PARKINSON’S DISEASE
- A BRIEF PRACTICAL APPROACH
Patrick Browne
Lorna Daly and Timothy Counihan

OBSTRUCTIVE SLEEP APNOEA
IN ADULTS
Dr Alan Ruth

CHRONIC OBSTRUCTIVE PULMONARY DISEASE
Ruth Morrow

TREATABLE AND AVOIDABLE CONDITIONS – TECH SUPPORT
Lisa Nolan

CAPACITY IN PRACTICE – TESTAMENTARY
Rody O’Brien
The Striverdi® effect

- **Striverdi® Respimat®**, a new once-daily LABA with a rapid onset of action that offers significant improvements in lung function* and exercise endurance† vs control for your COPD patients‡

- The second molecule delivered via the unique Respimat® Soft Mist™ inhaler†,‡

- Use once-daily in 2 consecutive puffs (2.5 mcg each)*

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Labelling:

**Dose and Administration:**

Adults only age 18 years or over: 5 microgram olodaterol given as two puffs from the Respimat inhaler once daily, at the same time of the day.

**Indication:**

Maintenance therapy. Immediate hypersensitivity reactions may occur after administration. Inhaled medicines may cause bronchoconstriction and lung function impairment. Avoid use in children under 18 years of age.

**Contraindications:**

Hypersensitivity to olodaterol or to any of the excipients. Benzalkonium chloride, disodium edetate, purified water or citric acid.Warnings and Precautions: Not for use in asthma or the treatment of acute episodes of bronchospasm, i.e. as rescue therapy. Immediate hypersensitivity reactions may occur after administration.

**Use once-daily in 2 consecutive puffs (2.5 mcg each)***

**REFERENCES:**


**STIVERDI® RESPIMAT®**

*Striverdi® Respimat® (olodaterol)

Solution for inhalation containing 2.5 microgram olodaterol (as hydrochloride) per puff. Action: LABA with a rapid onset of action that offers significant improvements in lung function and exercise endurance vs control for your COPD patients.

**Pack sizes:**

Single pack: 1 Respimat inhaler and 1 cartridge providing 60 puffs (30 medicinal doses). 60 puffs (30 medicinal doses).

**Legal category:** POM. MA numbers: PA 775/6/1 Marketing Authorisation Holder: Boehringer Ingelheim International GmbH, D-55216 Ingelheim am Rhein, Germany. Prescribers should consult the Summary of Product Characteristics for further information on side effects. Pack sizes: Single pack: 1 Respimat inhaler and 1 cartridge providing 60 puffs (30 medicinal doses).

**Prepared in February 2014.**

This medicinal product is subject to additional monitoring.

Date of preparation: June 2014

IRE/SVR: 141001a

*Patients continued all the usual therapy excepting other LABAs. A usual background maintenance therapy including SAMA, ICS and methylxanthines, but excluding other LABAs and LAMA. *Ireland. LABA= long-acting beta-2 agonist. COPD= chronic obstructive pulmonary disease. SAMA= slow-acting muscarinic antagonist. ICS= inhaled corticosteroid. LAMA= long-acting muscarinic antagonist.
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The movers and shakers

As we approach the IPNA National Conference and AGM (17th & 18th October), the Kerry branch have been working hard to give us a conference that reflects the diverse role of practice nursing. Their theme ‘Variety is the Spice of Life’ justly reflects the practice nurse role. As practice nurses, we have “to know a bit about everything” as you can be asked just about anything in a consultation, from the management of minor childhood illness, to queries about entitlements, or medication that a grandparent may be on. Many of my non practice nurse nursing colleagues struggle with this diversity and the fact that we, as practice nurses, have to have a broad knowledge base to effectively carry out our role.

This year’s conference covers an array of relevant topics. On Friday afternoon, there will be presentations on Food Allergy in Children (Ruth Charles, IFAN), Tissue Viability (Mari O’Connor Tissue Viability Nurse) and Infertility (Dr Mary McCaffrey – Consultant Obstetrician/Gynaecologist). Saturday morning will open with a presentation by Rolande Anderson on BRIEFcase for Alcohol management: the role of the Practice Nurse. This will be followed by Dr Graham Fry – Medical Consultant, Tropical Medical Bureau who will provide an overview on travel vaccines. The final speaker will be Fiona Barton – Cardiology Nurse Specialist/Resus Officer who will speak on Resuscitation in Primary Care. A number of awards will be presented throughout the conference to acknowledge the practice nurse’s work and to support his/her professional development.

The weekend will conclude the IPNA AGM on Saturday afternoon which I encourage you all to attend. This is your opportunity to air your views and keep abreast with the developments within practice nursing. There are a number of motions for discussion which will undoubtedly generate some stimulating and lively debate amongst members.

The IPNA is at the forefront of nurse education with its annual educational conference, regular monthly branch meetings, E-learning specifically aimed at practice nurses and a vibrant and active website. In times which are challenging in general to the nursing profession, the IPNA continues to support its members. There are very few other nursing organisations that offer such extensive support and educational opportunities to its members. So, come along to Limerick to learn, network and make new friendships.

“Those people who develop the ability to continuously acquire new and better forms of knowledge that they can apply to their work and to their lives will be the movers and shakers in our society for the indefinite future.” Brian Tracy

See you all in Limerick.

Ruth Morrow
Consulting Editor
“WHAT CAN BE DONE WHEN METFORMIN ALONE FAILS?”

“HOW CAN WE IMPROVE AND SUSTAIN GLYCAEMIC CONTROL?”

TREATING TYPE 2 DIABETES OFTEN MEANS FACING THE SAME CHALLENGES

“HOW CAN PATIENTS BENEFIT FURTHER FROM THEIR TREATMENT?”

“HOW CAN WE ENCOURAGE A POSITIVE OUTCOME?”
First fitness to practise hearings for nurses and midwives

Fitness to Practise Hearings will commence in public this autumn for the first time in the history of the nursing and midwifery professions. The first hearing will be heard on September 29th and 30th next at the headquarters of the Nursing and Midwifery Board of Ireland (NMBI) in Blackrock, Co Dublin.

Details regarding hearings will be published on an ongoing basis on the Board’s website, www.nmbi.ie.

“The first hearing follows on from the commencement order coming into force for Parts 7, 8 and 9 of the Nurses and Midwives Act 2011 and the subsequent establishment of the Board, the Preliminary Proceedings Committee and the Fitness to Practise Committee of the NMBI. "This is an important step in the history of the nursing and midwifery professions,” said Dr Maura Pidgeon, CEO of the NMBI.

“The Board ensures independent regulation is in place and good standards of practice can be supported for better public protection and patient safety. Public Fitness to Practise hearings will support the confidence of the public and patients who expect all health professionals to be regulated in this way.”

“Nurses and midwives enjoy a great national and international reputation for their hard work and professionalism. This new development will support confidence in the professions and will build the case for expanding the role of nurses and midwives to improve the Irish healthcare system and allow for better care provision to patients. Our new regulatory systems provide for this expansion,” Dr Pidgeon said.

“As well as public fitness to practise hearings, Continuing Professional Development (CPD) will become a mandatory requirement with nurses and midwives needing to maintain professional competence on an on-going basis and to demonstrate competence.”

To support the regulation, the Board of NMBI has approved an annual retention fee of €150 for 2015 for nurses and midwives.

“It is always hard to make increases, especially adding an extra euro a week. But as has been the case in implementing Acts in other regulatory bodies, the resulting changes from the Nurses and Midwives Act 2011 place additional requirements on the NMBI in terms of legislative and procedural changes,” Mr Paul Gallagher, President of the NMBI said.

“NMBI must develop, establish and operate a system monitoring the maintenance of professional competence by registered nurses and registered midwives. Fitness to Practise required the introduction of the new Preliminary Proceedings Committee and introduced a new additional layer in the process. As a consequence of the Act and its commencement order the changes couldn’t be implemented in a phased approach over a number of years.”

“The legislation maintains the independence of the Board and of professional regulation for nurses and midwives which is important for the professions.”

“It is vital if you are engaged in the practice of nursing or midwifery in Ireland, that you hold active registration with NMBI.”

Osteoporosis and Falls

The above article – Osteoporosis and Falls – which appeared in our July/August edition (issue 4 Vol. 7) was actually written by Nessa Fallon and not by Michelle O’Brien as stated. We apologise for this error.
IT’S TIME TO CHANGE THE CONVERSATION IN TYPE 2 DIABETES
Irish Medicines Board becomes the Health Products Regulatory Authority

A new name for the national regulator for medicines, medical devices and other health products came into effect in July 2014. The Health Products Regulatory Authority (the HPRA) is the new name for the Irish Medicines Board (IMB). The new name more clearly reflects its broader remit and wider scope of functions and responsibilities across the health products sector which have expanded significantly since the IMB was first established in 1996. To coincide with its new brand announcement, a new user friendly website which provides significant information on health products and will be of interest to members of the public, healthcare professionals as well as health products industry has been also launched at www.hpra.ie.

The role of the Health Products Regulatory Authority (The HPRA) is to protect and enhance public and animal health by regulating medicines, medical devices and other health products. It is also our role to monitor the safety of cosmetics. We are a state agency that puts the health of people and animals at the core of everything they do.

The Health Products Regulatory Authority (The HPRA) grants licences to companies to make, distribute and market medicines after a review of their safety, quality and effectiveness. We continuously monitor medicines, medical devices and other health products, responding quickly to any safety or quality concerns. We produce safety and quality information to support the safe use of health products. We also inspect companies and facilities which test, make or distribute health products to ensure that they comply with relevant standards and legislation.

The Health Products Regulatory Authority is responsible for regulating a wide range of health products available in Ireland. The regulation of all health products under the remit of the Health Products Regulatory Authority (the HPRA) is based on Irish and European legislation. For more detailed information on the role and work of the HPRA across each of the health product areas please visit www.hpra.ie

Transplant360 launches new web resource for organ recipients

A new web resource for people who have undergone an organ transplant, Transplant360.com, has been launched to provide long-term health advice and support. The initiative will be a focal point for the entire transplant community, including patients, carers and healthcare professionals, to promote long-term health after receiving an organ transplant.

The online resource for people who have undergone an organ transplant, Transplant360.com, has been launched to provide long-term health advice and support. The initiative will be a focal point for the entire transplant community, including patients, carers and healthcare professionals, to promote long-term health after receiving an organ transplant.

“Currently in Ireland out of 3,900 patients with failed kidneys 53%, or 2,100, are transplanted and 47%, or 1,800, are on dialysis. Including all other organ transplants, there are just under 3,000 people in Ireland enjoying extended life because of organ donation resulting in transplantation,” explained Mark Murphy, CEO, Irish Kidney Association.

Tackling childhood obesity campaign

At the launch of the latest phase of safefood’s Childhood Obesity campaign that urges parents to say no to sweets, biscuits and crisps every day and reduce the amount of treat foods children are eating were Leo Varadkar, TD, Minister for Health and Brendan Mullins, aged 7 from Clonsilla.

At the launch of Transplant360 online support service are Prof Albert Groenewoud, Astellas; Mr Mark Murphy, Irish Kidney Association; Mrs Vera Dwyer, lung and kidney transplant patient; Prof Jim Egan, Director, NODTO.
Kildare
Catherine O’Dowd

With another wonderful summer coming to a close, it can only mean our monthly educational meetings are ready to commence! The first meeting kicks off on September 16th at 7.45pm in Maudlins Hotel, Naas (permanent venue and time).

Dr Deirdre Lundy is the speaker and the topic is women’s health, and not to be missed. It will be kindly sponsored by Hazel Travers of MSD.

October will see the AGM and conference in Limerick and we are sure that it will be a super weekend with some wonderful speakers. And, it’s not all work... we will play hard too. I hope as many members as possible will attend.

Our November meeting will see the GP liaison nurse, Bernie McMahon from Naas Hospital, talk about secondary care services in our local area and her role as liaison nurse to primary care.

Please try to support the efforts of our PDC Rita Lawlor who has just released details of lunchtime education meetings to enhance our practice and care to patients. They will begin on 14th October in Vista Naas.

Kilkenny
Helen Fogarty

The Kilkenny branch of IPNA returned for our autumn schedule on Wednesday 17th September with a meeting on Travel Vaccines given by Kate Kiernan and sponsored by GSK. In October we have a timely meeting on respiratory issues, By then we should all be well into the 2014 flu vaccination programme. We hope you all had a lovely summer and look forward to meeting many of you next month at our annual conference, in Limerick.

NOT ONLY MEDICINES – MUCH MORE

The new name for the Irish Medicines Board (IMB) is the Health Products Regulatory Authority (HPRA).

Why change? Since 1996 our role as a regulator has expanded to include a number of additional products and functions.

The HPRA name reflects our wider remit which includes the regulation of:

- Human and veterinary medicines
- Clinical trials
- Medical devices
- Controlled drugs
- Blood and blood components
- Tissues and cells
- Cosmetic products
- The protection of animals used for scientific purposes
- Organs intended for transplantation

A new name – but our focus and mission hasn’t changed:

To protect and enhance public and animal health through the regulation of medicines, medical devices and other health products.

Find out more on www.hpra.ie
North Dublin
Ann Marie Ellwood

Our first meeting of this year was held on the 16th September in the Hilton Hotel, Clarehall. Our speaker was Patricia Kavanagh – CNS Rheumatology – Mater Hospital. Patricia gave us a comprehensive overview of rheumatoid arthritis and other common conditions seen in rheumatology, their diagnosis and treatment.

We are all looking forward to the Annual Conference in Limerick and a good number from North Dublin will be attending.

Our next meeting will be in November, date to be confirmed nearer the time.

Wexford
Dora Mulligan

Welcome back to everyone after our lovely summer. Our first meeting saw Cara Murphy CNS Heart Failure, provide us with a comprehensive talk on ECG interpretation. Sponsorship was kindly provided by Edel Canning from MSD.

Afterwards Anne O’Shaughnessy gave a brief feedback from the recent NEC meeting. Apparently, there has been a large number of nominees put forward for the Valerie Mangan award this year which is a great reflection on the attendances at the local meetings. A couple of hours once a month gives a great opportunity to network with our colleagues and gain up to date information on ongoing topics within our practice, especially as many of us work autonomously. We know there’s always someone at the end of the phone but these meetings give more than the personal touch, so keep it up ladies.

Our topics for this year’s meetings include BPH, osteoporosis, new respiratory devices and inhaler techniques, allergies, amongst others. Good luck to the Kerry branch at next month’s Conference and safe journey to all attending.

Wicklow
Mary Finnegan

Hope all our members had a wonderful happy, healthy, stress free summer, with lots of family time.

As usual, it flew by and here we are again, ordering in our flu vaccines and getting ready for one of our busiest times of year!

Since I last posted, we have had some excellent meetings.

As planned, we had 2 BLS/CPR courses in March, with a total of 18 nurses from our branch attending and receiving certification for a further 2 years. Many thanks to our Instructors, Maggie Bree and Paula Crotty, for making these evenings easy and fun to do, after a full days work!

