR
PHD, FRCSI, FRCS (GEN)
Professor of Cancer Surgery
& Consultant Oncoplastic Surgeon
Lead Clinician, The Breast Unit
Hospital of St John and St Elizabeth

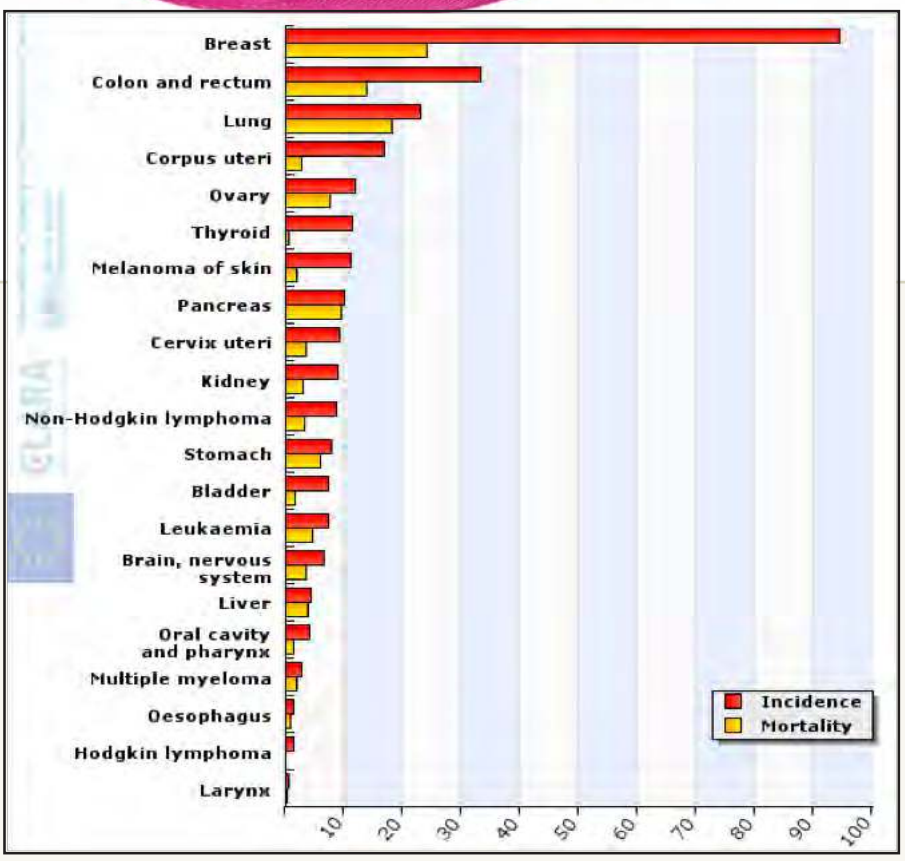
INCIDENCE

Breast cancer is by far the most common cancer in women. It accounts for 31% of all cancers in females in the UK (life time risk of 1 in 8 women).

There have been significant advances in breast cancer diagnosis and treatment. Surgical management of breast cancer has become less radical over the years without compromising the local control or long-term survival.

There has been a significant reduction in breast cancer mortality in the recent years, which is due to early diagnosis and advances in multimodality treatment.

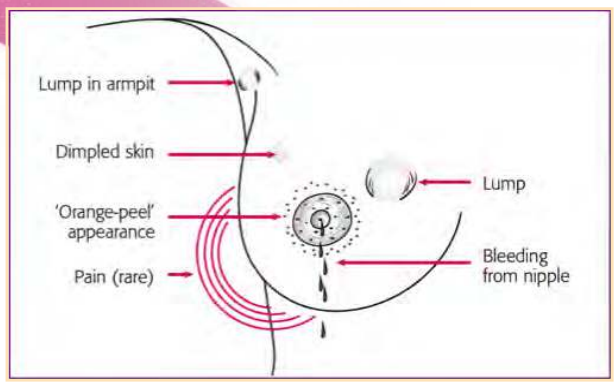
This is a two part article, the first part briefly discusses the presenting symptoms and diagnosis of breast cancer and the subsequent article is planned to focus on the treatment.



Comparison of cancer incidence and mortality in solid tumors in Europe

Breast Cancer

We have state of the art diagnostic facilities at the Hospital of St John and St Elizabeth including digital mammography and 3T MRI scan. We run triple assessment Breast Clinics on a daily basis.



Presenting symptoms and signs in Breast Cancer

BREAST CANCER PRESENTATION

Breast cancer can present in the following ways:

- **Lump: Most patients with breast cancer first see their doctor because of the discovery of a lump. This is usually painless and hard, and may be irregular in shape.**
- **Changes in breast shape and size: Breast cancer can cause dimples to form in the skin of the breast, the nipple to draw in, or the breast to change in size.**
- **Bloody nipple discharge: This is rarely due to breast cancer. If there is a lump as well, it is more likely to be cancer.**
- **Lump in the axilla: Sometimes it is not possible to identify the primary tumour within the breast, and the only symptom may be a lump in the armpit as a result of enlargement of lymph nodes.**
- **Skin involvement: In more advanced cases of breast cancer, the skin starts to ulcerate (develop open wounds). Sometimes the skin looks like orange peel; this is known as peaud'orange.**
- **Pain: Breast cancer is rarely painful unless it has locally advanced.**
- **Asymptomatic: In some patients who are totally asymptomatic, breast cancer is diagnosed through screening mammography, whilst the cancer is not palpable.**

Breast Unit Tel: 020 7266 4272 www.thebreastunit.org.uk
breastunit@hje.org.uk

DIAGNOSIS OF BREAST CANCER

Breast cancer is diagnosed by the 'triple test' or 'triple assessment', which includes clinical assessment by a breast specialist, imaging (mammography, ultrasound scan etc) and tissue diagnosis (core needle biopsy or cytology etc). All palpable breast lumps and asymmetrical nodularities must be referred for specialist evaluation and offered triple assessment.

Mammography can accurately diagnose over 95% of cases when there is a palpable lump in the breast. With modern digital mammography machines, the acquisition is faster with higher resolution images and lower radiation dose to patients.

Ultrasound scanning (ultrasonography) is a safe and common procedure. Ultrasonography is extremely accurate in distinguishing between solid lumps and cystic lumps. It is particularly helpful in patients with lumpy and dense breast tissue. The majority of needle biopsies are performed under ultrasound guidance.

Other imaging modalities such as magnetic resonance imaging (MRI) and nuclear medicine scans can be used in specific circumstances. MRI Scans are useful in evaluation of dense breast and also used as a screening tool in patients who fall in the high risk category for family history of breast cancer in the young age group.

All lesions that have a indeterminate cytology (C3,C4) or inadequate cells (C1) need to undergo core biopsy. Lesions that are reported to be equivocal on core biopsy need to be further assessed by additional interventional procedure including mammotome or excisional biopsy.

Patients with family history of Breast Cancer must be assessed and their risks stratified based on published guidelines (*refer to NICE guidelines for Family History of Breast Cancer). All patients who fall in the high-risk category must have risk assessment and genetic counselling.

***http://publications.nice.org.uk/familial-breast-cancer-cg164/patient-centred-care**

REVOLUTIONARY NEW TE
AT NEW PURPOSE-BUILT LO

One of the world's most advanced spine units is giving patients at the Hospital of St John and St Elizabeth, an unrivalled pathway to recovery

MR MO AKMAL MBBS MD BSc (Hons) FRCS (Orth)

Mr Akmal is the Chief of Orthopaedic Surgery at Imperial College Healthcare NHS Trust and practices at St. Mary's Hospital, Paddington. Privately, he runs the London Spine Unit at HJE.

One of the country's leading spinal surgeons is giving patients at the newly built Spine Unit at the Hospital of St John and St Elizabeth, an unrivalled pathway to recovery.

