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December 2013

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Asthma/COPD Nursing Course Information

Dear Nurse

Applications are now invited from nurses wanting to enrol on the Asthma Nursing Course in February 2014 and COPD Nursing Course in April 2014. The programmes are offered by distance learning. Not everyone has the same pace of learning. Some students pick up things fast, others need time to grasp a concept. One of the biggest advantages of distance learning is that you can study at a pace that is comfortable for you. The primary aim of Asthma/COPD Nursing Courses are to provide nursing health professionals with a high level of Asthma/COPD knowledge that promotes best practice, based on available evidence, and is consistent with national policy.

Since the commencement of the Asthma & COPD Nursing Courses, over 1000 nurses have enrolled over 43 intakes. Many applicants had not undertaken any additional study since completing their nursing training, which may have been years before. However, most find the courses to be challenging but thoroughly enjoyable learning experience that is within the grasp of any competent nurse practitioner. Asthma Nursing Course and COPD Nursing Course are accredited with 15 credits each, which can be used towards gaining your Bachelor of Nursing degree.

If possible would you be able to pin-up the following Asthma and COPD Nursing Course information on your work place notice board. Also feel free to circulate, make photocopies if you like.

Could you please phone/fax or email for an enrolment form.

Asthma Nursing Course closing date – 5th February 2014

COPD Nursing Course closing date – 5th of April 2014

For information contact:
Ann/Swarna
Phone Ann on 09 623 4777 or Swarna on 09 623 4771
Fax 09 623 0774
Email annw@asthma.org.nz
swarnah@asthma.org.nz
Asthma New Zealand/The Lung Association
PO Box 67066, Mt Eden, Auckland 134

Upcoming events and courses

ASTHMA NEAT COURSE
19 March 2014
18 June 2014
17 September 2014

HALF DAY COPD COURSE
16 April 2014
16 July 2014
15 October 2014

WORLD ASTHMA DAY

Tuesday 6th May 2014

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Further enquiries for any of these events phone
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message to readers

It is with mixed feelings that I am writing my first letter to you all as the incumbent CEO. I am very excited about the future going forward and in particular 2014. Therefore, it is with some sadness that we say farewell to Gerry Hanna after 17 years of service to both Asthma Auckland and Asthma New Zealand. Over these years Gerry's vision saw many changes and he assisted our growth from a humble team of 3 part-timers at Asthma Auckland to a full national body and leading authority on asthma in New Zealand. 2013 saw us employing 10 staff in Auckland and a further 4 staff nationwide but even this figure is set to grow in 2014 with both Asthma Rotorua and Asthma Southland set to join Asthma Wellington and Asthma South Canterbury as branches of Asthma New Zealand. His legacy will continue and I'm sure you are all with me in wishing him well for the future and trust his golf handicap can only improve.

To continue on from where Gerry left off I intend to address adherence issues in New Zealand and in particular in our youth. Too many underestimate or ignore symptoms or simply make either a conscious or unconscious decision to live with their symptoms. Asthma New Zealand is focused on finding a solution and is working with third parties such as inventor Catherine Huxford and her AsthmaMinder™. Catherine has developed a simple but effective tool that houses a person's MDI with their toothbrush as a reminder to use their preventer twice daily prior to brushing their teeth. The idea is that the inhaler is already in their hand to use when reaching for their toothbrush, simple but effective.

Asthma New Zealand is excited about further collaboration with VADR in 2014. VADR was responsible for developing the hugely successful Asthma New Zealand smartphone app. Both parties are now developing a web based dashboard that allows users and medical professionals the ability to review and manage their asthma remotely. The dashboard will allow medical professionals to adjust users asthma action plan's through a web interface and for the users to receive advice directly from their care giver.

I would also like to take this opportunity to thank our staff for their support, ongoing dedication and passion in supporting people with asthma in New Zealand. We would also like to wish you all a very happy and safe holiday season and New Year.

Linda Thompson
CEO

cat allergy

by Elaine Murray RN
Asthma Nurse Educator

I remember reading a poem called "Cat Kisses". It went like this;

Sandpaper kisses
on a cheek or a chin
that is the way
for a day to begin!

Sandpaper kisses,
a cuddle and a purr
I have an alarm clock
that's covered in fur.

Not the best way to start your day if you are allergic to cats!

Allergic reactions are the result of the immune system responding to what it perceives as dangers or threats to health and life. Normally these threats are from pathogens like viruses and bacteria, but sometimes the immune system reacts to a non–threatening substance.