Our meeting on 7th April was on the topic ‘The First 1000 days’, the programme covering a Mum’s dietary requirements from conception, throughout her pregnancy, and the infant’s diet from birth to age 2 years.

Our speaker was Niamh Brannely, Dietitian with special expertise in infant nutrition, who was kindly sponsored by Michelle Redmond, Infant Nutrition Rep with Aptamil.

This was a very informative, interactive meeting, and copies of the book ‘The first 1000 days’ were issued to attendees. These are also available free to every new mother in Ireland.

Our last meeting, before the summer break, on 19th May, was kindly sponsored by Ian Pitcher, from SPMSD. The guest speaker was Dr Conor Maguire, a GP from Leopardstown, whose topic for the night was ‘An Overview of Current Childhood Immunizations’. Dr Maguire also included an ‘Introduction to/discussion on the meningitis B, varicella, and the new shingles vaccines’.

This was an excellent talk, very easy to listen to, informative, and interactive and Dr Maguire was more than happy to answer each and every question, long after his presentation!

Our first meeting after the summer break was on 22nd September, and I look forward to seeing all our members back again, and we are also always delighted to welcome new members at any time.

Our September topic will be Childhood Allergies, and I am delighted that the new Paediatric Allergist attached to Crumlin Hospital, Dr Aideen Byrne, has agreed to be our guest speaker. The meeting is very kindly sponsored by Catherine O'Donnell, from Thermofisher Diagnostics, the company who provide the IgE tests in Ireland.

Next meeting is in November, but at time of writing, awaiting confirmation from speaker, before I confirm date!

Traditionally we do not have a Branch meeting in October, as we would like to encourage as many as possible to attend the National Conference, which this year is in Limerick, on 17th and 18th October, hosted by Kerry Branch. We wish Kerry all the very best for the weekend, and look forward to an excellent Conference.

Looking forward to another year with an excellent branch of nurses who have always been very supportive, enthusiastic, and friendly! We now have 43 members in our branch, with an average attendance at meetings last year of 25. But, we would still like to encourage those who no longer attend, or have never attended, to think about coming along this year. It is only 6/7 nights in the year, and all our meetings have a worthwhile educational content, as well as an opportunity to liaise and network with colleagues. All meetings are held on Monday nights at 8pm (though we often have a light supper at 7.30pm!) in the Conference Centre of the Wilton Hotel In Bray...very easy to get to, as just off the M11!
Obstructive sleep apnoea in adults

DR ALAN RUTH, BEHAVIOURAL MEDICINE PRACTITIONER IN PRIVATE PRACTICE

In our modern fast paced world, non-restorative sleep has become a common phenomenon. The International Classification of Sleep Disorders – Third edition (ICSD-3) includes a category called Sleep Related Breathing Disorders (also known as sleep disordered breathing). Sleep loss from undiagnosed, and consequently untreated sleep related breathing disorders, can adversely affect health and well-being.

Sleep related breathing disorders are disorders that adversely affect a patient’s breathing while they are asleep. They are characterized by disruptions of normal breathing patterns that only occur during sleep. The most common sleep related breathing disorders are snoring and sleep apnoea. Obstructive sleep apnoea (OSA) is by far the most common form of sleep apnoea. This review focuses on OSA in adults. Whilst OSA affects about 2 to 5 percent of children, infants and teenagers, these groups are beyond the scope of this review.

Practice nurses can help facilitate a diagnosis of OSA by recognizing OSA signs, symptoms, and risk factors, and informing the patient’s GP if OSA is suspected.

Snoring and sleep apnoea

Snoring is a common problem for many adults. It’s estimated that half of all adults snore at least occasionally and that 25 percent are habitual snorers. Snoring is a coarse sound made by vibrations of the soft palate and other tissue in the upper airway. It occurs when part of the throat air passage collapses and vibrates. When someone is asleep, the muscle tone in the tongue, soft palate and neighbouring structures decreases. This allows collapse and vibration of these structures when breathing, thereby causing snoring. Anything that obstructs the upper airway can contribute to snoring e.g. large adenoids or a large tongue. Light or occasional snoring is not a health threat if it doesn’t interrupt breathing.
It’s estimated that 30-50% of snorers actually suffer from sleep apnoea. Sleep apnoea occurs when a person’s normal breathing pattern is interrupted during sleep. The person temporarily stops breathing while they are sleeping. The gaps in breathing are called apnoeas. The word apnoea means absence of breath. Sleep apnoea sufferers stop breathing repeatedly as they sleep. Their breathing may stop anything from about 10 to over 100 times per hour of sleep and may not start again for up to a minute or more. The pauses in breathing become clinically significant if the cessation lasts for more than 10 seconds each time and occur more than 10 times every hour. In ‘primary snoring’ there are no episodes of apnoea or hypoventilation.

**Obstructive sleep apnoea**

OSA is the most common form of sleep related breathing disorder and is estimated to account for over 80% of cases. It is defined as the cessation of airflow (caused by an obstruction) during sleep, preventing air from entering the lungs. Eventually, the consequent loss of breath causes the nervous system to send an alarm signal to the brain resulting in the person arousing momentarily. This comes about as a result of the increase in carbon dioxide which causes the sympathetic nervous system to release stress hormones.

This reactivates the muscles that hold the throat open, the person breathes again and falls back to sleep. Typically there is a gasp or snort and their body shudders as they arouse. Usually the sufferer is totally unaware that they were momentarily jolted awake. The apnoeas prevent the sufferer from entering or spending adequate time in the deep restorative sleep stage. They also deprive the sufferer’s tissues and organs of oxygen.

It’s estimated that up to 5% of adults in Western countries are likely to have undiagnosed OSA. It is more common in men, older people, and in people who are obese. It affects about 4% of middle aged men and 2% of middle aged women.

**Signs and symptoms of OSA**

Often, the first person to recognise the signs of OSA is the bed partner of the OSA sufferer. The signs and symptoms of OSA include:

- Loud snoring
- Noisy and laboured breathing
- Repeated short periods where breathing is interrupted by gasping or snorting
- Sudden awakenings with a sensation of gasping or choking
- Daytime sleepiness or fatigue
- Dry mouth or sore throat upon awakening
- Morning headaches
- Trouble concentrating, memory problems, forgetfulness
- Depression
- Irritability or mood swings or personality changes
- Night sweats
- Gastroesophageal reflux
- Nocturia
- Restlessness during sleep
- Sexual dysfunction, including impotence and decreased libido
- Difficulty getting up in the mornings.

**Risk factors for OSA**

It’s quite a common misconception that OSA only affects older overweight men. OSA can affect anyone regardless of age, gender, or body type. Risk factors for OSA include:

- **Excess weight**: Fat deposits around the upper airway may obstruct breathing. However, not everyone with OSA is overweight.
- **Being male**: Compared to women, men have twice the risk.
- **Age**: Middle age and older adults (40+ for men and 50+ for women).
- **A large neck size**: 17 inches or more for men and 16 inches or more for women.
- **Nasal obstruction**: due to a deviated septum, allergies, or sinus problems.
- **Family history**: Sleep apnoea is known to run in families.
- **Smoker**: Smokers are three times more likely to have OSA than are people who’ve never smoked.
- **Physical features**: Certain physical features can block the upper airway e.g., a narrow throat, large tonsils or adenoids, recessed chin, low-hanging soft palate, or a deviated septum.
- **Use of alcohol or sedatives**: These substances relax the muscles in the throat.

**Possible complications of OSA**

Left untreated, OSA can have life-shortening consequences. Its associations with chronic health problems include:

- It has been shown to be an independent risk factor for the development of hypertension.
- It increases the risk of stroke, regardless of whether or not the sufferer has hypertension.
- If an OSA sufferer has cardiac disease, multiple episodes of low blood oxygen can lead to sudden death from a cardiac event.
- It induces carotid artery atherosclerosis.
- It increases the risk for congestive heart failure by 2.3 times
- It is associated with cardiac arrhythmias.
- The incidence of OSA is very high in obese patients with type 2 diabetes.
- Gastroesophageal reflux symptoms may be caused or exacerbated by OSA.
- OSA sufferers are more likely to have abnormal results on liver function tests.
- OSA may worsen asthma symptoms and interfere with the effectiveness of asthma medications.
- The risk for depression rises with increasing severity of sleep apnoea.

**Nursing assessment for possible OSA**

Awareness of OSA in general practice is still poor. It is vital to raise awareness to ensure that people with OSA gain access to the right care. Practice nurse awareness of OSA during routine monitoring could enable specific observations of patients, to
The evidence continues to mount that a diet made up of 2/3 plant foods and no more than 1/3 animal-based foods is the way forward for both health and a sustainable planet.

- Include a variety of plant-based foods
- More whole grain starches
- More plant-based proteins
- Meeting our fruit and veg quota
- Less and better quality meat

NEW

Written by health professionals, the toolkit demonstrates in a visual, practical and realistic way the 2/3 - 1/3 approach to healthy eating.

- A HCP desktop flipchart. Each page visually demonstrates how meals and drinks can easily be adapted to lower calories and saturated fat and sugar whilst increasing the volume of food on the plate. The chart provides you with the detail whilst the patient views simple images and food photography of meal, snack and drink swaps.

- The take-home patient information sheet. Provides the patient with summary information, which can be tailored to their individual goals, a 7-day meal plan, top tips and more.

For your free copy SIMPLY EMAIL the subject ‘PBE’ and provide your FULL POSTAL ADDRESS to info@nutrilicious.co.uk

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SMA Staydown contains cornstarch as a thickener which thickens in the stomach – NOT the bottle!


IMPORTANT NOTICE: Breast milk is best for babies and breastfeeding should continue for as long as possible.

This product must be used under medical supervision. SMA Staydown is a special formula intended for the dietary management of bottle-fed babies when significant reflux (regurgitation) is a problem. It is suitable as the sole source of nutrition up to 6 months of age, and in conjunction with solid food up to 12 months of age. If the baby’s reflux does not improve within 2 weeks of starting SMA Staydown, or if the baby fails to thrive, the family doctor should be consulted.

ZRI 187/07/14 *Registered Trademark

FOR HEALTHCARE PROFESSIONALS ONLY.
If the patient’s bed partner is present, important information may also be obtained from them as they may directly observe both nocturnal and daytime signs.

To identify those at high risk, and ensure appropriate referral.

Assessing a patient for possible OSA begins with an interview that focuses on gathering information that might be suggestive of the condition. Based on knowledge of the signs and symptoms (outlined earlier) patients could be asked, for example:

- If they suffer from excessive daytime sleepiness and/or low energy
- If they have an inability to concentrate
- If they experience short-term memory loss or mood swings
- If they sometimes doze off at inappropriate times
- If they are irritable and short-tempered
- If they have morning headaches
- If they get drowsy when driving

If the patient’s bed partner is present, important information may also be obtained from them as they may directly observe both nocturnal and daytime signs. The presence of risk factors (outlined earlier) should also be considered in the nursing assessment.

The Epworth Sleepiness Scale is a validated, easily administered questionnaire that can help determine whether or not someone has OSA. Scores from this questionnaire can help determine if OSA seems likely and whether a sleep study is warranted. The Epworth Sleepiness Scale may be accessed via the following link: http://www.britishsnoring.co.uk/sleep_apnoea/epworth_sleepiness_scale.php

In assessing a patient for the possibility of OSA, a practice nurse could also take into account the presence of comorbid conditions associated with OSA. These include coronary heart disease, hypertension, arrhythmia, congestive heart failure, myocardial infarction, stroke, metabolic syndrome, and type 2 diabetes. Gastroesophageal reflux disease and gout may also be present in patients with OSA.

If as a result of the GP’s clinical evaluation, they also suspect sleep apnoea, they will most probably refer the patient to a sleep specialist who may decide to conduct an overnight full diagnostic polysomnography. Polysomnography records brain waves, breathing effort and rate, air flow in and out of the lungs, oxygen levels in the blood, heart rate, eye movement, and electrical activity of muscles. It can determine the severity of sleep apnoea (if present) and identify other possible sleep disorders.

**Treatment**

The treatment chosen for OSD depends in part on the severity of a particular patient’s condition. It also involves consideration of the degree of risk involved for the patient concerned. The main current treatment options are:

**Continuous positive airway pressure (CPAP)**

Currently, Continuous positive airway pressure (CPAP) machines are the most common treatment for moderate to severe OSA. A CPAP machine pushes a steady stream of air through a mask that the patient puts on before sleep. The stream of air helps the patient’s airway open throughout the night to enable them to breathe. Some masks fit over the nose and others cover both the nose and mouth. In many cases, CPAP is not easy to use. Studies indicate that up to 50 percent of people who start using CPAP, stop using it. The many reasons include a feeling of claustrophobia, the noise of the machine, and the notion of it being cumbersome or inconvenient.

**Dental appliances**

Dental appliances, also called mouth devices may be helpful for mild to moderate cases of OSA. They are custom made and are worn over the patient’s teeth while they are asleep. An appliance keeps the jaw forward, to prevent the patient’s airway from collapsing, so they can breathe without obstruction while asleep. These appliances must be fitted by a dentist or orthodontist. For an appliance to fit properly the patient must have natural teeth.

**Surgery**

For severe cases of OSA there is a large variety of surgical procedures available, but limited evidence for their efficacy. Surgery must address the site or sites of obstruction that compromise the patient’s airflow. For some patients, a surgical option is the use of palate implants to stiffen the palate and prevent it from collapsing into the pharynx where it can obstruct the airway. For morbidly obese patients with severe sleep apnoea, bariatric surgery is an option.

**Behavioural approaches**

Behavioural approaches include the following:

**Weight loss**

Studies have found that weight-loss programmes can be an effective treatment for OSA in patients who are overweight. However, this is unlikely be successful in patients with a narrow airway.

**Orofacial myofunctional therapy**

Recent research has demonstrated that orofacial myofunctional therapy (OMT) may reduce the symptoms of sleep related breathing disorders such as snoring, and ameliorate mild to moderate OSA. When functioning properly, the muscles of the tongue, throat, and face, can reduce obstruction to the airway. OMT developed out of orthodontics and speech-language pathology. It is based on re-patternning (or re-educating) oral and facial muscles and techniques to improve breathing, swallowing, and chewing. It also promotes good tongue positioning.
Calpol 120 mg/5 ml Sugar Free Infant Oral Suspension.

**Composition:**
Calpol Sugar Free Infant Suspension contains 120 mg Paracetamol in each 5 ml.

**Indications:**
Calpol Sugar Free Infant Suspension is indicated for the treatment of pain (including teething pain), and as an antipyretic. Calpol Sugar Free Infant Suspension is indicated for the relief of headache, migraine, neuralgia, toothache and teething pains, sore throat, rheumatic aches and pains, influenza, tonsillitis and bronchial colds.

**Dosage:**
- **Infants aged 2-3 months:** Post-vaccination fever and other causes of pain and fever—If your baby weighs over 4 kg and was born after 37 weeks: 2.5 ml. If necessary, after 4-6 hours, give a second 2.5 ml dose. Do not give to babies less than 2 months of age. Do not give more than 2 doses. Leave at least 4 hours between doses. If further doses are needed, talk to your doctor or pharmacist.
- **Children aged 3 months – 6 years:**
  - 2.5 ml 4 times a day.
  - 5 ml 4 times a day.
  - 7.5 ml 4 times a day.
  - 10 ml 4 times a day.