The new dedicated facility on the 3rd Floor of the main hospital provides consultant led detailed assessment and treatment plans within 24 hours ensuring patients can move rapidly towards returning to active lives. The unit, lead by acclaimed orthopaedic surgeon Mo Akmal, can now offer a comprehensive range of treatments from basic pain management to advanced surgeries for acute problems.

"We understand that back pain and problems are very worrying and that patients want a rapid diagnosis to take away the uncertainty," says Mr Akmal. "We can provide a fast diagnosis - up to 90% within 24 hours - because we have experienced staff and the best diagnostic equipment on site.

"Often we can administer the treatment within the same week and this makes the unit so attractive to patients who need rapid pain relief."

Mr Akmal, former Chief of Orthopaedic and Spinal Surgery at Imperial College Healthcare NHS Trust and practices at St. Mary's Hospital, Paddington, devised a master plan to blend knowledge from medical disciplines and the latest technology with a patient-focused ethos to create a unique and premium service.

The unit has eminent staff including a neurosurgeon,

Concentrated clinical expertise, from London's busiest trauma unit, from a team packed with world-leading consultants, is available to treat anything from minor niggles to complex conditions and injuries.

specialist nurses, an osteopath and physiotherapists, pain specialist and spinal fellows who work in harmony. They are powered by a suite of technology including the 3-Tesla MRI scanner, one of only a handful in operation in the UK.

"The main message is that we can help whatever the problem," adds Mr Akmal. "There is a lot of fear and misunderstanding about spinal treatments and many people assume there is little that can be done or that they will have to go through very complicated operations.

"But they don't have to grin and bear it. We have a way of picking out the different pathological problems and targeting treatment accurately. A lot of patients endure lengthy and inappropriate physio regimes along with taking anti-inflammatory drugs when really they probably only need a day procedure to get rid of the pain and get back to normal, if not better.

"I can vouch for this because I had some back pain and couldn't work and wasn't sleeping well. I put off doing anything for too long but when I had the MRI scan it showed a facet joint problem and had a quick day surgery procedure and now my back is better than ever."

The Spine Unit's approach is to employ its expertise to locate what is known as the 'pain generator' of any back problems so that any therapy attacks the root of the problem rather than acting as temporary relief to symptoms. "Often it is about simple communication and understanding what the pain indicates. The answer can be anything from exercise and joining our Pilates classes to targeted injections or keyhole surgery. "Back pain can be a corrosive influence on sufferers and their families but the good news is we can help and help quickly."

"One of the biggest changes over the last ten years has been endoscopic spinal surgery which

CHNIQUES FOR BACK PAIN
NDON SPINE UNIT

allows us to operate through a keyhole opening where once it would have been surgery leaving a four inch scar," says Mr Akmal. " I can now take a disc from the spine using just a nick in the skin and a camera to guide me. It is now a 40-minute procedure with no damage to the muscles or surrounding tissues with the patient up and walking about on the same day.

"Patients are completely surprised by the recovery time as they expect to be in a hospital bed for a fortnight. Yet, in most cases, they can be back at work within two weeks.

"This is very important for people who are in pain and not able to work. They say it destroys their lives and the impact of back pain is psychological as well as physical."

The new range of minimally invasive techniques and more detailed knowledge of spinal structures using high resolution imaging allows the unit to provide a fast remedy for one of the most common back conditions when bones in the spine compress and pinch the nerve channels that run around the back of the spine, causing debilitating pain. The condition is known as spinal stenosis and affects mainly elderly patients.

Around a decade ago, the solution would be lengthy and intensive surgery with consultants stripping muscle and delicately shaving away bone to free the nerve channels. Today's technique involves keyhole surgery to place an interspinous spacer – a wedge of special plastic or metal – that lifts the bone and releases the nerves.

"We have people in acute pain and not able to walk more than 20 yards and their problems are often put down to age but this is now a 15 minute local anaesthetic procedure that can dramatically change their lives because they are pain free and can regain mobility."

Mr Akmal, who is also one of the first in the UK to offer patients a procedure known as Balloon Kyphoplasty seven years ago. The balloon surgery is a simple minimally-invasive procedure which offers quick pain relief and better quality of life. The procedure, which does not require an overnight stay in hospital, involves surgeons inserting a small orthopaedic balloon into the cracked vertebrae (bones in the spine). The balloons are slowly inflated and filled with cement to push the collapsed vertebrae back in place. Once the vertebrae are in the correct position, the balloons are deflated and removed with a tiny syringe. The procedure, which takes about 20 minutes and can be performed under sedation, is recommended by NICE as a treatment for these types of spinal fractures.

Mr Mo Akmal said: "Treating these fractures with BKP is a cost effective and relatively safe surgical procedure to treat lingering chronic pain and it could potentially save lives. These fractures, which mainly affect the elderly, are very common, extremely debilitating and can lead to other health problems such as chest infections, sleeping problems and further fractures. The only other options to the surgery are bed rest, back bracing, physiotherapy and pain-relieving medicines."

"Using this simple, quick procedure means that patients no longer suffer acute back pain, they make fewer trips to their GP and older patients regain their independence. The results are amazing and can give pain relief almost immediately." Most patients we have seen require only 1 follow up after the procedure and have often returned to their normal activities in a matter of days.

Mr Akmal, front-line trauma spinal surgeon at St. Mary's Major Trauma centre has dealt with an increasing number of patients who survive severe accidents and go on to recovering to enjoy a near full life.

"We had a gardener who fell from a building and suffered a nasty spinal injury," he says. "He came back to see us a few months later totally amazed that he wasn't in a wheelchair and that he was actually back at work. He couldn't believe it.

"We have had people in bad car and bike accidents yet they can be helped and get back to work. It is all the techniques that we develop to treat these serious cases that gives us the experience and knowledge to deal with the entire range of back problems. It is amazing what can be done now. The spinal unit is looking to develop a spinal injuries rehabilitation service at the Hospital which will fill a vital need for patients who require expert care.

"There is so much misunderstanding and mystery about back pain and spinal trauma but we now have the knowledge, the experience, the dedicated team and the equipment to treat anything. Patients are always amazed at how well they feel and how quickly they recover and wonder why they didn't seek treatment earlier.



Left: Our nurses are dedicated to help patients. Middle: Dr Samantha Jayasekera (left). Right: Dr Chris Farnham, Hospice Director an

PALLIATIVE CARE ADV

St John's Hospice, the only independent Hospice in Central London, is part of the charitable Hospital of St John and St Elizabeth.

The Hospice aims to provide the best quality care to seriously ill people ensuring that they and their families have the support they deserve.

Over 2000 patients and their families are looked after by the Hospice each year. All the services we offer are absolutely free of charge.

The staff at the Hospice are specialists in caring for the physical, emotional, social and spiritual concerns of the patient, and their family and friends. Volunteers also work alongside the professional staff to enhance many aspects of hospice care.

Referral to the Hospice is by General Practitioners, M

YOUR QUESTIONS ANSWERED

How does a patient get referred to the Hospice?
A GP, District Nurse or Hospital Doctor can refer to the Hospice. Once the referral has been received the patient will be assessed either at home, in the Hospice or in Hospital by one of our specialist nurses or doctors.

Call us for advice or referrals on our dedicated GP hotline
Our Consultants and Nurses are always here to offer advice and help with your patients - allowing you to access the Inpatient Unit as well as our Community Teams and Hospice@Home 07725 258767.

Are there charges at St John's Hospice?
No. All of the services are provided free to patients and their families. It costs over £5 million a year to run the services with funding coming from the Hospital of St John and St Elizabeth, the NHS, and the generosity of the local community.

020 7806 4040 hospice.info@hje.org.uk www.stjohnshospice.org.uk

d some of his team with an appreciative patient

VICE FOR GPs

Medical Consultants and District or Specialist nurses

Over 2,000 patients and their families are looked after by the Hospice each year free of charge

Is St Johns only for people with cancer?
No. St John's looks after patients with any terminal illness. St John's Hospice is pioneering in developing an inclusive approach to looking after people living with HIV/AIDS, and now a wide range of illnesses including: dementia, heart disease, respiratory disease, renal failure and long term neurological diseases, as well as cancer.

Are all of the services provided at the Hospice in St John's Wood?
No. There are 19 beds in the Inpatient Unit and up to 20 people per day in the Clinical Day Unit. The team also support people in the community through the Community Team and Hospice@Home service. The Lymphoedema Service sees people in clinics at the Hospice and in their homes.

Michelle's story of the kindness shown to her father

Michelle with father, Rod

Michelle and Nikki

My name is Michelle. My sister, Nikki and I, lost our Dad, Rod, to cancer in May 2010. His cancer was originally diagnosed as terminal but he bravely fought it for nearly two years before he died. He lived in the North East of England but when things started to deteriorate Nikki and I brought him down to London to be with us.

Following lots of conversations with the GP we were relieved when a bed was found for him at St John's.

We could not have dared wish for anything so amazing! Dad said he thought it was like a hotel and he felt immediately safe and calm in the hospice environment. The level of care and expertise of the staff in the hospice, from the volunteers to the medical teams, was second to none.

We were even able to bring our two dogs and dad's two cats into the Hospice to see him as all the animals spent time together with him when he was ill at home in the North East. He was always asking about the dogs and cats so we took them to visit him to put his mind at rest.

It was these personal touches that made all the difference. Words cannot express how grateful we are.

Since then we have maintained strong links with the Hospice and try to help wherever we can. They have also continued to support and comfort us.

I was able to give back to St John's in 2013 when the company I work for, Marks and Spencer's, was searching for a new Charity Partner. I nominated St John's and to my absolute joy – they were picked!

My colleagues in the finance team are now fundraising to support St John's throughout 2014. We held a 'pub quiz' in November and raised enough money to purchase hundreds of pairs of new nightwear for all the patients. We also now have a beautiful leaf on the Giving Tree. One of my colleagues ran the London Marathon for the Hospice in April and we are looking forward to hosting another fundraising event in the summer.

This is all because of my Dad, if he could see what he has created, he wouldn't believe it!

THE DETECT

The DETECT study is a large (466 patients), multicenter (61 hospitals), international (18 country) study that addressed the question of how to best identify early pulmonary hypertension in patients with scleroderma

Dr JG Coghlan MD FRCP Consultant Cardiologist

The Cardiac Unit of the Hospital of St John and St Elizabeth played a pivotal role in supporting high quality timely investigations for the largest enrolling centre – the Royal Free Hospital. The principle investigators were Dr JG Coghlan (Royal Free Hospital) & Prof J Seibold (University of Michigan) and the study was fully funded by Actelion Ltd.

Pulmonary arterial hypertension (high blood pressure confined to the pulmonary circulation without lung or heart disease) is a progressive disorder that, untreated, leads to right heart failure and death within a few years. It is however a rare condition (approx. 50 per million), associated with non-specific symptoms (breathlessness, ankle swelling) and easily missed on routine examination and investigations.

Over the past 18 years multiple therapies have been developed, that have been shown to improve quality of life, effort tolerance and reduce morbidity and mortality. Use of these treatments has been associated with a substantial improvement in survival in patients diagnosed with pulmonary arterial hypertension. However, most patients are diagnosed late and despite therapy, quality of life remains very impaired.

In some groups, most notably scleroderma the incidence of pulmonary hypertension is much higher than in the general population, allowing the development of screening programs and early therapy. Most screening programs have relied on echocardiography as the primary tool for identifying patients that might have pulmonary hypertension. The DETECT study by evaluating all currently proposed screening tools against the gold standard diagnostic tool (right heart catheterization), has for the first time produced a validated simple algorithm that can identify almost all patients with scleroderma associated pulmonary arterial hypertension even while asymptomatic.

Our understanding of early pulmonary hypertension and the strengths and limitations of available screening tools has been greatly enhanced by this study. Among the pivotal findings are that echocardiography while the best available tool, cannot ever be a stand-alone screening tool. Of the 28 echocardiographic parameters evaluated only three were independently associated with early pulmonary hypertension (triscuspid velocity, right atrial area & right ventricular area), and even the best of these (triscuspid velocity) will miss nearly 40% of patients with pulmonary arterial hypertension if set to the most sensitive usable threshold, while incorrectly suggesting the presence of pulmonary hypertension in 1 in every 2 patients screened. Setting the triscuspid velocity threshold to the level recommended in the European Society of Cardiology guidelines, fails to identify 78% of patients with pulmonary arterial hypertension.

In order to complete this study, patients had to undergo multiple investigations (echocardiography, lung function testing and cardiac catheterization) on the same day. The organizational efficiency of the Hospital of St John & St Elizabeth and the ability to deliver consistency (all studies were performed by the same personnel) ensured that patients had minimal inconvenience and the study proceeded smoothly.

STUDY

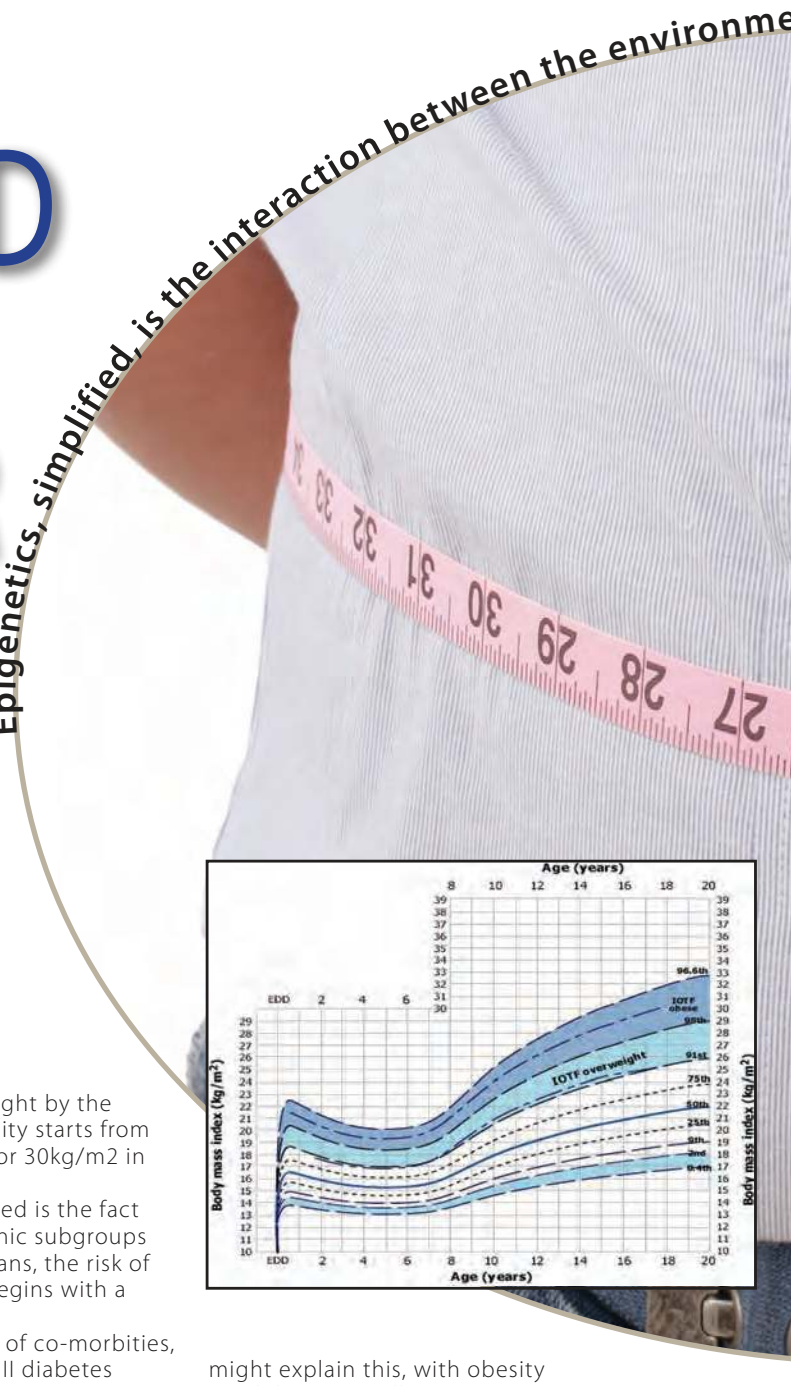
Austria (2 / 16)
Germany (10 / 118)
Netherland (1 / 15)
Romania (1 / 5)
Slovakia (1 / 0)
Turkey (3 / 5)
Bosnia (1 / 0)
China (1 / 11)
Czech Republic (1 / 5)
Hungary (2 / 7)
Poland (1 / 6)
Russia (1 / 3)
Switzerland (2 / 14)
Norway (2 / 13)
UK (1 / 57)
Spain (1 / 2)