**Contra-indications:**
Calpol Sugar Free Infant Suspension is contra-indicated in patients with known hypersensitivity to paracetamol, or any of the other components.

**Special warnings and special precautions:**
Calpol Sugar Free Infant Suspension should be used with caution in moderate to severe renal impairment or severe hepatic impairment. The label contains the following statements:
- Store below 25°C.
- Protect from light.
- Contains paracetamol.
- Do not exceed the stated dose.
- Keep out of reach of children.
- Do not take more than 4 doses in 24 hours.
- Dose 4 times a day.
- Do not repeat doses more frequently than 4 hourly.
- Do not give for more than 3 days without consulting a doctor.
- If symptoms persist consult your doctor.
- Do not give to your child for more than 3 days without speaking to your doctor or pharmacist.
- As with all medicines, if your child is currently taking any medicine consult your doctor or pharmacist before taking this product. Immediate medical advice should be sought in the event of an overdose, even if you feel well.

**Undesirable effects:**
Paracetamol has been widely used and, when taken at the usual recommended dosage, side effects are mild and infrequent and reports of adverse reactions are rare. Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of the disease improved after paracetamol withdrawal. Nephrotoxic effects following therapeutic doses of paracetamol are uncommon. Papillary necrosis has been reported after prolonged administration. Adverse effects of paracetamol are rare but hypersensitivity, including anaphylaxis and skin rash may occur. Blood and the lymphatic system disorders: Thrombocytopenic purpura, haemolytic anaemia, agranulocytosis. Hepatobiliary disorders: Anaphylaxis, Chronic hepatic necrosis, liver damage, Hypersensitivity, Immune system disorders: Papillary necrosis. Skin and subcutaneous: Skin rashes (with or without itching).

**When it comes to kids, we understand.**

When parents ask for your help calming post-immunisation fever, there’s a name healthcare professionals have trusted for over 35 years.

- Gentle enough for babies
- Suitable from 2 months*
- Gets to work on fever in just 15 minutes

**Calpol Infant Suspension Syringe available only in 140ml**
Breathing retraining
Since OSA is characterized by disruptions of normal breathing patterns during sleep, ‘breathing retraining’ is gaining in popularity as a treatment approach. Research has shown the effectiveness of ‘breathing retraining’ in normalising dysfunctional breathing patterns. The goal is to normalise each aspect of the breathing pattern for all situations i.e. awake, asleep, at rest, while speaking and during exercise. A survey conducted in 2010 investigated the effectiveness of ‘breathing retraining’ (using the Buteyko method) in over 11,000 sleep apnoea sufferers. The results revealed that over 95 percent of participants had improved sleep; approximately 80 percent were able to cease use of their CPAP machine or dental appliance. Symptoms such as snoring, headaches, restless legs, low concentration levels and decreased energy levels improved in the majority of participants.

Smoking and alcohol
Quitting smoking and not drinking alcohol may improve sleep apnoea symptoms. Alcohol relaxes the throat muscles and causes the airway to collapse.

Positional therapy
In cases of mild sleep apnoea and in patients who only snore when they sleep on their back, symptoms may improve if they sleep on their side. There are a number of products available that patients can wear in bed to prevent them from sleeping on their back.

Drug treatment?
Numerous drugs have been investigated as potential primary therapies for OSA. However, none have been found to prevent or overcome upper airway obstruction sufficiently to justify pharmacological therapy as a primary therapy in the management of OSA. According to the conclusion of a recent (2013) Cochrane Database Systematic Review:

“There is insufficient evidence to recommend the use of drug therapy in the treatment of OSA.”

References
Birch M (2010) Sleep apnoea and breathing retraining, Fitzroy (Australia): Buteyko Institute of Breathing and Health
Graham T (2012) Relief from snoring and sleep apnoea, Melbourne: Penguin Group (Australia)
Guimaraes K et al (2009) Effects of Oropharyngeal Exercises on Patients with Moderate Obstructive Sleep Apnoea Syndrome, American Journal of Respiratory and Critical Care Medicine, Volume 179
Mckown P (2011) Sleep with Buteyko: Stop snoring, sleep apnoea and insomnia, Moycullen: Buteyko Books
Peters B (2014) What is Myofunctional Therapy? About.com Sleep, April 22
Reading P (2013) ABC of Sleep Medicine, Chichester: Wiley-Blackwell (BMJ Books)
Rosario I (2011) Obstructive sleep apnoea: A review and update, Minneapolis: Minnesota Medicine (Minnesota Medical Association)
Woidtke R (2013) Adult obstructive sleep apnoea: Taking a patient-centred approach, Volume 8, No 7

Sleep apnoea sufferers stop breathing repeatedly as they sleep. Their breathing may stop anything from about 10 to over 100 times per hour of sleep and may not start again for up to a minute or more.
Help support baby’s gut after an episode of gastroenteritis with SMA Lactose Free

SMA Lactose Free is the only whey dominant LF formula in Ireland*

It can take 6-8 weeks to restore baby’s ability to digest lactose after gastroenteritis1. Avoiding lactose may help reduce the duration of diarrhoea2. SMA LF is a lactose free formula which may be used as part of a lactose free diet.

* As of August 2014, as checked via company carelines.


Important Notice: Breast milk is best for babies and breastfeeding should continue for as long as possible. This product must be used under medical supervision. SMA LF is a lactose-free milk based formula for the dietary management of babies and young children who are intolerant to lactose or sucrose, or who are suffering from symptoms such as diarrhoea, tummy ache or wind caused by temporary lactose intolerance. It is suitable as the sole source of nutrition up to 6 months of age, and in conjunction with solid food up to 18 months of age. SMA LF is not suitable for those who are allergic to cows’ milk protein, or who suffer from galactosaemia or require a galactose free diet. ZRI 189/08/14

FOR HEALTHCARE PROFESSIONAL USE ONLY
# 7th Collaborative Conference

**“Meeting the Challenges of Diabetes in Primary care: A hands on approach”**

*Wednesday 24th September 2014*  
*12:00 noon – 6 pm*  
*Oriel House Hotel, Ballincollig, Co. Cork*  
*Approved for ICGP CME/ABA CEU’s*

## Conference Programme:

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>12:00 noon</td>
<td>Registration and Buffet Lunch</td>
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<tr>
<td>2:00 pm</td>
<td>Chairperson; Dr. Tom Molloy, GP Charleville &amp; DiGP Director</td>
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<tr>
<td>2:05 pm</td>
<td>Prof. Henry Smithson, Dept. Of General Practice, UCC.</td>
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<tr>
<td>2:40 pm</td>
<td>“The challenge of Self-management in Long Term Conditions”</td>
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<tr>
<td>3.25 pm</td>
<td>Second Workshop (40 minutes)</td>
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<td>4:10 pm</td>
<td>Tea/Coffee</td>
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<tr>
<td>4.30 pm</td>
<td>Third Workshop (40 minutes)</td>
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<tr>
<td>5.10 pm</td>
<td>Dr. Maeve Durkan, Consultant Endocrinologist</td>
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<tr>
<td>5.50</td>
<td>“The challenge of the Friday afternoon patient…..”</td>
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### Workshop 1

**Case Studies:**  
Elderly, Poly-pharmacy, Individualised Targets  
Dr. Antoinette Tuthill  
(Endocrinologist)  
Cork University Hospital

### Workshop 2

**Detecting and Managing Atrial Fibrillation in Primary Care**  
Professor Stephen Byrne  
(Dept. of Pharmacy UCC)  
& Fiona Barton CNS  
(Cardiovascular)

### Workshop 3

**Hypoglycaemia in Type 2 Diabetes**  
Ms. Angela O’Riordan  
(CNS Diabetes, Kerry)

### Workshop 4

**Physical Activity: the new vital sign!**  
Dr. John O’Riordan, GP, Tower Medical Centre, Cork & Ms. Shirley O’Shea, Senior Health Promotion Officer, HSE

### Workshop 5

**Portion Size and Carbohydrate Awareness**  
Ms. Karen Harrington, (North Cork)  
& Ms. Fiona Rush (North Lee), Senior Community Dietitians, HSE

### Workshop 6

**Preventing Diabetes**  
Ms. Bernadette O’Riordan (CNS Diabetes Prevention), West Cork

### Workshop 7

**Supporting Individuals in Achieving Life Style Changes**  
James O’Mahony, ANP  
(Psychotherapy), HSE

### Workshop 8

**The use of ABPM in the diagnosis of Hypertension**  
Professor Colin Bradley, Head of Dept of General Practice UCC
Resolor® (prucalopride). Selective serotonin (5-HT4) receptor agonist, enterokinetic agent, available as 1 mg and 2 mg film-coated tablets for oral administration, once daily, with or without food, at any time of the day. Indications: Resolor is indicated for symptomatic treatment of chronic constipation in women in whom laxatives fail to provide adequate relief. Dose: Women: ≥18 years, ≥45 years. Start with 1 mg once daily and increase to 2 mg once daily if necessary. Patients with severe renal impairment (GFR <30 ml/min/1.73 m²): 1 mg once daily. Patients with severe hepatic impairment (Child-Pugh class C) start with 1 mg once daily which may be increased to 2 mg if required to improve efficacy and if the 1 mg dose is well tolerated. No dose adjustment required in patients with mild to moderate renal or hepatic impairment. Men, children and adolescents <18 years: not recommended until further data become available.

Contraindications: Hypersensitivity to prucalopride or any of the excipients. Renal impairment requiring dialysis. Intestinal perforation or obstruction due to structural or functional disorder of the gut wall. Obstructive megacolon/megarectum. Severe inflammatory conditions of the intestinal tract, such as Crohn’s disease, and ulcerative colitis and toxic megacolon/megarectum. Precautions: Caution should be exercised when prescribing Resolor to patients with severe hepatic impairment (Child-Pugh class C) due to limited data in patients with severe hepatic impairment. The safety and efficacy of Resolor for use in patients with severe and clinically unstable concomitant disease (e.g., cardiovascular or lung disease, neurologic or psychiatric disorders, cancer or AIDS and other endocrine disorders) have not been established in controlled clinical trials. Caution should be exercised when prescribing Resolor to patients with these conditions especially when used in patients with a history of arrhythmias or ischaemic cardiovascular disease. In case of severe diarrhoea the efficacy of oral contraceptives may be reduced and an additional contraceptive method is recommended. Contains lactose monohydrate. Patients with galactose intolerance, Lapp lactase deficiency or glucose-galactose malabsorption must not take Resolor. Interactions: Prucalopride has a low pharmacokinetic interaction potential. Studies in healthy subjects did not show a clinically relevant effect of prucalopride on the pharmacokinetics of warfarin, digoxin, alcohol, pantoprazole or oral contraceptives. 20% increase in plasma concentrations of erythromycin was found during concomitant administration. The mechanism for this interaction was not clear. Furosemide increased the systemic exposure to prucalopride by 48%. This effect is too small to be clinically relevant. Therapeutic doses of probenecid, cimetidine, erythromycin and pantoprazole did not affect the pharmacokinetics of prucalopride. Pregnancy: Animal studies did not indicate harm. Experinence of Resolor during human pregnancy is limited. Cases of spontaneous abortion have been observed in human clinical studies although, in the presence of other risk factors, the relationship to Resolor is unknown. Resolor is not recommended during pregnancy. Women of childbearing potential should use effective contraception during treatment with Resolor. Lactation: Prucalopride is excreted in breast milk, however at therapeutic doses no adverse effects are anticipated in the breastfed neonatal infant. In the absence of human data Resolor is not recommended during breastfeeding. Effects on ability to drive and use machines: No studies have been performed. Resolor has been associated with dizziness and fatigue, particularly on the first day of treatment, which may affect driving or using machines. Side effects: The most commonly reported side effects in Resolor clinical trials were headache and gastrointestinal symptoms (abdominal pain, nausea, diarrhoea) occurring in about 20% of patients each. These events occur mostly at the start of therapy and usually disappear within a few days whilst continuing Resolor. Other common adverse events in controlled trials included dizziness, vomiting, dyspepsia, renal haematuria, haematospermia, abnormal bowel sounds, palpitations and fatigue. Uncommon adverse events included anaemia, haemorrhagic manifestations, fever and malaise. After the first day of treatment the most common adverse events were reported with similar frequency for Resolor and placebo except nausea and diarrhoea: these remained higher but the difference between Resolor and placebo was smaller (1 to 3%). Adiponectin were reported in 0.7% of placebo patients, 1.0% of 1 mg Resolor patients and 0.7% of 2 mg Resolor patients. As with all new medicines, patients are advised to report any unexpected adverse events to their physician. Legal category: POM. Marketing Authorisation Holder: Shire Pharmaceuticals Ireland Limited, 9 Upper Blackhall Street, Dublin 24, Ireland. Date of preparation: September 2013. Marketing Authorisation Number: EU/1/09/581/001 (1 mg), EU/1/09/581/002 (2 mg). Further information is available from: Shire Pharmaceuticals Ireland Ltd, 9 Upper Blackhall Street, Business Campus, Dublin 24, Ireland. Tel: 01-4297700.


Adverse events should be reported to the Pharmacovigilance Unit at the Irish Medicine Board (IMB) (imbbpharmacovigilance@imb.ie). Information about adverse event reporting can be found on the IMB website (www.imb.ie). Adverse events should also be reported to Shire on 1800 810916.
Eating breakfast is considered to be an important part of a balanced diet and provides a great start to the day. Breakfast eaters generally have higher micronutrient intakes1 and tend to be less overweight2 than breakfast skippers. Children and adolescents who regularly eat breakfast also tend to have a lower body mass index than those who don’t and have a reduced risk of becoming overweight or obese.3,4 Surveys, however, conclude that many children skip breakfast5 and, considering the fact that eating breakfast is thought to improve concentration and learning,6 the promotion of regularly eating breakfast, especially on school days should stay high on the agenda.

The reality of the morning rush when getting ready for work and school is all too familiar. It’s easy to understand how this can lead to breakfast skipping, possibly accounting for the statistic that 1 in 7 children in Ireland fail to eat breakfast every day.7 Skipping breakfast not only reduces nutrient intake it can also affect the ability to learn. Now that children are going back to school, it seems a great opportunity to set a routine and get into the breakfast habit from the start.