Canada (10 / 41)
USA (21 / 170)

Contact details: The Cardiac Unit 020 7806 4080 www.thecardiacunit.org.uk cardiacinvestigations@hje.org.uk

CHILDHOOD OBESITY NATURE OR NURTURE

BY DR PIYUSHA KAPILA MB ChB MD FRCPH
Consultant Paediatrician



"What came first - the chicken or the egg?" was the question that my patient aged 6 always greeted me with, and my inevitable response was "I don't know!" It has made me wonder however, in the last 5 years or so, with increased knowledge of epigenetics, whether its genes or jeans (size), or indeed both, that are responsible for a large number of disorders seen by clinicians in the present day.

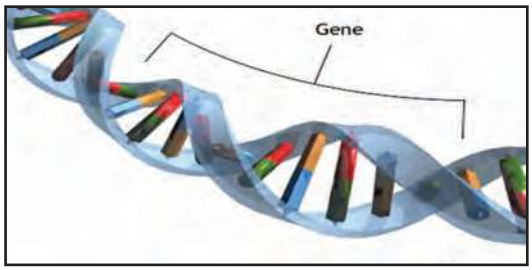
Epigenetics, simplified, is the interaction between the environment and genes, leading to modification in the expression of the latter. The clinical implications of this can be appreciated when several conditions are considered. The focus of this article will however be on obesity.

Obesity has received much publicity in the last decade and most clinicians can recite verbatim the risks of co-morbidities such as diabetes and life-expectancy.

Obesity in children is widely assessed using centile charts produced from anthropometric data obtained from Caucasian children in the 1990s (1990 Growth reference data). The 85th centile is equivalent to 25kg/m2 in adults, the body mass index (BMI) at which individuals are defined as being overweight by the WHO whilst obesity starts from the 95th centile or 30kg/m2 in adults.

Less appreciated is the fact that in some ethnic subgroups such as the S Asians, the risk of co-morbidities begins with a lower BMI.

The incidence of co-morbities, particularly Type II diabetes and the metabolic syndrome, is increasing in children. This is



linked also to obesity in one or both parents. Of significance however, is that in some cases obese children may develop impaired glucose tolerance before their parents, with a BMI that is lower. It is reasonable to speculate that epigenetics might explain this, with obesity in adults, especially women, altering gene expression in children. This would be mediated by alteration of inutero factors e.g. insulin.

It is well known that breast fed babies tend to be smaller than those fed formula. This has always been attributed to the ability of the former being able to restrict their intake according to their needs. More recently a link between protein intake in feeds and size (growth rate) has been demonstrated. Formula feeds have a higher protein content (2.1g/100ml) than breast milk. The protein content, and type, of breast milk varies throughout

ent and genes, leading to modification in the expression of the latter

the course of lactation, being highest at the beginning (-1.4g/100mls) and drops by 6 months to about half of this. Rapid growth contributes to cardiovascular and hypertensive disorders in later life.

Significant links between asthma, particularly non-atopic, higher total IgE levels and obesity have been demonstrated. The age of onset of puberty has shown a downward trend with a clear link to bigger size. If these phenomena influence gene expression then irrespective of "obesity", their incidence will continue rising.

Epigenetics is extremely new at present and more is being understood about this with time. However, it highlights the need for consideration of the impact of environmental influences on not only the current population but the future as well.

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DIAGNOSING AND TREATING

Parents can help with diagnosis by recording the sounds of their child's wheezing

BY IAN BALFOUR-LYNN
BSc MD MBBS FRCP FRCPCH FRCS (Ed) DHMSA
Consultant in Paediatric Respiratory Medicine
Royal Brompton Hospital and Chelsea & Westminster Hospital

THE PROBLEM

Many infants have recurrent episodes of cough and wheeze with colds and are completely well in between episodes. They are usually diagnosed as having episodic viral wheezing. A small proportion will have genuine infantile asthma which is difficult but not impossible to diagnose in children under 2 years. Despite what many parents are told, there is certainly no rule that says asthma can not be diagnosed until the child is older.

MAKING THE DIAGNOSIS

History – is it actually wheeze? Many parents report that their child wheezes, when what they are really describing are the harsh sounds of upper airway secretions in the back of the throat. Some will be confusing wheeze with stridor. Asking the parents to record the sounds on mobile phones is helpful.

Examination is usually normal and unhelpful. Rarely the presence of Harrison sulci indicates chronic respiratory difficulties and is significant. Low height and weight may indicate a more significant underlying condition.

Investigations are usually unhelpful. Children under 6 years of age are unable to perform lung function testing and skin prick testing under 2 is rarely helpful.

If symptoms are marked or atypical, referral to a paediatrician is warranted, particularly one with a respiratory interest. In some cases, further investigations may be performed to exclude less common diagnoses. Gastro-oesophageal reflux must always be borne in mind, as it may manifest as recurrent cough and wheeze that has not responded to standard therapy.

POINTERS TO INFANTILE ASTHMA RATHER THAN SIMPLE EPISODIC VIRAL WHEEZING

- **Family history of atopy - asthma, hay fever or eczema in a parent or sibling**
- **Personal history of atopy - genuine atopic eczema rather than the occasional patch of dry skin, or a proven food allergy**
- **Pattern of wheeze - background daily or nighttime symptoms, or exercise / excitement induced symptoms, rather than the more common pattern of symptoms only when the child has a viral cold**

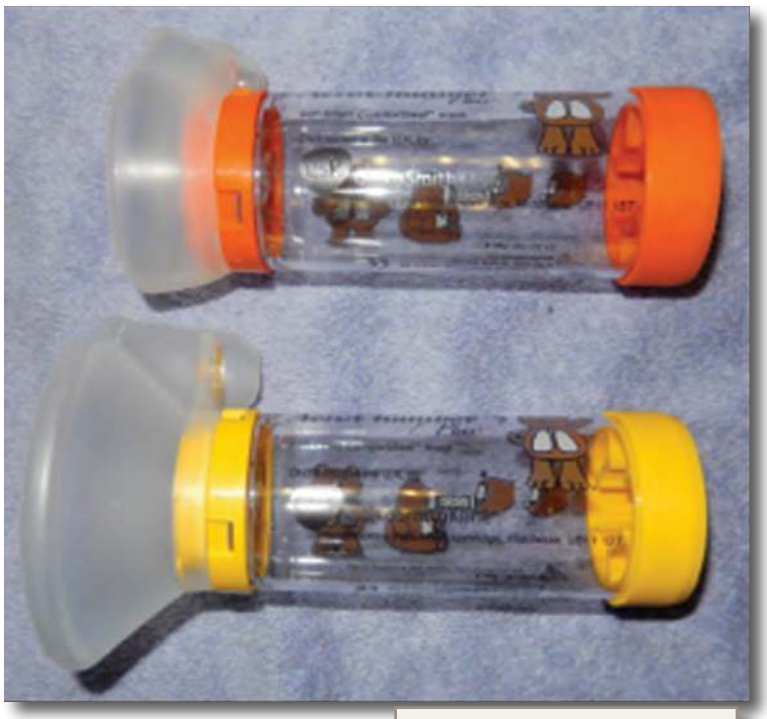
TREATMENT OF GENUINE INFANTILE ASTHMA

The best thing most parents could do is to stop smoking, however this rarely happens; it is still our duty to inform the parents of the harm they are doing to their children.

SALBUTAMOL

Salbutamol works in infants, it is not true that only ipratropium bromide works in this age group. Bronchodilators should only be used on an 'as required' basis rather than automatically taken 3-4 times a day. The syrup form is far less effective and not worth using, as the oral dose required to have an impact inevitably leads to side effects. They should be

ASTHMA IN UNDER 2s



Infants tend to tolerate small volume spacers better, for example an AeroChamber® (orange for <3 months, yellow for older).

administered through a spacer device with a facemask. By about 3 years of age, most children can use the spacer with a mouthpiece. Importantly lung deposition is drastically reduced if the child screams or struggles with the spacer; parents are often told incorrectly that it is a good time to give the drug when a child is crying! There is no advantage to using a nebuliser at home, compared to a spacer device.

MONTELUKAST

Montelukast 4 mg granules can be very useful in reducing viral airway inflammation. Rather than using them every day, since they work within 4 hours they can be started at the beginning of a cold or chest symptoms and continued until the child is better. They must be mixed in cold food e.g. yoghurt, fruit puree, and not hot food nor liquids. Parents should be warned that a small proportion of children get bad dreams and disturbed sleep, in which case it should be stopped.

INHALED CORTICOSTEROIDS

A small minority of pre-school children will require regular prophylaxis. Inhaled steroids are not too effective for children with simple viral wheezing but are more likely to work in those with genuine infantile asthma. In those with background troublesome symptoms who are using a bronchodilator several times a week, or who are frequently in A&E, or requiring hospital admissions, a trial of inhaled steroids is warranted. It takes 4-6 weeks to take full effect, so they can not be used just during colds. There is also little point in increasing the dose when the child is acutely unwell. Side effects are rarely seen at standard low doses.

PROGNOSIS

The prognosis is generally very good. However although most wheezy infants do not turn out to have persistent childhood asthma, most asthmatics do start wheezing when young. There is nothing to predict with certainty what will happen to any individual.

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BY CHARLOTTE CHALIHA
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Consultant Obstetrician and Gynaecologist,
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Vaginal prolapse describes the protrusion of the pelvic organs towards or through the vagina. Approximately 50% of parous women will have some degree of prolapse and only 10–20% of these will seek medical help [1]. The lifetime risk of undergoing an operation for prolapse is 11% and 30% will undergo re-operation for recurrence of the problem [2]. The aetiology is not fully understood but is strongly linked with ageing, vaginal delivery, and collagen weakness [1, 3].

MANAGEMENT OF VAGINAL PROLAPSE

SYMPTOMS AND SIGNS

Prolapse may be asymptomatic and the severity of symptoms may not always relate to the degree of prolapse. Common symptoms include a dragging sensation or bulge in the vagina, difficulty urinating or emptying bowels, urinary incontinence and frequency, and sexual difficulties.

Prolapse can occur in the anterior, middle, or posterior compartments of the vagina. Anterior compartment defects result in prolapse into the vagina of the urethra (urethrocele), bladder (cystocele), or both (cystourethrocele). Middle compartment defects result in uterine or vaginal vault descent or an enterocoele (herniation of the Pouch of Douglas). Posterior compartment defects result in prolapse of the rectum into the vagina (rectocele). (Figure 1.).

There are several grading symptoms for prolapse of which the most validated method is the pelvic organ prolapse quantification system. This grades the prolapse according to descent of the anterior, posterior and apical segments of the vaginal wall relative to the hymen.

Investigations

Women with urinary symptoms should have a midstream urine sample sent for culture and sensitivity. A post void residual urine scan and uroflowmetry should be performed if there is any voiding difficulty or recurrent urinary tract infections. Urodynamic studies can be performed prior to surgery if there is associated incontinence or to reveal incontinence masked by the prolapse. Stress incontinence occurs in 36–80% of women with advanced prolapse [1, 5, and 6] and if confirmed on urodynamics a simultaneous continence procedure can be performed at the time of the prolapse repair.

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Conservative treatment

This should be considered prior to performing surgery.

(i) Pelvic floor exercises - These are usually of benefit only in those with mild degrees of prolapse and may alleviate symptoms so that surgery can be avoided. (ii) Pessaries - These can be used in patients unfit for or refusing surgery, in those awaiting surgery, and in women who have not completed their family. There are a variety of pessaries available in a number of shapes and sizes that allow tailoring of the pessary to a specific site defect and individual anatomy. Generally pessaries are changed every 6 months to decrease the risk of erosion and infection. (Figure 2)[1, 6].

Factors that elevate intra-abdominal pressure, such as heavy lifting, chronic cough and constipation, and obesity are associated with utero-vaginal prolapse and these conditions should be treated at the same time.

Surgical treatment

There are numerous surgical techniques used to correct prolapse using abdominal or vaginal approaches. The aims of surgery are restoration of normal anatomy, relief of vaginal prolapse symptoms, and improvement in urinary, bowel, and sexual function [1, 6, 7].

Cystocele

A cystocele can be repaired using an anterior colporrhaphy which plicates the layers of the vaginal muscularis and adventitia overlying the bladder. The recurrence rate of prolapse after anterior colporrhaphy is 0–20%. Alternatively a paravaginal repair can be done which aims to reattach the detached lateral vagina to the level of the arcus tendineus fasciae pelvis. The failure rate for this procedure is reported as between 3% and 14%.

Uterine prolapse

A vaginal hysterectomy is the preferred option for uterine prolapse. Simultaneous suspension of the vaginal vault at the time of hysterectomy either by sacrospinous fixation or a McCall culdoplasty reduces the risk of future vault prolapse [6].

For those women who wish to retain their uterus or have not completed childbearing, options include a Manchester procedure (shortening the uterosacral and cardinal ligaments