Children need an adequate intake of vitamins and minerals to support their slow and steady growth and studies in children suggest that breakfast eaters are more likely to meet their daily nutrient intake guidelines.8 A recent study examining the school-day diet of Irish primary school children found that relative to the overall school-day, food eaten ‘before school’ was lower in saturated fat and sodium, and higher in dietary fibre and many micronutrients.9 Breakfast eaters tend to have higher intakes of essential vitamins and minerals, particularly when they choose cereal and milk for breakfast, as breakfast cereals are often fortified and milk boosts calcium intake.1

The importance of eating breakfast to cognitive performance has been studied in some depth in healthy young adults2 with increasing interest in children and effects on performance.
and learning at school. The primary fuel for the brain is glucose and it is dependent upon a constant supply in the blood stream. When we wake up in the morning we have, in effect, had an ‘overnight fast’ and eating breakfast boosts the levels of glucose in the circulation. Glucose in itself may have a direct effect on cognitive performance and the exact mechanisms of action are not well established and need greater understanding.10

Increasingly, it is accepted that when children eat breakfast it can help improve their mental performance in areas such as problem solving,11 mathematical and creative tasks12 and attention span.13 This effect continues throughout the hours after breakfast, not just after breakfast has been consumed.14,15 The beneficial impact of breakfast consumption is likely to be even greater among children whose nutritional status is compromised.16 However, further research is needed to more fully understand the effect of breakfast in children and adolescents, and to recommend exactly what size and composition of breakfast is optimal for children’s cognitive function.

The importance of breakfast cannot be underestimated, and the evidence for its beneficial effect on overall wellbeing and improved memory is encouraging.18 Breakfast doesn’t have to be a complicated affair – quite the reverse in fact. A bowl of fortified breakfast cereal and milk, perhaps topped with a handful of fruit or with a glass of juice, is quick, tasty and nutritious and is the ideal choice for the whole family.

References
Children are lacking in Vitamin D

All Kellogg's children's breakfast cereals are a source of vitamin D

Why is Vitamin D important? This is an essential nutrient for the normal growth and development of bone in children as vitamin D has a key role to play in the absorption of calcium. It is well established that severe vitamin D deficiency leads to Rickets in childhood.

References:
Parkinson’s disease (PD) is the second most common neurodegenerative disease after Alzheimer’s disease, and affects about 1% of the population over 65 years of age. Although the incidence of PD rises with advancing age, juvenile onset PD (onset under 40 years of age) is well recognised and is associated with identifiable genetic mutations in a significant proportion of cases.

The cause of PD remains unknown. One possibility is that affected individuals may have inherited a predisposition to developing PD and that some environmental exposure may trigger the start of neuronal degeneration. The recent identification of a number of genetic mutations in families with several affected members, has enhanced our understanding of the pathogenesis of neuronal degeneration in PD. These gene mutations result in a number of possible abnormalities including abnormal protein folding/aggregation, defective protein clearance, defective cell resistance to oxidative stress, mitochondrial dysfunction – such abnormalities may contribute to pathogenesis.

Clinical features
The onset of symptoms in PD is often insidious. Patients and their families may pass off the slowness of movement as being a sign of old age, or ‘rheumatism’. Usually a family member notices that the patient has slowed up, become stooped or simply ‘aged’ quickly. This slowness of movement or bradykinesia is the sine qua non of PD. Bradykinesia is readily observed by the patient’s expressionless face, soft voice, small spidery handwriting, stooped posture and absent arm swing with gait testing. Tremor, which is present in 70% of PD patients at the time of diagnosis, characteristically is present only at rest. Some patients also have an action tremor that interferes with eating and other activities. Tremor is a frequent source of embarrassment for patients, especially as it tends to worsen when the patient is under stress or anxious. In addition to tremor and bradykinesia, patients with PD have increased muscle tone or rigidity. Postural instability, tested by standing behind the patient and pulling back the shoulders (having first alerted the patient), tends to occur as the illness advances.
Disturbed sleep is common in PD. This may be multifactorial, due to nocturnal akinesia, nocturia, tremor or the presence of a parasomnia. Patients’ sleeping partners may report symptoms of restless legs syndrome or periodic limb movements of sleep or REM sleep behaviour disorder. This latter syndrome consists of patients acting out their dreams, often shouting and thrashing about, apparently, in an attempt to repel attackers. All of these sleep disturbances are common in PD and contribute to a poor night’s sleep, leading to a poor day thereafter. Low doses of clonazepam (0.5 mg nocte) are particularly effective for patients with REM sleep behavior disturbance.

The presence of prominent postural instability, falls (especially backward falls) or cognitive impairment at the time of diagnosis or within a year or two thereafter suggests that the patient has a form of PD that differs from the more common idiopathic form. Table 2 provides a number of ‘red flags’ that should alert that the patient may have atypical parkinsonism.

### Treatment

The goal is to keep patients in the mainstream of life. It is important to enquire about patients’ routine, work and leisure practices when coming to a decision regarding initiation of treatment. It may be useful to ask “are there any activities that you used to do which you have had to give up?” Patients may have been keen card players but discontinued because of difficulty holding them or because of embarrassment at the presence of tremor. Many patients will not volunteer this kind of information unless it is specifically sought after. If there is a suggestion that the patient is withdrawing from society, either as a direct result of their Parkinsonism or as a result of secondary depression this must be taken as evidence of serious disability, and treated aggressively.

In patients with minimal symptoms, it is reasonable to start therapy with rasagiline, selegiline, amantadine, dopamine agonists or an anticholinergic drug. However, some of these drugs may be poorly tolerated in the elderly. Rasagiline and selegiline block one of the main dopamine degradation pathways by inhibiting the B isofrom of monoamine oxidase (MAO-B). The theoretical risk of interaction with the selective serotonin reuptake inhibitors (SSRIs), tri-cyclic antidepressants (TCADs) and non-selective MAO is rarely encountered in clinical practice, and no special diet is required.

Amantadine has a mild symptomatic effect which is often short-lived. The usual maintenance dose is 100 mg tds. Amantadine may cause pedal oedema and should be used with caution in patients with renal impairment; it is also associated with livedo reticularis. Anticholinergic drugs are especially useful for treating tremor, rigidity and dystonia, although they confer a substantial risk of serious side effects in older patients, especially confusion, memory impairment, blurred vision, urinary retention and constipation.

For most patients over the age of sixty, the appropriate initial therapy is with a levodopa preparation. A favourable response to levodopa confirms the diagnosis of idiopathic PD. As mentioned above, the drug is administered with an inhibitor of the enzyme dopa decarboxylase (carbidopa; Sinemet and Duodopa, or benserazide; Madopar) in order to prevent conversion of levodopa to dopamine in the peripheral circulation. Both Sinemet and Madopar are available as immediate release or controlled release preparations.

The goal of therapy should be to restore the patient to normal function, using the minimum dose of levodopa. The clinical effects of levodopa may take several weeks to become apparent, and the temptation to increase either the frequency or strength of the daily dose should be resisted, especially in younger patients who carry the greatest risk of developing motor fluctuations and dyskinesias. In older patients, the risk appears to be substantially less and in fact these patients may require larger doses initially for a clinical effect to become apparent. Most patients will show a clear response to a total daily levodopa dose of 600 mg; patients who show no clinical improvement at 1000 mg/day almost certainly do not have idiopathic PD, and other causes of Parkinsonism should be entertained.

The usual maintenance levodopa dose for initial therapy is 100 mg tds of an immediate release preparation. The dispersible preparation of madopar is best avoided in early disease due to its short half-life. Controlled-release preparations of levodopa are also best avoided as initial therapy, as their bioavailability is less than that of the immediate-release preparations; hence it might be difficult to ascertain in patients with sub-optimal responses whether their poor response is a result of subtherapeutic levodopa dosing or that they are resistant to levodopa therapy (suggesting that the underlying diagnosis is not idiopathic PD).

The risk of transient nausea from levodopa can be offset by pre-treating patients with domperidone (Motilium) 10mg tds for the first three days of treatment. For patients with severe nausea, the dosage escalation phase of levodopa may need to be much slower. It is important to remember that nausea is almost universally transient, and the physician should not conclude that the patient is ‘allergic’ to the drug on the basis of initial GI upset. Metoclopramide (Maxolon) and prochlorperazine (Stemetil) are centrally acting dopamine antagonists and must be avoided in PD. Once nausea subsides, patients should be instructed to take the medication on an empty stomach, preferably one hour before meals. This is necessary as levodopa is absorbed in the intestine via a saturable transport system which is shared with other large neutral amino acids; hence large amounts of dietary protein will inhibit absorption of levodopa. Taking levodopa on an empty stomach is probably less important for patients with early PD, but becomes critical for patients who have developed motor fluctuations who experience ‘dose failures’; in many of these cases, the apparent failure of levodopa to work relates simply to inadequate absorption.
Enhancing dopamine, enhancing lives of patients with Parkinson’s disease

**AZILECT**

**rasagiline**

A balance of efficacy, tolerability and convenience

Abbreviated Prescribing Information. For full prescribing information refer to the Summary of Product Characteristics. Name: Azilect® 1mg tablets. Active Substance: Rasagiline mesilate. Indication: Treatment of idiopathic Parkinson’s disease (PD) as monotherapy (without levodopa) or as adjunct therapy (with levodopa) in patients with end of dose fluctuations. Dosage: 1 mg tablet orally once-daily with or without levodopa. It may be taken with or without food. Elderly: No change in dose is required for elderly patients. Children and adolescents(< 18yr): Not recommended due to lack of data on safety and efficacy. Contraindications: Hypersensitivity to the active substance or to any of the excipients. Concomitant treatment with other monoamine oxidase (MAO) inhibitors, including medicinal and natural products without prescription (e.g. St. John’s Wort) or pethidine. At least 14 days must elapse between discontinuation of rasagiline and initiation of treatment with MAO inhibitors or pethidine. Rasagiline is contraindicated in patients with severe hepatic impairment. Special warnings and precautions: The concomitant use of rasagiline and fluoxetine or fluvoxamine should be avoided. At least five weeks should elapse between discontinuation of fluoxetine and initiation of treatment with rasagiline. At least 14 days should elapse between discontinuation of rasagiline and initiation of treatment with fluoxetine or fluvoxamine. The concomitant use of rasagiline and dextromethorphan or sympathomimetics such as those present in nasal and oral decongestants or cold medications containing ephedrine or pseudoephedrine is not recommended. Caution should be used when initiating treatment with rasagiline in patients with mild hepatic impairment. Rasagiline use in patients with moderate hepatic impairment should be avoided. Parkinson’s disease is associated with a higher risk of skin cancer; any suspicious skin lesions should be evaluated by a specialist. Interactions: In view of the MAO inhibitory activity of rasagiline, antidepressants should be administered with caution. Co-administration of rasagiline and ciprofloxacin (or other potent inhibitors of CYP1A2) is cautioned. There is a risk that the plasma levels of rasagiline in smoking patients could be decreased. See also interactions listed in the contraindications and special warning sections. Pregnancy and lactation: Caution should be exercised when prescribing to pregnant women. Caution should be exercised when rasagiline is administered to a breast-feeding mother. Driving: Patients should be cautioned about operating hazardous machines, including motor vehicles until reasonably certain Azilect does not affect them adversely. Adverse reactions: Monotherapy: Very common (≥1/10): headache. Common (≥1/100 to <1/10): Influenza, skin carcinoma, leucopenia, allergy, depression, hallucinations, vertigo, conjunctivitis, angina pectoris, rhinitis, flattulence, dermatitis, musculoskeletal pain, neck pain, arthritis, urinary urgency, fever, malaise. Uncommon (≥1/1000 to <1/100): Decreased appetite, cerebrovascular accident, myocardial infarction, vasculobulbar rash. Adjunctive therapy: Very common (≥1/10): Dyskinesia. Common (≥1/100 to <1/10): Decreased appetite, hallucinations, abnormal dreams, dystonia, carpal tunnel syndrome, balance disorder, orthostatic hypotension, constipation, abdominal pain, nausea, vomiting, dry mouth, rash, arthralgia, neck pain, decreased weight, fall. Uncommon (≥1/10000 to <1/100): Skin melanoma, confusion, cerebrovascular accident, angina pectoris. Post-marketing: serotonin syndrome was reported with use of antidepressants and rasagiline. Elevated blood pressure and rarely hypertensive crisis have been reported with concomitant ingestion of rasagiline and tyramine rich foods. Overdose: Symptoms reported with Azilect doses ranging from 3mg to 100mg included dysphoria, hypomania, hypertensive crisis and serotonin syndrome. There is no specific antidote. Patients should be monitored and the appropriate symptomatic and supportive therapy instituted. Legal Category: POM. Marketing Authorisation Holder: Teva Pharma GmbH, Germany. Marketing Authorisation Numbers: EU/1/104/304/003 Tablets 1mg 28 pack. Further information may be obtained from Lundbeck (Ireland) Ltd., 7 Riverwalk, Citywest Business Campus, Citywest, Dublin 24, Ph: 01-4689900. Date of Preparation November 2010. References: 1. Azilect SPC. 2. Biglan et al, Mov.Dis. Vol.21, No.5, 2006 pp.616-623. 3. J.F.M Finberg, M.B.H Youdim / Neuropsychology 43(2002) 1110-1118. 4. Hoy & Keating, Drugs 2012;72(5):643-669.
resulting nocturnal akinesia. This is best treated by the addition of a controlled release preparation of levodopa at night. For patients with more frequent wearing off between doses, the addition of entacapone, an inhibitor of one of the degradative enzymes of dopamine, catechol-o-methyl transferase (COMT) may be effective.

Freezing of gait is a common symptom in patients with advancing disease, and a frequent cause for falling forwards. Freezing is often manifested as difficulty initiating walking, or getting stuck in doorways. Patients may describe their feet as being like they are stuck in wet cement. It is important to ascertain whether the freezing is a manifestation of being off, or whether it is occurring regardless of the state of the patient’s motor function. The latter is notoriously difficult to treat and usually refractory to medication. It may respond transiently to the use of visual cues, such as placing taped lines on the floor, or using a modified cane. For wearing off and ‘off’ – related freezing, the treatment is to augment the amount of dopamine available.

Treatment of dyskinesias
Dyskinesias typically occur as the plasma levels of levodopa reach a peak between doses; the movements are choreiform and random. Less common are dyskinesias which occur at the beginning of a dose interval or at the end (biphasic dyskinesias, also known as dyskinesia-improvement-dyskinesia [D.I.D]). This type of dyskinesia tends to be more dystonic in nature, with sustained posturing of an extremity. Unlike peak-dose dyskinesias, which are often not distressing to the patient, biphasic dyskinesias may be painful.

Treatment of refractory motor fluctuations/dyskinesias
It is widely believed that motor fluctuations and dyskinesias are the result of pulsatile stimulation of dopamine receptors in the striatum. In support of this is the experimental finding that by providing continuous dopaminergic stimulation using intravenous levodopa infusions, motor fluctuations do not develop. Unfortunately it has been difficult to provide a form of continuous dopaminergic stimulation that might be useful in the clinical setting. For patients with refractory motor fluctuations, use of apomorphine, a parenterally-administered short-acting dopamine agonist is a useful option.

Falls
Falls are common and often preventable in patients with PD. There are several possible causes including freezing and sudden ‘off’ periods, orthostatic hypotension and postural instability. The history may help determine the cause: backward falls are most often a result of postural instability, which is a symptom of relatively advanced PD. If backward falls occur within the first year or two of the diagnosis, an atypical form of Parkinsonism, such as progressive supranuclear palsy (PSP) or multiple systems atrophy (MSA) is possible. Serious consideration of the use of a wheelchair should be given to patients with backward falls. Orthostatic hypotension may be a result either of the Parkinsonism itself or the medications, especially selegiline and dopamine agonists. Falls due to freezing and off periods may respond to adjustment of the levodopa regimen as discussed above.