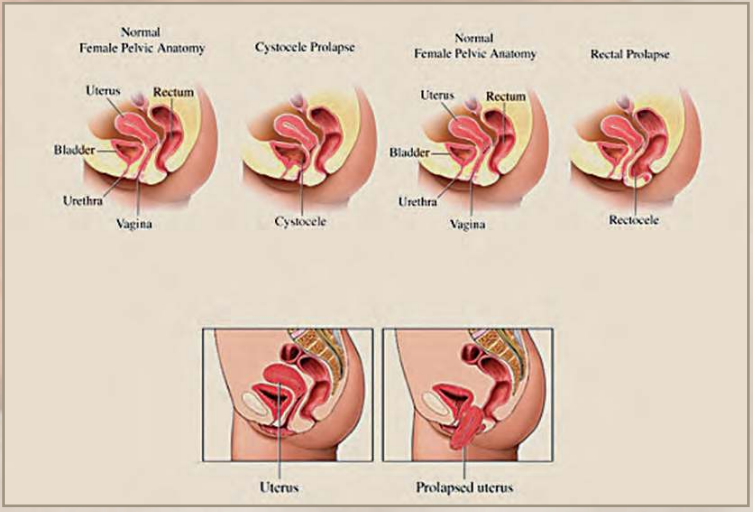


Figure 1. Uterovaginal prolapse

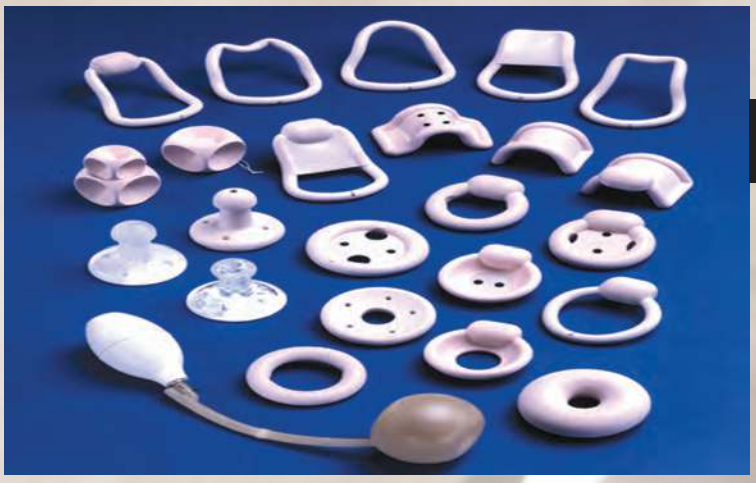


Figure 2 Fof pessaries for treatment of vaginal prolapse

with amputation of the cervix), transvaginal sacrospinous fixation, and a sacrohysteropexy – anchoring the cervix/uterus to the sacral promontory with mesh.

Vault prolapse

This can be repaired using by a vaginal sacrospinous fixation or abdominal open or laparoscopic sacrocolpopexy. The latter procedure is associated with a lower recurrence rate and less dyspareunia but is not without complications, including major intra-operative bleeding and a 3.3% incidence of mesh erosion.

Operations to repair posterior compartment defects

A rectocele can be repaired by either levator plication or fascial repair. Levator plication is associated with an increase in dyspareunia, secondary to atrophy and scarring of muscle fibres. Alternatively a transanal repair can be performed as favoured by colorectal surgeons.

Repair of isolated defects in the fascia have been reported to cure rectocoeles in 82% of cases, as well as resulting in an improvement in constipation, tenesmus, and splinting of the vagina and perineum during defecation.

Obliterative procedures – colpectomy and colpocleisis

Most procedures to correct prolapse aim to restore normal anatomy. In the frail, elderly and those not wishing to retain sexual function, obliterative procedures can be considered. The primary advantage of these procedures is that they are relatively quick to perform, and can be performed under local or regional analgesia, so reducing morbidity further. As obliterative procedures preclude further assessment of the cervix and uterus, a vaginal hysterectomy should be performed prior to this.

Mesh for prolapse repair

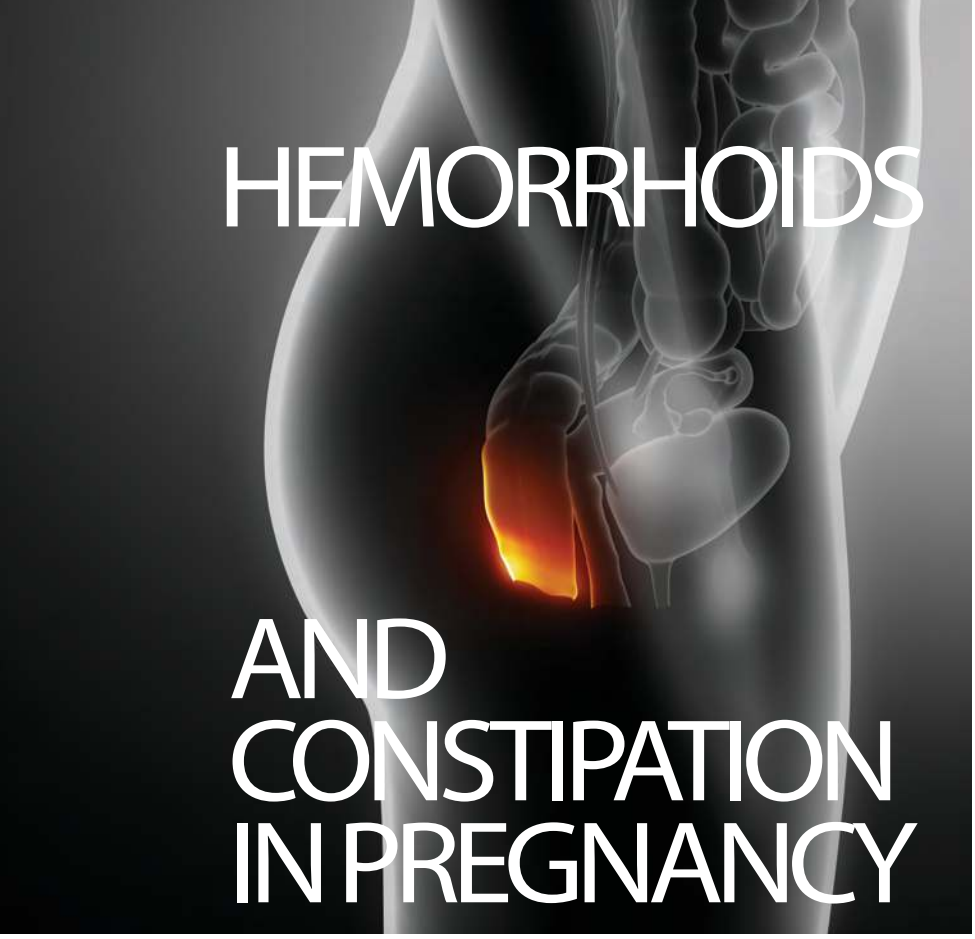
Prolapse and continence surgery has been revolutionised over the past decade by the advent of synthetic and biological graft materials and mesh kits that have been marketed to improve outcomes. There is very little data available to support the use of mesh kits for primary prolapse surgery unless the surgeon has reason to suspect that the patient is at high risk for recurrence. Potential complications include mesh erosion, dyspareunia and visceral injury. The data supporting the biological grafts is also weak although they are associated with fewer complications [8].

CONCLUSIONS

Pelvic organ prolapse is a common health problem, and though severe morbidity is rare, it can have marked effects on quality of life. All women should be offered conservative treatment first and if this fails surgery offered. Choice of surgery should be tailored to the individual woman and address any associated bowel, bladder and sexual dysfunction. Multidisciplinary care amongst gynaecologists, urologists and colorectal surgeons has now been advocated to address complex pelvic floor problems and to streamline management appropriately.

REFERENCES

1.Thakar R, Stanton S. Management of genital prolapse. BMJ 2002;324:1258-62.
2. Olsen AL, Smith VJ, Bergstrom JO, Colling JC, Clark AL.Epidemiology of surgically managed pelvic organ prolapsed and urinary incontinence. Obstet Gynecol 1997; 89; 501-506.
3. Maclennan AH, Taylor AW, Wilson D.The prevalence of pelvic floor disorders and their relationship to gender, age, parity and mode of delivery. BJOG 2000; 107: 1460-1470.
4. 12 Bump RC, Mattiason A, Bo K et al.The standardization of terminology of female pelvic organ prolapse and pelvic floor dysfunction. Am J Obstet Gynecol 1996; 175: 10-17.
5. Rosenzweig BA, Pushkin S, Blumenfield D, Bhatia NN. Prevalence of abnormal urodynamic test results in continence women with severe genitourinary prolapse. Obstet Gynecol 1992; 79; 539-542.
6. Doshani et al. Uterine prolapse. BMJ 2007;335:819-23.
7. Baessler et al. Surgical management of pelvic organ prolapse. Cochrane Database Syst Rev. 2013 Apr 30;4:CD004014.
Weber AM, Walters MD.Anterior vaginal prolapse: review of anatomy and techniques of surgical repair.Obstet Gynecol 1997; 89: 311-318.
8. The surgical repair of vaginal wall prolapse using mesh. NICE IPG 267, 2008.



HEMORRHOIDS AND CONSTIPATION IN PREGNANCY

BY MR OLIPARAMBIL ASHOKKUMAR MD FRCOG
Consultant Obstetrician & Gynaecologist

LONDON WELLWOMAN CLINIC

WHY DURING PREGNANCY DO WOMEN SUFFER FROM CONSTIPATION?