Surgical therapy for advanced PD
Surgical treatments for PD are not a new concept. Effective surgical interventions were available in the 1960s in the pre-levodopa era. It was found that placing lesions in the thalamus

Non-pharmacological therapy
For patients whose activity level is curtailed by motor symptoms, an evaluation by a physiotherapist with experience in treating PD is invaluable, particularly if the patient is concurrently starting drug therapy. A home exercise and aquatherapy are also useful modalities of treatment. Patients should be encouraged to remain informed about the disease and any therapeutic developments, possibly through involvement in a support group. It must be emphasised that support groups are not for everyone, and, while many patients feel empowered and better informed through such groups, other patients become despondent seeing fellow patients with advanced disease. It is useful to educate patients about the spectrum of disease, and that it is not incompatible with a long and fulfilling life in many cases.

It should be expected that for the majority of patients, worsening of their condition as a result of progression of disease ought not to occur within the first 3 to 5 years of treatment. If a patient and their family return complaining of worsening of symptoms before this time, a careful search should be made for alternative explanations for the apparent worsening. The patient should be questioned about medications (compliance), wearing off phenomenon, sleep quality, depression and co-morbid medical conditions. Most causes of worsening symptoms can be attributed to one or a combination of the above factors. Teasing out the details of a complicated medication regimen requires patience of both patient and clinician.

Treatment of motor fluctuations
One of the early signs of the development of motor fluctuations in a patient is the wearing off phenomenon. Wearing off can be elicited by asking patients whether or not they feel the first tablet of the day kick in; this implies that there has been some decrement in the response to levodopa overnight, often with
Diabetic RetinaScreen offers free regular eye screening and treatment of diabetic retinopathy to people with diabetes aged 12 years and older.

Diabetic retinopathy is a common complication of diabetes, which over time can affect eyesight. The screening process is simple, available locally, and can detect diabetic retinopathy before you notice any changes in your sight.

If you have diabetes, make sure you’re registered for your free appointment.

FIND OUT MORE:
Freephone 1800 45 45 55 | www.diabeticretinascreen.ie

Diabetic RetinaScreen is part of the Health Service Executive
(thalamotomy) or globus pallidus (pallidotomy) reversed many of the symptoms of PD, especially tremor and bradykinesia. This form of treatment was largely abandoned following the discovery of levodopa, but re-emerged in the 1990s once the long-term complications of levodopa therapy became apparent. More recently, surgical therapies have centered on electrically stimulating the thalamus, globus pallidus or subthalamus using deep brain stimulation (DBS). DBS works by inactivating those areas of the basal ganglia which are overactive in PD, possibly by overriding the normal neuronal electrical activity within those structures.

Non-motor manifestations of PD

Constipation
Constipation is almost universal in PD, and is in part medication related (especially anticholinergics) and in part due to autonomic dysfunction through gut hypomotility. The following approach may be helpful:
- Increase bulk in the diet: bran, psyllium (e.g. Metamucil), methylcellulose.
- Increase fluid intake to eight tumblers per day.
- Increase fruit and vegetable intake.
- Exercise
- Avoid constipating medications (anticholinergics, TCADs, oxybutynin).
- Stool softener (e.g. docusate)
- Osmotic laxative (e.g. Movicol).

Orthostatic hypotension
Patients complain of lightheadedness, dizziness or ‘fogginess’. Treatment entails:
- Discontinue offending medications including anti-hypertensive drugs, selegiline and dopamine agonists.
- Increase daytime fluid intake,
- Liberalise salt intake,
- Compression stockings
- Small regular meals.
- Fludrocortisone (0.1-0.4 mg/day)
- Midodrine (2.5-5 mg q 4 hourly until late afternoon).

Depression and anxiety
Depression affects at least 30% of PD patients. Psychomotor symptoms may be difficult to differentiate from bradykinesia. It remains unclear to what extent depression represents a part of the symptom complex of PD or whether it is a reactive disorder in the setting of a debilitating disease. Patients often complain of anxiety during off-periods which are rapidly reversed when they turn on, suggesting a direct of dopamine on mood. Whatever the cause, depression should be treated aggressively.

Psychosis
The development of psychotic symptoms in a patient with PD presents a major management problem. The most common cause is medication related. Patients typically present initially with mild, non-threatening visual hallucinations which over time become associated with paranoid features and a gradual loss of insight. In these cases all medications with the exception of sinemet should be withdrawn (anticholinergics need to be slowly tapered), and levodopa reduced to the lowest acceptable dose. Night-time dosing should be minimised, preferably using controlled release preparations. If an antipsychotic is required, quetiapine (Seroquel) is associated with the fewest extrapyramidal side-effects; half of a 25 mg tablet at night may be a sufficient dose initially. Risperidone and olanzepine should be avoided if at all possible on account of worsening the motor symptoms. Clozapine is the only proven medication for treatment of psychotic symptoms in PD, but requires regular blood monitoring on account of the risk of agranulocytosis; nonetheless, in refractory cases, this agent can be most effective and prevent unnecessary nursing home placement.

Cognitive decline and dementia
It is important to remember that cognitive disturbance in PD may not be related to the disease itself, but arise from infection, organ failure, medications, subdural haematoma, depression, Lewy body dementia or coincident Alzheimer’s disease. As many as 60%-80% of PD patients will develop dementia. Every effort needs to be made to eliminate potentially reversible causes by appropriate use of CT scanning, vitamin B12 estimation and general medical assessment. A proportion of patients with Parkinsonism who develop dementia or psychotic symptoms within a year of diagnosis will turn out to have Lewy body dementia. In these patients, acetylcholinesterase inhibitors, such as donepezil (Aricept) or rivastigmine (Exelon) may be helpful, although they are associated with increase drooling and urinary incontinence in some patients.

If there is a suggestion that the patient is withdrawing from society, either as a direct result of their Parkinsonism or as a result of secondary depression this must be taken as evidence of serious disability, and treated aggressively.
COPD, a common preventable and treatable disease, is characterized by persistent airflow limitation that is usually progressive and associated with an enhanced chronic inflammatory response in the airways and the lung to noxious particles or gases. COPD is a preventable and treatable disease. It has two components:

- **its pulmonary** component is characterised by airflow limitation that is not fully reversible
- FEV\(_1\):FVC ratio <70%, post-bronchodilator (measured via spirometry)
- **its extrapulmonary** effects (weight loss, nutritional abnormalities, skeletal muscle dysfunction, and increased risk for myocardial infarction, osteoporosis, etc.) contribute to the severity in individual patients.

**Epidemiology**

An estimated 210 million people have COPD worldwide. Ireland has an estimated 110,000 COPD patients (Murtagh et al, 2005). The worldwide prevalence of COPD is >10%. More than 3 million people died of COPD in 2005, accounting for 5% of all deaths globally that year. Worldwide COPD ranked as the 4th leading cause of death and is expected to become the 3rd leading cause by 2030. Total deaths from COPD are projected to increase by >30% in the next 10 years without interventions to cut risks, particularly exposure to tobacco smoke. There is an increasing prevalence of COPD in women (MMWR, 2008) with an increased risk of COPD in the economically deprived (Prescott et al, 1999) as socioeconomic status is inversely related to risk of COPD.

In relation to other diseases, COPD is the 4\(^{th}\) leading cause of morbidity and mortality, the leading cause of disability and the 6\(^{th}\) in prevalence of major conditions (Table 1) (GOLD, 2013)

**Risk factors**

The risk factors for COPD include:

- Exposure to particles such as tobacco smoke, occupational dusts, organic and inorganic, indoor air pollution from heating and cooking with biomass in poorly ventilated dwellings and outdoor air pollution
- Lung growth and development
- Gender – males are more susceptible than females
- Age – risk increases with age
- Respiratory infections
- Socioeconomic status
- Asthma/bronchial hyper-reactivity
- Chronic bronchitis

**Pathophysiology of COPD**

COPD is characterised by airflow limitation, air trapping and decreased exercise tolerance. Frequently, by the time the patient presents with symptoms, many have progressed to moderate COPD. Many patients who have mild COPD on their spirometry will not have symptoms. When airflow is limited, air gets trapped in the lungs which is first recognised by the patient on exercising. Air trapping impacts on the patient by effecting their ability to inhale. It also affects their exercise tolerance and causes patients to limit their activities.

---

**Table 1: Prevalence of COPD in relation to other major conditions**
Diagnosis and assessment
The diagnosis and assessment of COPD involves assessing symptoms, airflow limitation, risk of exacerbations and co-morbidities.

Assessing symptoms
The characteristic symptoms of COPD are chronic and progressive dyspnoea, cough, and sputum production that can be variable from day-to-day. Dyspnoea is usually progressive, persistent and characteristically worse with exercise. Patients may have an intermittent and/or unproductive cough but many patients will commonly cough up white/clear non-purulent sputum. Symptoms can be assessed using the COPD Assessment Tool (CAT test) and the Medical Research Council Dyspnoea (MRC) scale. The CAT test is an 8-item measure of health status impairment in COPD (http://catestonline.org). The MRC scale is illustrated in Table 2.

Table 2: Medical Research Council Scale

<table>
<thead>
<tr>
<th>mMRC Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>I only get breathless with strenuous exercise.</td>
</tr>
<tr>
<td>1</td>
<td>I get short of breath when hurrying on the level or walking up a slight hill.</td>
</tr>
<tr>
<td>2</td>
<td>I walk slower than people of the same age on the level because of breathlessness, or I have to stop for breath when walking on my own pace on the level.</td>
</tr>
<tr>
<td>3</td>
<td>I stop for breath after walking about 100 meters or after a few minutes on the level.</td>
</tr>
<tr>
<td>4</td>
<td>I am too breathless to leave the house or I am breathless when dressing or undressing.</td>
</tr>
</tbody>
</table>

Assessing airflow limitation
Airflow limitation is assessed by spirometry. An FEV₁/FVC ratio post bronchodilator of less than 70% indicates airflow limitation. The severity of airflow limitation is then assessed by the FEV₁. (Table 3). The bronchodilator of choice used for reversibility testing is Salbutamol 200mcg – 400mcg via spacer device with the spirometry repeated 15 minutes post administration.

Table 3: GOLD (2014) classification based on FEV₁

<table>
<thead>
<tr>
<th>GOLD 1: Mild</th>
<th>FEV₁ ≥ 80% predicted</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOLD 2: Moderate</td>
<td>50% ≤ FEV₁ &lt; 80% predicted</td>
</tr>
<tr>
<td>GOLD 3: Severe</td>
<td>30% ≤ FEV₁ &lt; 50% predicted</td>
</tr>
<tr>
<td>GOLD 4: Very Severe</td>
<td>FEV₁ &lt; 30% predicted</td>
</tr>
</tbody>
</table>

*Based on Post-Bronchodilator FEV₁

Assessing risk of exacerbations
If the patient has had two exacerbations or more within the last year or an FEV₁ <50% of predicted value, they are considered high risk for exacerbations in the future.

Assessing co-morbidities
Patients with are at increased risk for:
- Cardiovascular diseases
- Osteoporosis
- Respiratory infections
- Anxiety and depression
- Diabetes
- Lung cancer

*These co-morbid conditions may influence mortality and hospitalizations and should be looked for routinely, and treated appropriately (GOLD, 2014)

Combining assessments and classification of COPD
GOLD (2014) recommend combining the assessments from airflow limitation, risk of exacerbations and symptoms (Table 4) to classify patients as A, B, C, or D (Table 5). This classification assists
Eklira® Genuair 322 micrograms inhalation powder

Abbreviated Prescribing Information. Please consult the Summary of Product Characteristics (SPC) for the full prescribing information.

Presentation: Inhalation powder in a white inhaler with an integral dose indicator and a green dosage button. Each delivered dose contains 375 µg aclidinium bromide equivalent to 322 µg of aclidinium. Also, contains lactose. Use: Maintenance bronchodilator treatment to relieve symptoms in adult patients with chronic obstructive pulmonary disease (COPD).

Use: For inhalation use. Recommended dose is one inhalation of 322 µg aclidinium twice daily. Patients should be instructed on how to administer the product correctly. No dose adjustments are required for elderly patients, or those with renal or hepatic impairment. No relevant use in children and adolescents.

Contraindications: Hypersensitivity to aclidinium bromide, atropine or its derivatives, including ipratropium, oxitropium or tiotropium, or to any of the excipients.

Warnings and Precautions: Do not use in asthma. Stop use if paradoxical bronchospasm occurs and consider other treatments. Do not use for the relief of acute episodes of bronchospasm. Use with caution in patients with heart failure functional classes III and IV. Do not use in patients with symptomatic prostatic hyperplasia or bladder-neck obstruction or with narrow-angle glaucoma. Do not use in patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption.

Side-effects: Common (1-10%): Sinusitis, nasopharyngitis, headache, cough, diarrhoea. Uncommon (0.1-1%): Blurred vision, tachycardia, dysphonia, dry mouth, rash, pruritus, urinary retention. Rare (0.01-0.1%): Hypersensitivity. Not known: Angioedema.

Pack sizes: Carton containing 1 inhaler with 60 unit doses.

Legal category: POM

Marketing Authorisation Number: EU/1/12/778/002. Marketing Authorisation holder: Almirall, S.A., Ronda General Mitre 151, ES-08022, Barcelona, Spain. Marketer by: A. Menarini Pharmaceuticals Ireland Ltd., Castlecourt, Monkstown Farm, Monkstown, Dun Laoghaire, Co. Dublin. Further information is available on request to A. Menarini Pharmaceuticals Ireland Ltd. or may be found in the SPC. Last updated: May 2014.

There is an increasing prevalence of COPD in women with an increased risk of COPD in the economically deprived as socioeconomic status is inversely related to risk of COPD.

Other investigations

Chest X-ray: Seldom diagnostic but valuable to exclude alternative diagnoses such as malignancy and establish the presence of significant co-morbidities such as heart failure.

Lung Volumes and Diffusing Capacity: Help to characterize severity, but not essential to patient management. These tests are carried out in pulmonary function laboratories.

Oximetry and Arterial Blood Gases: Pulse oximetry can be used to evaluate a patient's oxygen saturation and need for supplemental oxygen therapy.

Alpha-1 Antitrypsin Deficiency Screening: Should be performed when COPD develops in patients of Caucasian descent under 45 years or with a strong family history of COPD.

Exercise Testing: Objectively measured exercise impairment, assessed by a reduction in self-paced walking distance (such as the 6 min walking test) or during incremental exercise testing in a laboratory, is a powerful indicator of health status impairment and predictor of prognosis.

Differential diagnosis

Asthma is the primary differential diagnosis (Table 4). Other differential diagnoses include congestive cardiac failure, lung cancer, TB, alpha one antitrypsin deficiency and cor pulmonale.