During pregnancy, pressure from the fetus on the abdomen and hormonal changes cause the hemorrhoidal vessels to enlarge. Gravid uterus puts pressure on the pelvic and abdominal veins. This can slow the return of blood from the lower half of the body, which increases the pressure on the veins and causes them to become more dilated or swollen.
Constipation, which is a common problem during pregnancy, can also cause or aggravate hemorrhoids.

WHAT TIPS ARE THERE FOR CLEARING UP CONSTIPATION?

- Eat a high-fibre diet - plenty of whole grains, beans, fruits, and vegetables
- Drink plenty of water (eight to ten glasses a day)
- Regular exercise
- Treat constipation by a fiber supplement or stool softener

WHAT ENCOURAGES HAEMORRHOIDS?

The exact cause of symptomatic hemorrhoids is unknown. A number of factors are believed to play a role including: irregular bowel habits, a lack of exercise, low-fibre diets, increased intra-abdominal pressure genetic factors like an absence of valves within the hemorrhoidal veins, and aging.

WHAT EXACTLY ARE HEMORRHOIDS?

Hemorrhoids are vascular structures in the anal canal. They act as a cushion composed of arterio-venous channels and connective tissue. Hemorrhoid cushions are important for continence.
They can get swollen or inflamed and are called piles. They can be internal or external depends on where they present. It can cause painless rectal bleeding or pain when they are thrombosed.

HOW LONG BEFORE THEY CLEAR UP?

Usually they clear up soon after the delivery as long as there is no constipation.

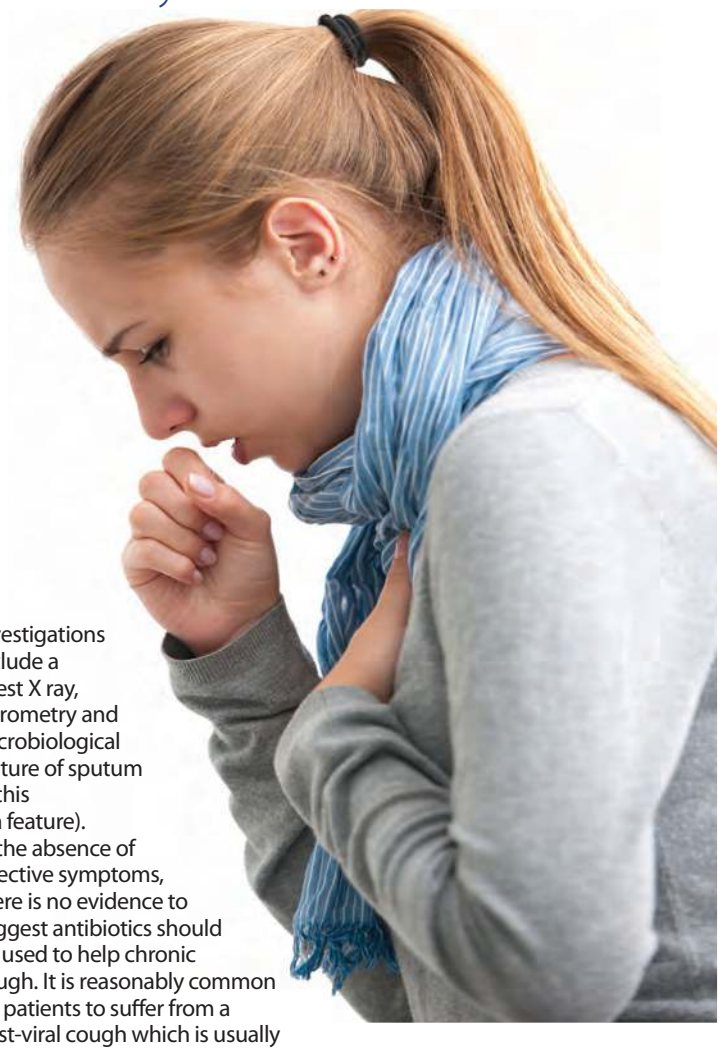
HOW CAN SUFFERERS RELIEVE THE PAIN?

- Apply an ice pack wrapped in a towel to the affected area several times a day. Direct contact with ice should be avoided.
- Soak the bottom in warm water in a tub for 10 to 15 minutes three to four times each day.
- Try alternating cold and warm treatments.
- Clean the affected area after each bowel movement using soft, unscented, white toilet tissue, which causes less irritation than colored, scented varieties.
- Moistening the tissue.
- Topical creams can be bought over the counter, make sure that medicines in the cream are safe to use in pregnancy.
- Simple analegesics like paracetamol.

CHRONIC COUGH

A chronic cough is one that lasts for eight weeks or more and here we pinpoint the likely causes

BY AMIT PATEL MBBS MRCP AHEA
Consultant Respiratory Physician

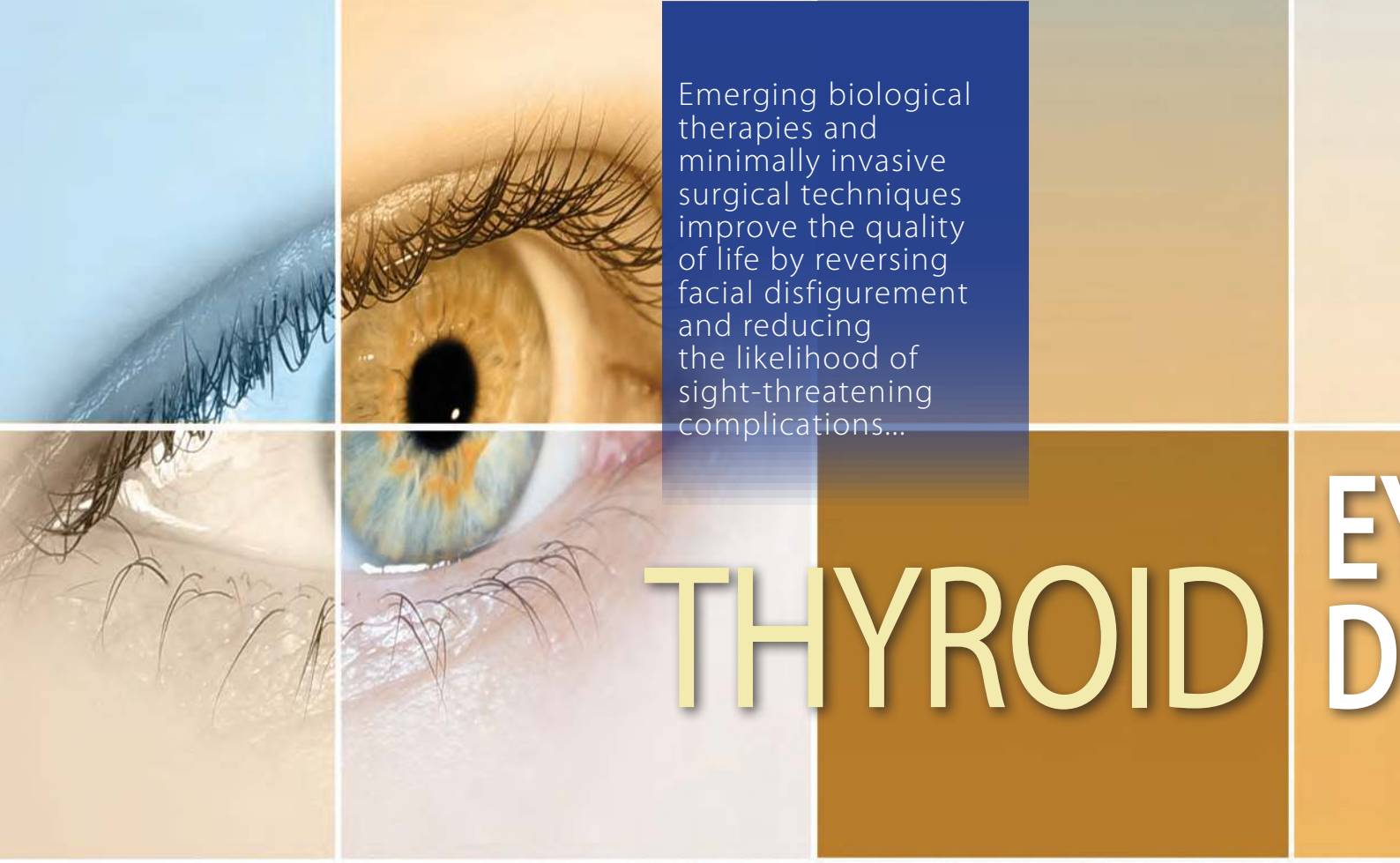


All year round waiting rooms are filled with patients complaining of a cough. Nearly a quarter of people will see a doctor about a respiratory illness every year with many presenting with a cough. Most often the cough is in the setting of a viral infection and abates within a few weeks. A chronic cough is one that lasts for more than 8 weeks.