<table>
<thead>
<tr>
<th>COPD</th>
<th>ASThma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset in mid-life</td>
<td>Onset early in life (often childhood)</td>
</tr>
<tr>
<td>Symptoms slowly progressive</td>
<td>Symptoms vary from day to day</td>
</tr>
<tr>
<td>Long smoking history</td>
<td>Symptoms worse at night/early morning</td>
</tr>
<tr>
<td>Allergy, rhinitis, eczema present</td>
<td>Family history of asthma</td>
</tr>
</tbody>
</table>

Table 5: Classification of COPD (GOLD, 2014)

<table>
<thead>
<tr>
<th>Patient</th>
<th>Characteristic</th>
<th>Spirometric Classification</th>
<th>Exacerbations per year</th>
<th>mMRC</th>
<th>CAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Low risk</td>
<td>GOLD 1-2</td>
<td>≤1</td>
<td>0-1</td>
<td>&lt;10</td>
</tr>
<tr>
<td>B</td>
<td>Low risk</td>
<td>GOLD 1-2</td>
<td>≤1</td>
<td>≥2</td>
<td>≥10</td>
</tr>
<tr>
<td>C</td>
<td>High risk</td>
<td>GOLD 3-4</td>
<td>≥2</td>
<td>0-1</td>
<td>&lt;10</td>
</tr>
<tr>
<td>D</td>
<td>High risk</td>
<td>GOLD 3-4</td>
<td>≥2</td>
<td>≥2</td>
<td>≥10</td>
</tr>
</tbody>
</table>
Modern aerosol device with a patient-facing dose counter

Flutiform® (FLUTICASONE PROPIONATE AND FORMOTEROL FUMARATE) Pressurised Inhalation Suspension

Indications: Flutiform® is indicated for the regular treatment of asthma in adults and adolescents (12 years and over), where use of a combination product (inhaled corticosteroid [ICS] and long-acting β2-agonist [LABA]) is appropriate.

Flutiform® contains fluticasone propionate 50/125 µg, 50/250 µg and 50/500 µg and formoterol fumarate 10 µg. It is supplied as a pressurised, single dose inhaler containing a dose counter (a patient-facing dose counter). The dose counter is considered an integral part of the inhaler and should be replaced when the dose indicator is getting near zero.

**Flutiform**

Potentially serious side-effects: hyperglycaemia; depression; aggression; behavioural changes (predominantly in children); paradoxical airway obstruction; precipitin reaction; immediate hypersensitivity reactions (including anaphylaxis); mucosal ulcers; hypokalaemia; hypokalaemia with high doses of β2-agonists or concomitant treatment with β2-agonists and drugs that can induce hypokalaemia; risk of pregnancy or potentially serious side-effects; hyperglycaemia; depression; aggression; behavioural changes (predominantly in children); paradoxical airway obstruction; precipitin reaction; immediate hypersensitivity reactions (including anaphylaxis); mucosal ulcers; hypokalaemia; hypokalaemia with high doses of β2-agonists or concomitant treatment with β2-agonists and drugs that can induce hypokalaemia; risk of pregnancy or potentially serious side-effects.
Management

Key Points for therapeutic options for COPD (GOLD, 2013)

Smoking cessation has the greatest capacity to influence the natural history of COPD. Healthcare providers should encourage all patients who smoke to quit.

Pharmacotherapy and nicotine replacement reliably increase long-term smoking abstinence rates.

All COPD patients benefit from regular physical activity and should repeatedly be encouraged to remain active.

Appropriate pharmacologic therapy can reduce COPD symptoms, reduce the frequency and severity of exacerbations, and improve health status and exercise tolerance.

None of the existing medications for COPD has been shown conclusively to modify the long-term decline in lung function.

Influenza and pneumococcal vaccination should be offered depending on local guidelines.

Counseling delivered by physicians and other health professionals significantly increases quit rates over self-initiated strategies. Even a brief (3-minute) period of counseling to urge a smoker to quit results in smoking quit rates of 5-10%. Smoking cessation should be encouraged at all severities of the condition.

Nicotine replacement therapy (nicotine gum, nasal spray, transdermal patch, sublingual tablet, or lozenge) as well as treatment with Varenicline reliably increases long-term smoking abstinence rates and are significantly more effective than placebo (GOLD, 2014).

2. Pulmonary rehabilitation

Pulmonary rehabilitation has been proven to provide significant benefits in reducing dyspnoea, fatigue and exacerbations and improving quality of life in people with COPD. Although an effective pulmonary rehabilitation programme is 6 weeks, the longer the programme continues, the more effective the results. If exercise training is maintained at home, the patient’s health status remains above pre-rehabilitation levels.

Pharmacological management of stable COPD

Maintaining and maximising bronchodilation is key in COPD. This is done by the use of long-acting bronchodilators (LABAs), long-acting

Non-pharmacological therapeutic management of COPD

1. Smoking cessation

Smoking cessation is of paramount importance in the management of COPD regardless of disease severity. Support given by health professionals significantly increases quit rates over self-initiated strategies. Even a brief (3-minute) period of counseling to urge a smoker to quit results in smoking quit rates of 5-10%.

Nicotine replacement therapy (nicotine gum, inhaler, nasal spray, transdermal patch, sublingual tablet, or lozenge) as well as pharmacotherapy with varenicline, bupropion, and nortriptyline reliably increases long-term smoking abstinence rates and are significantly more effective than placebo.

Dyspnoea is usually progressive, persistent and characteristically worse with exercise.

Table 6: COPD vs Asthma

<table>
<thead>
<tr>
<th>Key Points for diagnosis &amp; assessment of COPD (GOLD, 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A clinical diagnosis of COPD should be considered in any patient who has dyspnoea, chronic cough or sputum production, and a history of exposure to risk factors for the disease.</td>
</tr>
<tr>
<td>• Spirometry is required to make the diagnosis; the presence of a post-bronchodilator FEV1/FVC &lt; 0.70 confirms the presence of persistent airflow limitation and thus of COPD.</td>
</tr>
<tr>
<td>• The goals of COPD assessment are to determine the severity of the disease, including the severity of airflow limitation, the impact on the patient’s health status, and the risk of future events.</td>
</tr>
<tr>
<td>• Comorbidities occur frequently in COPD patients, and should be actively looked for and treated appropriately if present.</td>
</tr>
</tbody>
</table>

Table 7: Pharmacological therapeutic options for stable COPD (GOLD, 2014)

<table>
<thead>
<tr>
<th>Patient</th>
<th>Recommended First choice</th>
<th>Alternative choice</th>
<th>Other Possible Treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>SAMA prn or SABA prn</td>
<td>LAMA or LABA or SABA and SAMA</td>
<td>Theophylline</td>
</tr>
<tr>
<td>B</td>
<td>LAMA or LABA</td>
<td>LAMA and LABA</td>
<td>SABA and/or SAMA Theophylline</td>
</tr>
<tr>
<td>C</td>
<td>ICS + LABA or LAMA</td>
<td>LAMA and LABA or LABA and PDE4-inh. or LABA and PDE4-inh.</td>
<td>SABA and/or SAMA Theophylline</td>
</tr>
<tr>
<td>D</td>
<td>ICS + LABA and/or LAMA</td>
<td>ICS + LABA and LABA or ICS+LABA and PDE4-inh. or LABA and LABA or LABA and PDE4-inh.</td>
<td>Carbocysteine SABA and/or SAMA Theophylline</td>
</tr>
</tbody>
</table>
**HOW MUCH IS TOO MUCH?**

- **43%** of mature* drinkers consume alcohol two or more times a week\(^1\)
- During any single drinking occasion **51%** of female and **30%** of male mature* drinkers consumed at a high risk level\(^1\)

Why not discuss drinking habits with your patients today?

<table>
<thead>
<tr>
<th>Daily risk levels of drinking(^2)</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Very High Risk</strong></td>
<td>Over 6 standard drinks</td>
<td>Over 10 standard drinks</td>
</tr>
<tr>
<td><strong>High Risk</strong></td>
<td>4-6 standard drinks</td>
<td>6-10 standard drinks</td>
</tr>
</tbody>
</table>

\(^*\) Aged 30+. 10g alcohol = 1 standard drink. Irish standard drink approximations are one ½ pint of beer; one small glass of wine (12.5% volume); or one pub measure of spirits (35.5 ml). One bottle of wine contains 8 standard drinks.\(^3\)

References:

SEL1/8/13
muscarinic agents (LAMAs), short-acting bronchodilator (SABAs) and short-acting muscarinic agents (SAMAs). Other bronchodilator treatments include theophyllines which require regular patient monitoring as these agents interact with other commonly used drugs. Tables 7, 8 and 9 illustrate the inhaled treatment options for patients with COPD.

The use of inhaled corticosteroids in patients with COPD has been debated at length in recent years and should be reserved for patients who experience more than 2 exacerbations per year as combined therapy is associated with an increased risk of pneumonia (GOLD, 2014).

Phosphodiesterases 4 (PDE4s) are the ‘new kids on the block’ in COPD and are yet to become available in Ireland. Cilomilast and Roflumilast are currently in development. PDE4 is expressed in airway smooth muscle and, in vitro, PDE4 inhibitors relax lung smooth muscle. They also address the inflammatory process associated...
with COPD which is quite different to the inflammatory process in asthma. Selective PDE4 inhibitors are being developed for treating COPD (Brown, 2007) and will become available in Ireland in the near future.

All patients with COPD should be encouraged to have the seasonal Influenza vaccine. Pneumococcal polysaccharide vaccine is also recommended for COPD patients 65 years and older and for COPD patients younger than age 65 with an FEV₁ < 40% predicted.

The use of antibiotics, other than for treating infectious exacerbations of COPD and other bacterial infections, is currently not indicated (GOLD, 2013). Patients with viscous sputum may benefit from mucolytics but the overall benefits are very small. Antitussives are not recommended (GOLD, 2014).

Other therapeutic options for COPD include long term oxygen therapy (LTOT). The long-term administration of oxygen (> 15 hours per day) to patients with chronic respiratory failure has been shown to increase survival in patients with severe and resting hypoxemia. Patients require assessment for LTOT and should be referred to a respiratory physician for assessment and suitability for LTOT. The combination of noninvasive ventilation (NIV) with long-term oxygen therapy may be of some use in a selected subset of patients, particularly in those with pronounced daytime hypercapnia (GOLD, 2014).

Management of acute exacerbations of COPD

An exacerbation is “an acute event characterized by a worsening of the patient’s respiratory symptoms that is beyond normal day-to-day variations and leads to a change in medication.” The most common causes of COPD exacerbations are viral upper respiratory tract infections and infection of the tracheobronchial tree. Diagnosis relies on the clinical presentation of the patient complaining of an acute change of symptoms that is beyond normal day-to-day variation. The aim of treatment is to minimize the impact of the current exacerbation and to prevent the development of subsequent exacerbations (GOLD, 2013). For every exacerbation the patient has, he/she will have a further decline in their FEV₁.

The treatment of exacerbations involves maximizing short-acting bronchodilator therapy with or without short-acting anti-cholinergic therapy. Systemic corticosteroids and antibiotics can shorten recovery time and improve lung function and hypoxemia.

The consequences of acute exacerbations are illustrated in Figure 1.

Managing co-morbidities

Many patients with COPD will have other co-morbidities. The presence of co-morbidities should not alter COPD treatment and co-morbidities should be managed as if the patient does not have COPD. Co-morbidities include ischaemic heart disease, atrial fibrillation, heart failure, hypertension, osteoporosis, anxiety, depression, lung cancer, metabolic syndrome and diabetes mellitus. Many patients will have more than one co-morbidity and consideration should be given to length of appointment when reviewing these patients.

Conclusion

COPD is a complex multiple system condition whereby patients can experience severe limitations to their quality of life. Patients require a skilled practice nurse to assist them in optimising their full potential. Education, empowerment and self-management are key to the success of preventing exacerbations and avoiding hospital admission. Practice nurses are well placed to provide these supports to patients by ensuring optimal inhaler technique, educating the patient in recognition of acute exacerbations and management of these and assisting with smoking cessation. With the development in recent times of a number of new therapies, people with COPD now have much more therapeutic options available to them and health professionals have much more to offer.

References


Global Imitative for Chronic Lung Disease, 2014, COPD Diagnosis, Management and Prevention

Global Imitative for Chronic Lung Disease, 2013, COPD Diagnosis, Management and Prevention.


Many of the conditions focused on during these campaigns are life-threatening and therefore deserve to receive a huge amount of attention. Two of the less well known international awareness days that will take place this October focus on treatable or avoidable conditions: International Stuttering Awareness Day and International Sight Day (No More Avoidable Blindness).

Treatable and avoidable conditions are some of the areas where technological advances can make a huge difference to population health through successful prevention and early diagnosis, especially when tools are accessible and user-friendly.

World Sight Day 9th October 2014
This year’s Call to Action is ‘No More Avoidable Blindness’ and the focus will be on preventing cataracts (the leading cause of blindness in the world) and trachoma. It is estimated that 80% of blindness can be avoided through early diagnosis and simple treatments but the equipment used to diagnose ophthalmic conditions is expensive (approximately €5,000 each), large and specialised. However, this area is a prime example of where smartphone technology can improve diagnostic rates at a fraction of current costs.

Several apps have been developed in the UK and US that...
have the potential to transform eye health. Downloadable apps along with clip-on devices convert any smartphone to an effective diagnostic tool, whether it’s scanning an eye directly or displaying letters on screen for simple vision assessments. The tests themselves can be carried out by minimally trained operators in any part of the world, no matter how remote. Images of the eye can be either assessed within the apps or uploaded to a platform where ophthalmic professionals can view and diagnose them.

These apps will be used in developed countries as well, so expect to see some of them coming to a general practice near you at some point in the future!

**Portable eye exam**

**PEEK APP** A UK-based team of ophthalmologists, hardware designers and software developers recently developed an app called PEEK (Portable Eye Examination Kit) which was a winner at The Design Awards 2014. PEEK consists of an app and a simple device that clips onto a smartphone. The camera of the smartphone is then used to examine the eye and upload information to an online platform. There is a geotagging feature which will make it easier to follow up patients in remote areas. It’s not just cataracts that the app can pick up – the developers say that it can also be used to diagnose blindness, glaucoma, macular degeneration and diabetic retinopathy, as well as picking up signs of brain tumours and haemorrhaging. The App is currently undergoing testing on 5,000 people in Kenya. See [www.peekvision.org](http://www.peekvision.org) to keep an eye on progress, studies and developments.

**EyeCatra** is one of a number of eye-testing apps that have been developed by the Camera Culture Media Lab at Massachusetts Institute of Technology.

The Catra App sweeps a beam of light across the eye to detect cloudy areas which can indicate the onset of cataracts in their early stages. While standard testing equipment gives results on a scale of 1 to 4, it is claimed that this app actually provides more information because it creates a map of cloudy areas, showing exact position, size, shape and density of the cataract. It also picks up changes in the lens that haven’t yet become opaque. It is expected that in the future specific areas of cataracts could be treated, avoiding complete surgical removal. If this is the case, specific mapping of the cataract will be vital. When the idea was pitched in 2011, it was estimated the cost of the app and clip-on device would cost €4.99.

For more information see the MIT webpage [http://web.media.mit.edu/~pamplona/CATRA/](http://web.media.mit.edu/~pamplona/CATRA/)

**Blood glucose**

Apps to read blood glucose levels via snapshots of the eye will be of use to anyone working in general practice (particularly in countries like Ireland that have high rates of undiagnosed diabetes): a San Diego-based company called Freedom Meditech raised $7 million in 2013 to roll out a new medical technology that would enable optometrists and ophthalmologists to screen their patients for diabetes during routine eye exams. The device that was initially developed costs approximately €35,000. However, another start-up company has been working on harnessing this technology and developing a smartphone app that would measure glucose levels in the aqueous humour by calculating changes in the shape of the iris. The app on any individual’s smartphone would be programmed to give personalised readings for that person via continuous use and regular inputting of data such as blood glucose levels, so that eventually the app would measure the levels accurately without...
the need for blood tests. The title of the article announcing this news on MedCityNews said it all: ‘Could selfies someday replace the finger prick for testing blood sugar?’ For news on development and rollout of this app check [http://www.irisense.net/](http://www.irisense.net/).

In recent months, Google partnered with Novartis to work on developing a contact lens that measures glucose levels in the eye. There is no expected date for availability as the technology is at an early stage, but it represents an exciting development – certainly one that would be welcomed by those whose daily lives are marred by the pain and inconvenience of regular finger-pricking.

**International Stuttering Awareness day 22nd October 2014**

Each year groups that support those who stutter work closely together to campaign for equal access to standardised treatment programmes as well as public awareness. This year’s slogan is ‘We Speak with One Voice’.

There are now apps that help sufferers to practise speech patterns in the privacy of their own homes, to continue exercises given by their speech therapist, or as stand-alone self-directed exercises.

The Stutter Help Trial App is an android application that provides techniques for people to control their speech fluency, slow down the speech rate, boost confidence for people who stutter or stammer while speaking. It can be used as a part of speech therapy.

This application provides techniques forutters to practice, including Delayed Auditory Feedback, Metronome, Mirror, Add Words, Finger Tapping and Yoga.

Healthcare professional consulted: speech language pathologist and audiologist. Downloaded: over 10,000 times. Average rating: 3.9 out of 5

cost: Trial version is free. Pro version is €3.95

The Proactive Speaking (PRO90D) Mobile Speech Trainer gives you a different range of tools than the ones described above. This app connects you directly with a speech coach via video, audio, live weekly programming, and webinars. Features include Mental Trainer, Interactive Video Trainer, Practice Session Speech Recorder, Skill...

and Situation Tracker, Slide Scale Practice Rating Tool, Practice Session Scheduler and Reminder, Journal and Note-Taker, PDF Guides and Book, Regular Live Streaming Events and Special Webinars.

Cost: 30 day trial is free. Lifetime access is €149.

**MPIStutter** is an iphone app supporting Modifying Phonation Intervals (MPI) stuttering therapy. It ‘analyzes the user’s vocal fold activity and trains him or her to eliminate too-rapid speech elements and speak fluently at a normal speaking rate’. MPIStutter requires wearing a throat microphone to accurately monitor vocal fold activity. In a study of MPI stuttering therapy, five adult stutterers were trained to use MPI software in a speech clinic. They then used the software on their own, without supervision by Speech Therapists. They practised 2-3 hours per day for 2-3 weeks. All five reached ‘near zero’ stuttering on business-related telephone calls (a stressful speaking situation). Therapy was then discontinued. One year later all five subjects had maintained their

‘Could selfies someday replace the finger prick for testing blood sugar?’

speech fluency. The study was later published in the *Journal of Speech, Language and Hearing Research*.

This app and other devices that assist those who stutter are available from CasaFutureTechnologies.com, a company founded by a previously severe stutterer who discovered a solution to his problem (after many years of different treatments) during a call on a faulty phone! The echo of his voice reminded him of Delayed Auditory Feedback (a common treatment for stuttering) and he started manufacturing devices and technology to treat the condition.

Cost: €89.99

Apps and devices come and go and there are thousands to choose from, so the ones sampled above are just a small snapshot of the various technologies being developed at the moment around the world. Of course, dependability and accuracy will be absolutely crucial to the success of these technologies, but there is every reason to be hopeful that patients and healthcare professionals in the near future will have access to cheap and practical solutions to make progress in the battle against avoidable diseases and treatable conditions.
It is presumed that an adult has the capacity to consent to, or refuse, treatment unless the contrary can be established. This capacity is known as ‘ordinary capacity’ in a medical context. It is also presumed that an adult has the capacity to make a will unless the contrary can be proven. The capacity required to make a will is called ‘testamentary capacity’. The law sets out different tests to be applied in order to establish each type of capacity.

**Ordinary Capacity – the ‘C’ test**

The test to establish ordinary capacity in Irish law follows the English High Court decision in *Re: C [1994]*.

The test is in three parts and the patient must pass all three, as follows:

1. Does the patient comprehend and retain treatment information?
2. Does the patient believe that information?
3. Does the patient weigh that information, balancing risks and needs to arrive at a choice?

**Case**

C, a 68 year old man who suffered from chronic paranoid schizophrenia. He was detained in a special hospital where the medical team would not assure him that they would not – at some time in the future – carry out an amputation to treat gangrene on his foot. The team believed that C was incapacitated as a result of his mental illness. As it was believed by a vascular surgeon that C’s chances of survival were less than 20% if he did not have the amputation, the team would not give C the assurance that they would not amputate in the future. C sought an order from the English High Court that he had capacity to decide to refuse the surgery. The court found that C did have capacity as he had established:

1. That he could comprehend and retain the treatment information
2. That he believed the information and,
3. That he could weigh that information, balancing risks and needs to arrive at a choice. Interestingly, the court came to this decision despite C exhibiting delusions of being a famous doctor.

In some incapacity cases, for instance, a Ward of Court, some other person may have the legal authority to make decisions on behalf of the adult patient. In other circumstances, where there appears to be a lack of capacity and no other person has the legal authority to make decisions on behalf of the adult patient, necessary medical treatment should not be denied. Such treatment should be given where the doctors decide that it is in

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**Interestingly, the court came to this decision despite C exhibiting delusions of being a famous doctor.**

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the best interests of the patient to do so. Factors to consider in such a scenario include:

(a) Treatment providing best clinical benefit for the patient, involving all health professionals in the patient’s care
(b) The patient’s past and present wishes
(c) The views of relatives or others who may know the patient’s wishes or beliefs, and
(d) Whether the patient’s capacity may improve.

Testamentary capacity
Testamentary capacity is different to ordinary capacity. Testamentary capacity is the capacity to make a will and it is referred to as being of ‘sound disposing mind’ in the Succession Act, 1965. The legal definition of ‘sound disposing mind’ was set out in the English decision of Banks v Goodfellow (1870) and has been approved and applied in Irish law. The court held in Banks v Goodfellow that in order to be of ‘sound disposing mind’, the testator must satisfy the following three conditions:

1. He/she must know and understand that he/she is making a will
2. He/she must know the nature of his/her estate, what assets or property he/she is entitled to dispose of, and
3. He/she must show that he/she considered the entitlements or possible claims to his/her estate by other parties.

The above criteria may be satisfied during a lucid period even though otherwise the patient does not have capacity.

It is clear that a high level of mental capacity is required in order to be able to make a valid will.

Practical examples
Mr Man is 80 years old and his doctor, Dr Cure, has known him for 30 years. Dr Cure’s assistant, Nurse Cure has also known Mr Man for many years. Mr Man’s daughter, Lucy, has explained to Nurse Cure that her dad has recently become very forgetful. Nurse Cure was aware that Mr Man had lived alone and was very self-sufficient but a few months ago he went to live with Lucy. Mr Man is making a will and has made an appointment to see Dr Cure regarding his testamentary capacity. Mr Man’s solicitor has some doubt about Mr Man’s capacity and is seeking Dr Cure’s opinion. Dr Cure asks Nurse Cure to assist her in her assessment of capacity.

As set out above, testamentary capacity is different to ordinary capacity. In the circumstances Nurse Cure might advise Dr Cure to test capacity in general terms firstly as Mr Man has become forgetful and is not living independently. Next Nurse Cure might advise that Dr Cure assess capacity to make a will, if she is satisfied with capacity in general terms. Nurse Cure states that the three key criteria as set out above in Banks v Goodfellow, are the focus and Dr Cure should ascertain the information by avoiding the type of questions that illicit a ‘yes’ or ‘no’ answer but rather ask questions that go along the lines of, ‘what do you understand by …’ etc.

It may be beneficial for Dr Cure to keep contemporaneous notes of the questions she asks and the replies she gets in case the validity of Mr Man’s will is ever challenged in the future.

Consider another scenario with the same fictitious characters. Mr Man, who was a patient of Dr Cure’s for over 30 years, died last year aged 80. Mr Man made his will four years ago, in 2010. Mr Man’s daughter, Lucy (who is also executor of his estate) has applied for a Grant of Probate and requires an affidavit of mental capacity from Dr Cure stating that she attended Mr Man for the period around which he made his will and that Dr Cure is satisfied that Mr Man was of sound disposing mind at this time. Dr Cure discusses the case with her assistant, Nurse Cure. Nurse Cure

If the testator death certificate states that the cause, or one of the causes of death is Alzheimer’s disease, then the probate office usually looks for an affidavit of mental capacity from the deceased’s doctor.
nursing in general practice

recalls, having reviewed the files, that Mr Man only attended Dr Cure on two occasions in 2009. In 2011 Mr Man was diagnosed with Alzheimer’s disease.

It is presumed in Irish law that a will is valid unless proven otherwise. One ground to challenge the validity of a will is to contest the capacity of the testator. If the testator death certificate states that the cause, or one of the causes of death is Alzheimer’s disease, then the probate office usually looks for an affidavit of mental capacity from the deceased’s doctor. Dr Cure had not attended Mr Man at the time Mr Man made his will, but she had only seen him the previous year. Accordingly, Dr Cure cannot swear an affidavit that Mr Man had testamentary capacity at the time he made his will. Lucy will then have to apply to the court and seek a declaration of validity. Obviously, the scenario may change with the facts. Contemporaneous notes may have a very significant effect on the outcome.

Conclusion

Ordinary capacity is much broader in scope than testamentary capacity. Although only adults were considered above, as all practitioners know very well, the issue of capacity for minors, in particular the 16 to 18 years category, can be fraught with difficulties. Also with ordinary capacity, the important issue of consent must be considered. The courts have the unenviable task of interpreting the law and making decisions in very different circumstances. The High Court decision of Ms Justice Laffoy in Fitzpatrick v K [2008] is a leading example. This was the case of Ms K, a young woman from the Democratic Republic of Congo, who gave birth to a baby boy in the Coombe Women’s Hospital. Ms K suffered a major postpartum haemorrhage and required a blood transfusion. Ms K refused, via an interpreter, the blood transfusion on religious grounds. The hospital challenged the validity of Ms K’s refusal to consent to the treatment due to the patient’s exhausted state, communication difficulties and that she had booked into the hospital as a Catholic. The court granted the hospital the emergency order, the blood transfusion was given and Ms K survived. One of the factors in the court’s decision concerned the C case three stage test for capacity and its application. It was held that the patient’s cognitive ability will have been impaired to the extent that she is incapable of making the decision to refuse the treatment if the patient:

• has not comprehended and retained the treatment information, and in particular, has not assimilated the information as to the consequences likely to ensue from not accepting the treatment
• has not believed the treatment information, and in particular, if it is the case that not accepting the treatment is likely to result in the patient’s death, has not believed that outcome is likely, and,
• has not weighed the treatment information, in particular the alternative choices and the likely outcomes, in the balance in arriving at the decision.

Accordingly, the court decided that Ms K did not have the capacity to refuse the treatment. A striking example of the unenviable task of the court!

Note: This article is a general commentary on some of the issues in capacity – it is not legal advice – such advice should always be sought and obtained on an individual case by case basis.

Recruitment

Practice Nurse required

Donabate

Practice Nurse required for busy computerised practice in Donabate, for 2-3 sessions per week commencing October 2014. Experience in phlebotomy, vaccinations and smear taking desirable. Please send CV to donabateclinic@yahoo.ie

Kilkenny City

Practice Nurse required – to cover maternity leave for GMS/Private Practice in Kilkenny City.

Email CV to ayrfieldmedical@gmail.com or call 086 8328892
Launch of Aspirin 75mg gastro-resistant tablets

Clonmel Healthcare have announced the launch of Aspirin 75mg gastro-resistant tablets.

Aspirin film-coated tablets are indicated for:

- Secondary prevention of myocardial infarction
- Prevention of cardiovascular morbidity in patients suffering from stable angina pectoris
- History of unstable angina pectoris, except during the acute phase
- Prevention of graft occlusion after Coronary Artery Bypass Grafting (CABG)
- Coronary angioplasty, except during the acute phase
- Secondary prevention of transient ischaemic attacks (TIA) and ischaemic cerebrovascular accidents (CVA) provided intracerebral haemorrhages have been ruled out

Aspirin gastro-resistant tablets are available in a 28 pack size. Aspirin gastro-resistant tablets are GMS reimbursable. Full prescribing information is available on request or alternatively please go to www.clonmel-health.ie.

Product is subject to medical prescription. Please contact Clonmel Healthcare on 01-6204000 if you require any additional information on Aspirin gastro-resistant tablets.

Dioclear

- Dioclear contains a natural substance which absorbs water and binds diarrhoea causing substances, stopping Diarrhoea in its tracks!
- Dioclear does not enter your bloodstream; it works in the digestive system making it a safe treatment for the whole family.
- Dioclear is safe, effective and clinically proven and can be used for the whole family, from infants through to adults.

For further information contact Fannin Ltd: Phone: 012907000 Email: info@fannin.eu Website: www.fannin.eu

Launch of Bufomix Easyhaler

Bufomix Easyhaler is a fixed dose budesonide/formoterol combination for patients with asthma or COPD. Easyhaler is an established innovative device with consistent dose delivery and is very easy to use. Bufomix Easyhaler is 35% less expensive than the original brand.

Orion Pharma Ireland is pleased to announce the launch of Bufomix Easyhaler, in two fixed-dose budesonide/formoterol combinations, indicated for the treatment of asthma and chronic obstructive pulmonary disease (COPD)

Bufomix Easyhaler is the first therapeutically equivalent budesonide/formoterol combination product available in Ireland since the launch of the original brand. Bufomix is delivered via the well-established Easyhaler device which has been marketed since 1993 and has been used by millions of patients worldwide.

It is available in two strengths

- 160mcg/4.5mcg* (equivalent to original brand 200mcg/6mcg)
- 320mcg/9mcg* (equivalent to original brand 400mcg/12mcg)

* dosages are measured using “delivered dose” rather than “metered dose”.