Asthma, gastroesophageal reflux disease (GORD), COPD, upper airway syndrome and smoking are common causes of chronic cough. Other causes include bronchiectasis which is associated with increased sputum production and repeat infective episodes. Infective causes such as tuberculosis have also been on the rise in London. Patients may have a history of night sweats, weight loss, sputum production and previous contact with TB but this is often not the case. Conditions such as sarcoidosis and pulmonary fibrosis are under recognised. Patients may present with a dry cough and breathlessness and fine crackles may be audible on auscultation of the chest. Lung cancer can also present with a chronic cough. Recent national campaigns have highlighted the importance of considering a chest x-ray in those patients with a cough that persists for longer than 3 weeks. If these conditions are suspected, patients should be referred for a specialist respiratory opinion.

It is important when trying to elucidate the cause of a cough to exclude serious underlying causes requiring urgent investigation and management. Questions focus on duration, associated features (for example haemoptysis and sputum production), fevers, smoking history and medications. Initial investigations include a chest X ray, spirometry and microbiological culture of sputum (if this is a feature). In the absence of infective symptoms, there is no evidence to suggest antibiotics should be used to help chronic cough. It is reasonably common for patients to suffer from a post-viral cough which is usually secondary to a combination of inflammation, increased sensitivity of cough receptors and epithelial damage. Mucus production can also then contribute to symptoms. Symptoms do usually settle within 8 weeks. Treatment is directed at the most likely underlying cause. If for example a patient has a history of wheeze with a cough that is worse at night, perhaps with a trigger such as dust or exercise, this may point to asthma. Patients with a history of sinusitis and post nasal dripping may have an upper airway cause. Often the cause can be difficult to get to the bottom of. In "cough variant" asthma for example, cough can be the only symptom. Diagnosis will often require specialist pulmonary function testing and review.

When a patient is referred to a specialist clinic, the history is reviewed once again. Further testing is arranged where appropriate including CT scan of the chest, lung function testing and rarely bronchoscopy. Appropriate targeted treatment can then be recommended.



Emerging biological therapies and minimally invasive surgical techniques improve the quality of life by reversing facial disfigurement and reducing the likelihood of sight-threatening complications...

THYROID E D

Surgical trends and emerging biological therapies

BY COSTAS PAPAGEORGIOU MD Oculofacial Plastic Surgeon

Refined surgical techniques

The commencement of surgical rehabilitation is a major step in the life of a patient with Graves disease and should be approached in a conservative and studied fashion. Technical advancements in orbital decompression relate to the new areas of bone removal, removal of orbital fat and the use of hidden incisions.

Micro-liposuction of the orbit

For less severe cases where 2-3 mm of proptosis is reduction is needed, Mr Papageorgiou may use a technique that only removes soft tissue or fibroblast-fat through a hidden incision from the inner surface of the lower eyelid (transconjuctival approach). Fat decompressions have the advantage of being performed under sedation anesthesia with no skin incisions, allowing surgical time and shortened recovery period.

Minimally invasive orbital decompression

For moderate to severe disease with more prominent proptosis, patients may need bony decompression in addition of fat removal. Deep lateral wall decompression is the preferred approach which involves sculpting areas of bone from the deep lateral wall of the orbit. The advantage of this minimally invasive approach is that it doesn't violate the relationship of the orbit with the adjacent sinus spaces and is less likely to induce post-operative double vision as the eye muscle compartments are not shifted during surgery.

Sculpting the eyelid and eyebrow tissues

Even after multi-staged corrective surgeries, some patients find that the disease has left its mark. Loss of elasticity and puffiness of the eyelid and eyebrow profile can be permanent features as the proliferative adipogenic and inflammatory phase of the disease has affected the volume of the

eyelid and eyebrow soft issues. These changes can be addressed with sculpting surgery such as aesthetic blepharoplasty or eyebrow recontouring via micro-liposuction. The goal of these procedures is to refine the proportions and symmetry of the periorbital tissues.

YE ISEASE

The recent success of immune therapies for allied autoimmune diseases has spurred use of these for patients with TED. As our knowledge of the immune pathogenesis of the disease grows, paralleling our experience with targeted immunotherapies, there will likely be a future paradigm shift in the management of patients

B Cell Regulation

B Cells play a critical role in the initiation of the autoimmune processes related to TED. Rituximab (RTX) is a genetically engineered humanized antibody, which depletes circulating mature B cells, and can help control the inflammatory cascades by affecting antigen presentation and cytokine production mediated by B cells. Most importantly RTX does not induce significant immunosuppression, as it does not target the bone marrow stem cells and circulating plasma cells.

One recent prospective study from UCLA reported reduction in the disease activity in patients with moderate-to-severe symtoms. RTX dosages used were the same as for treatment of rheumatoid arthritis (2 doses of 500mg, spaced 2 weeks apart).

Adverse effects, though not common according to published literatrue, have been demonstrated, highlighting the need for judicious use of the drug in select patients with moderate to severe active disease who may be intolerant or poorly responsive to conventional therapies.

Anticytokine therapies

Specific anticytokine therapies, including TNF-a targeting agents, have been evaluated in TED patients. While these reports show some potential benefit anticytokine therapy, no randomized controlled trials have been performed.

Antioxidants

The results of a recently published trial to determine the effects of selenium and pentoxifylline in patients with mild TED revealed significant improvement in the selenium-treated group in terms of quality of life, reduced progression of eye disease, and improvement in clinical activity scores. Selenium (100 micrograms twice daily) can be a valuable adjunctive in early stages of disease for certain patient populations.

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Following a three-year presence in the USA in two renowned academic institutions Mr Papageorgiou brings his expertise and latest techniques and innovations from the Unviersity of California Los Angeles (UCLA) to the Hospital of St John & St Elizabeth.

Mr Papageorgiou trained in two leading academic centres in the USA which pioneered minimally invasive orbital decompression surgery and adopted the latest trends in immunomodulation therapies.

He has extensive clinical and translational research experience in the molecular pathogenisis of TED and has studied histopathologic and anatomic changes affecting the orbit using sophisticated 3D software and imaging devices.

Mr Papageorgiou specialises in a select number of surgical procedures and aesthetic rejuvenating treatments involving the face. With a robust clincical and surgical experience informing his work, he is well established as a highly skilled surgeon bringing credibility and trust to a sensitive and often emotive area of medical practice.

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Holly Miles and Karl Brown have recently joined the GP Liaison team at the Hospital. They are both dedicated to bridging the gap between GPs and the Hospital, providing educational lectures and events for GPs in the Central and North West London areas.
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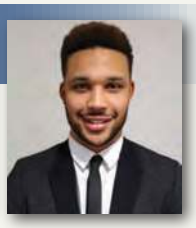

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