Clinical trials of the Easyhaler device have demonstrated a number of benefits:

- Easyhaler utilises innovative technology that allows patients to inhale products consistently, accurately and easily.
- The device is easy to use; there is a simple three-step process that ensures the correct dose is delivered every time.

Compared to the original brand, Bufomix Easyhaler offers a cost saving for the HSE of 35%.

Grünenthal signs exclusive agreement with MSD for Arcoxia

Grünenthal wish to announce that in the coming weeks all distribution and commercialisation of Arcoxia (etoricoxib) will be transferring from MSD to Grünenthal Pharma Ltd. Please note that MSD will continue to remain as the MA holders for Arcoxia® (etoricoxib)

“Arcoxia (etoricoxib) is a valuable addition to Grünenthal’s product portfolio and a substantial consolidation of our position as leading partner in pain therapy. With Arcoxia® (etoricoxib) we can now provide an innovative therapeutic option for the treatment of pain with an inflammatory component”, said Tom Coogan, General Manager, Ireland.

This transition will take place seamlessly and the availability of Arcoxia® (etoricoxib) to patients will not be affected. All product characteristics such as dosing, indications, etc. will remain unchanged.

Your point of contact for Arcoxia® (etoricoxib) will change to your local Grünenthal Representative from Monday 1st of September 2014.

Also as of Monday 1st September 2014, please direct all enquiries including medical information to: Grünenthal Pharma Ltd. Tel: +44 (0)870 351 8960 Email: medical.informationie@grunenthal.com
Web: https://www.grunenthal.ie

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Olysio now available for treatment of adults with chronic hepatitis C

Janssen Ireland recently announced the reimbursement of Olysio® (simeprevir) in combination with pegylated interferon and ribavirin for the treatment of chronic hepatitis C in adult patients.

Simeprevir is a new generation, NS3/4A protease inhibitor administered as a once daily 150 mg capsule with pegylated interferon (pegIFN) and ribavirin (RBV). Simeprevir offers proven efficacy with increased tolerability in HCV genotype 1 and 4 patients with various stages of liver fibrosis and cirrhosis.

Simeprevir is well tolerated, with the most common adverse events reported in clinical trials (incidence ≥ 5%) including nausea, rash, pruritus, dyspnoea, blood bilirubin increase and photosensitivity reaction.2

Marketing Authorisation was based on positive and consistent results from three pivotal Phase 3 studies in patients with genotype 1 HCV: QUEST-1 and QUEST-2 in treatment-naïve patients and PROMISE in patients who have relapsed after prior interferon-based treatment.2 The studies involved over 1,000 patients. QUEST-1 and QUEST-2 included 785 treatment-naïve patients with genotype 1 chronic HCV infection. PROMISE included 393 relapser patients with genotype 1 chronic HCV infection. All three studies met their primary endpoints and demonstrated that simeprevir, in combination with pegIFN and RBV, achieves superior cure rates when compared with PegIFN and RBV alone, in treatment naive and prior-relapser patients. The efficacy of simeprevir in HCV genotype 4 patients was demonstrated in the RESTORE study.

HCV is a major health problem in Ireland, with between 20,000 and 50,000 people infected with the virus.[6] Treatment of HCV is complex because of the unpredictable course of the infection and the heterogeneous population of patients it affects. Treatment efficacy is also highly dependent on the genotype of the virus.

Commenting on the reimbursement, Dr Stephen Stewart, Mater Misericordiae Hospital Dublin said: “While treatments for hepatitis C have come a long way in recent years, new treatment options will further improve HCV management for patients – promising higher SVR rates, shorter treatment duration and better tolerability. Combining new directly acting antivirals will allow for interferon-free treatment regimens with very high cure rates, short duration and low toxicity.”

Results from the Phase 2 COSMOS (Combination Of SiMeprevir and sOfoSuvir in HCV genotype 1 infected patients) study were published July 28 in The Lancet.[8] They demonstrated that 92 percent of genotype 1 chronic HCV adult patients treated with Janssen’s simeprevir in combination with sofosbuvir, achieved sustained virologic response 12 weeks after the end of treatment (SVR12), including those patients with compensated cirrhosis and prior null response to treatment with pegylated interferon (PegIFN) and ribavirin (RBV).

According to findings from the study, the all-oral 12-week, interferon-free treatment regimen with simeprevir and sofosbuvir resulted in consistent SVR12 rates regardless of degree of fibrosis, and was an effective and well-tolerated therapeutic regimen in both treatment-naïve and prior null-responder patients.

Vfend (Voriconazole) new indication is approved for children aged 2 years and above and adults in oral and IV formulations

Pfizer receives European approval for Vfend in prophylaxis of invasive fungal infections in high-risk alloHSCT recipients

Pfizer Healthcare Ireland recently announced that Vfend (voriconazole) received European Commission approval on June 24, 2014 for a new indication in prophylaxis of invasive fungal infections (IFIs) in high-risk alloHSCT recipients.

The European Commission’s decision to approve Vfend for prophylaxis of IFIs in high-risk alloHSCT recipients is based on phase III clinical trials (IMPROVIT and VOSIFI studies) showing the effectiveness of Vfend for primary and secondary prophylaxis of IFIs in alloHSCT recipients.

Vfend® is available in both oral and IV formulations, making it convenient for patients and clinicians, and the recommended dosing for prophylaxis is the same as the well-established regimen for Vfend® in the treatment of IFIs.1

“Vfend is already the standard first line therapy for the treatment of invasive aspergillosis and the new indication is supported by extensive clinical evidence clearly demonstrating the efficacy of Vfend in both primary and secondary prophylaxis of IFIs in the alloHSCT setting," said Dr Declan O’Callaghan, Medical Director, Pfizer Healthcare Ireland. “Pfizer is committed to helping to improve outcomes for patients at all stages of this challenging but potentially lifesaving procedure.”

In the prospective, randomized, open-label, multicentre IMPROVIT study of primary antifungal prophylaxis in alloHSCT recipients, success of prophylaxis in patients receiving Vfend® was superior to itraconazole (48.7% vs 33.2%, p<0.01).1 Success of prophylaxis (primary composite endpoint) was defined as the ability to tolerate study drug for at least 100days, with ≤14 days interruption with survival with no proven or probable IFI to Day 180. In the study, Vfend was better tolerated than itraconazole for longer durations. In addition, there was less need for other systemic antifungals compared with itraconazole.

In the prospective, open-label VOSIFI study, Vfend was shown to be effective for secondary prophylaxis of systemic IFI in alloHSCT recipients. At 12 months after Vfend prophylaxis, only 6.7% ±4.6% of patients experienced new or recurrent IFI, which is considerably lower than the relapse rate reported in historical controls. Based on clinical trial data, Vfend was provisionally recommended for IFI prophylaxis in alloHSCT recipients in the third European Conference on Infections in Leukaemia (ECIL 3) treatment guidelines, with a provisional Level ‘A’ grading – the highest recommendation possible for initial neutropenic and graft-versus-host disease (GVHD) phases.

ECIL 3 treatment guideline recommendations follow the IDSA grading system based on ‘quality of evidence’ and ‘strength of recommendations’ Vfend was graded as a provisional ‘A’ (A: Strong evidence for efficacy and substantial clinical benefit; strongly recommended): I: Evidence from at least one well-executed randomized trial) pending publication of the data studied.
Betaconnect autoinjector for multiple sclerosis

Bayer HealthCare has announced the introduction of the Betaconnect autoinjector, the first component of an innovative, new dose-delivery system for its Beteferon multiple sclerosis (MS) treatment. The Betaconnect auto-injector is now available to Irish patients who are prescribed Beteferon to manage their MS symptoms. Beteferon has had a long and successful history in Ireland and was first launched in 1995.

The new Betaconnect product marks a new frontier in innovation and usability. Designed in partnership with Bang & Olufsen Medicom, Bayer has developed the new system for administering and monitoring Beteferon. This new approach will help patients to potentially improve the treatment of multiple sclerosis (MS), as the Betaconnect auto-injector provides patients with a reminder of their next injection, and flexibility in injection depth and speed based on patient preferences.

The fully electronic Betaconnect autoinjector automates the Beteferon injection to provide a quiet and potentially more comfortable injection for MS patients who use Beteferon.

Betaconnect received an Honourable Mention in this year’s Red Dot Award for Product Design. The Red Dot Design Award is an internationally renowned product competition.

Bang & Olufsen Medicom is an award winning designer, developer and manufacturer of injection, inhalation and connectivity devices with more than 25 years experience. They specialise in advanced and electronic devices – enabling patients, caregivers, healthcare professionals and healthcare payers to connect and communicate – paving the way for improved adherence and better therapeutic outcome.

Once daily Striverdi (olodaterol) Respimat available

Boehringer Ingelheim has announced that Striverdi Respimat 5 mcg has recently become commercially available in Ireland as a maintenance therapy for patients with chronic obstructive pulmonary disease (COPD). This follows marketing authorisation in November 2013 under the EU decentralised procedure.

Striverdi is the second molecule to be licenced for delivery via the Respimat Soft Mist Inhaler in the UK following Spiriva (tiotropium), demonstrating Boehringer Ingelheim’s commitment to developing effective treatments for a wide range of COPD patients. License has been granted based on results from a comprehensive Phase III clinical trial programme that included more than 3,000 patients with moderate to very severe COPD.

The Phase III programme included four pivotal randomised, double blind, placebo controlled 48-week studies; two comparing Striverdi Respimat once daily versus placebo, both arms plus usual care, and two comparing Striverdi Respimat once daily versus formoterol Aerolizer twice daily or placebo, all plus usual care. Results showed that the addition of Striverdi Respimat once daily over 48 weeks significantly improved lung function versus placebo (p<0.05) which was comparable to improvements shown with formoterol Aerolizer 12 mcg twice daily.

Safety data showed that overall, the frequency of adverse events (AE) experienced with olodaterol via Respimat was comparable to the active comparator formoterol Aerolizer.

Lipikar Baume AP+ for eczema and severe dryness

Eczema affects approximately 1 in 5 children under the age of six in Ireland. Children usually grow out of this disease but it also affects circa 1 in 12 adults.

La Roche-Posay continue to pioneer a better life for sensitive skin and are the first dermo cosmetic company to work with microbiome. Now familiar with the concept of good bacteria in our stomachs, we similarly have good bacteria on our skin which keeps it healthy. An imbalance in this microbiome alters the skin’s ability to function as normal.

Lipikar is a treatment for anyone with eczema or severe dryness, and linked symptoms: irritation, inflammation, itchiness. It restores balance to the skin microbiome.

The microbiome is community of micro-organisms (over a hundred billion bacteria, fungi and viruses) found in and on the human body. These bacteria train the immune system and protect the body from pathogens or dangerous infection. Its makeup is unique to each individual – like a fingerprint.

Traditional treatments for atopy aimed first to calm inflammation and then to reconstitute skin’s barrier and re-establish its protective function.

It is not enough to simply restore skin’s barrier function to lastingly relieve atopic skin: the microbiome must be re-balanced. As long as it remains unbalanced, attacks of severe dryness, itching and irritation will keep coming back.

Lipikar aims to restores and stabilize the microbiome on the skin’s surface (preventing the penetration of irritants and allergens) as well as reinforcing the immune defence systems and reduce inflammation.

Pradaxa (dabigatran etexilate)

Boehringer Ingelheim Ireland Ltd have announced that Pradaxa (dabigatran etexilate) 150mg is now available in a 10 capsule pack.

This pack is reimbursed under the Health Service Executive Community Drug Schemes i.e. the General Medical Services scheme (GMS) and the Drug Payment Scheme.

Pradaxa Hard Caps. 150mg. 10 (A) (Dabigatran Etexilate) PRCS reimbursement code: 60603 Price to Wholesaler: €11.75

Pradaxa 150mg is indicated for the prevention of stroke and systemic embolism in adult patients with non-valvular atrial fibrillation with one or more risk factors, such as prior stroke or transient ischemic attack (TIA); age ≥ 75 years; heart failure (NYHA Class ≥ II); diabetes mellitus; hypertension.

It is also indicated for treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE), and prevention of recurrent DVT and PE in adults.

If you require further information please contact us on +44 1344 742579 or medinfo.bra@boehringer-ingelheim.com
Name: 
Address: 
Email: 

Congratulations to the winner of last crossword, 
Bridget O’Dea, Health Centre, Caherconlish, Co Limerick.

Please fax your answers to 015472388 or post to:
Editor, Nursing in General Practice, GreenCross Publishing Ltd., 7 Leeson Street, Dublin 4.

Closing date for entries: 1 November 2014.

Winner will receive €50.

Please note: the winners’ cheques will be sent out within 60 days.

ANSWERS TO LAST CROSSWORD
Across: 1 Cholera, 4 End up, 7 Ear lobe, 8 Ennui, 9 Surgery, 10 Cornea, 15 Emerald, 17 Santa, 19 Twin bed, 20 Rhyme, 21 Roe-deer.
Down: 1 Crepe, 2 Emotive, 3 Averse, 4 Eager, 5 Diocese, 6 Pharynx, 10 Creator, 11 Re-entry, 13 Despise, 14 Editor, 16 Alice, 18 Adder.

Across:
1 Real hip replacement causes this facial deformity. (7)
4 and 7 across. Wireless, perhaps, remedial treatment using radiation. (5,7)
7 See 4 across.
8 Van he crashed for a safe 9 across. (5)
9 Port. (7)
10 Pummels UK currency (6)
12 Courageously – as one went in Star Trek, where no man had gone before. (6)
15 A shortage of bloody iron can be cause for complaint! (7)
17 A flower – from Amsterdam, perhaps. (5)
19 Guilt feeling about a code perhaps. (7)
20 Command for tidiness? (5)
21 Frames with panes on a computer perhaps. (7)

Down:
1 Break out of one’s shell. (5)
2 Was educated – like a lawyer perhaps. (7)
3 Alfred Hitchcock’s deranged movie! (6)
4 Electronic aircraft detection system, no matter how you look at it! (5)
5 Hard gem, one of a suit! (7)
6 A neat hospital attendant? (7)
10 Could copal be mixed only to humour a patient? (7)
11 Without a gun and with nothing up one’s sleeve. (7)
13 Was it a comfortable empire? (7)
14 Hand-cart for one of the Three Sisters. (6)
16 Officer discovered in Majorca. (5)
18 Push the newspapers? (5)
DISCOVER A LOGICAL COMBINATION TO UNLOCK A SMOKE-FREE FUTURE

NICORETTE® INVISI 15mg PATCH™ nicotine + NICORETTE® 2mg Gum

With Nicorette® Invisi Patch™ and Nicorette® 2mg Gum discover an NRT combination that applies logic to quitting needs of smokers

Do something incredible

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Product name and PA number: Nicorette® 2mg Gum, Nicorette® 15mg Invisi Patch™ and Nicorette® 10mg Invisi Patch™. PA Number: PA 823/49/1,3,14 and 24, PA 823/49/21-22. PA Holder: McNeil Healthcare (Ireland) Limited, Airton Road, Tallaght, Dublin 24, Ireland. Classification: Products are not subject to medical prescription. Further information is available upon request.