Cat allergy is by far the most common allergy to pet animals. Up to 40% of asthmatics are sensitive to cats, and are more likely to cause sensitisation than that of the dog.[1] A tiny protein particle, the "Fel d 1" is found mainly in the cat skin flakes and saliva. The protein is produced in the cat salivary glands and sebaceous glands of the skin, which is then deposited on the fur during their grooming. Male cats are more allergenic than female cats, because testosterone increases Fel d 1 production by the sebaceous glands. There is no such thing as a non-allergic breed.[1]

Cat allergen is present in large amounts in homes with cats, but it can be found anywhere, as it is very sticky and can be transported on clothes from place to place. Cat allergen particles are very small (1/10 the size of dust mite allergen), they remain airborne for prolonged periods of time hence the sudden onset of symptoms when entering a room or house and inhaling the allergen.

The main symptom is rhinoconjunctivitis. Rhinitis is characterised by one or several of the following:

- Nasal congestion
- Runny nose
- Post-nasal drip
- Sneezing
- Red eyes (conjunctivitis)
- Itching of the nose or eyes[4]

There can be an intermediate reaction of rhinoconjunctivitis on entering the room with a cat. This usually occurs within an hour, or there may be a delayed reaction occurring two to four hours following exposure.

In some people the symptoms of asthma such as wheezing or coughing, start within 10 minutes of entering a house that has a cat in it.[1] It is important to note that many people may not get an acute flare up of their asthma with cat exposure and they assume that they are not allergic to cat, but there is on-going chronic inflammation in the airways of the lungs due to the cat exposure.[1] People with a constant cold could be reacting to their cat.

For some people, hives may develop at the site of where the individual comes into contact with the allergen. Cat allergen is a common trigger for eczema.

So how are cat allergies treated?

Cat allergies can usually be controlled with antihistamines, steroidal nasal sprays and preventer inhalers. Allergy shots are another option. These may not be effective, but for some people they can be hugely beneficial – BUT, it can take years and is expensive. Some studies have shown that exposure to pets as a young child seems to reduce the risk of developing pet allergies later. On the other hand, a child who already has allergic tendencies may get worse with each exposure to a pet.[2]

Reducing exposure to cats

While medication helps to control the effects of a cat allergy, the best approach is to avoid cats and their dander.

- Don't touch, hug or kiss cats
- Keep the cat outdoors if possible
- Do not let the cat in your bedroom and especially not in your bed
- Clean rigorously and often as the cat dander gets everywhere
- Ventilate the home, open windows – remember the cat allergen will be everywhere (this includes the curtains, carpet, rugs, soft furnishings and the bedding. It will also be on the walls, shelves or flat surfaces).
- Use a HEPA Filter vacuum cleaner (carpet can accumulate up to 100 times the amount of cat allergen as hard flooring
- Steam clean the carpet regularly

Daily grooming of the cat will help remove loose hair and dander, it is best to do this outside.

Treat the cat regularly for fleas to stop them scratching – have you ever noticed how much hair is floating around the cat when it is scratching!

Consider bathing your cat, but there is conflicting evidence about how effective it is.

While these things might help, it may not be enough. If keeping your cat is putting your health, or a family members health at risk, you may have to consider giving it up.

Remember that up to 40% of asthmatics are sensitive to cats, but

there may be other allergens such as house dust mite and pollens that are triggers. A skin prick test or a blood test called a RAST test may be needed to confirm what allergies you have.

BUT, there is some good news

In July this year it was reported that scientists are hopeful that a research breakthrough will lead to a cure for people who are allergic to cats. Scientists at the University of Cambridge say they've figured out how a particular protein, Fel d 1, in cat dander, triggers an allergic response in humans. They found that cat allergen activates a specific pathway in the body, once in the presence of a common bacterial toxin, found everywhere in the environment. It only needs very low doses of this toxin, called lipopolysaccharide (LPS) to unleash the severe immune response seen in people with cat allergy.[3] They discovered that the presence of the bacterial toxin LPS somehow increases the signalling to the immune system, intensifying the response to the cat allergen Fel d 1, and then in further tests they found that Toll-like receptor 4 (TLR4) which is known to be involved in allergic reactions to dust mite and metal nickel, was reacting to the combination of LPS and Fel d 1.[3]

Dr Clare Bryant also told the press: "we are hopeful that our research will lead to new and improved treatments for cat and possibly dog allergy sufferers".[3] The idea is that new drugs could target the pathway to the newly discovered receptor so it can't trigger the severe immune response in affected people.

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Now, here's a way to bath your cat.

Put both lids of the toilet up and add 1/8 cup of pet shampoo to the water in the bowl.
Pick up the cat and soothe him while you carry him toward the bathroom.
In one smooth movement, put the cat in the toilet and close both lids. You may need to stand on the lid.
The cat will self-agitate and make ample suds. Never mind the noises that come from the toilet; the cat is actually enjoying this.
Flush the toilet three or four times. This provides a "power wash and rinse".
Have someone open the front door of your home, making sure that there are no people between the bathroom and the front door.
Stand behind the toilet as far as you can, and quickly lift both lids.
The cat will rocket out of the toilet, streak through the bathroom, and run outside, where he will dry himself off.
Both the cat and the toilet will be sparkling clean.

By The Dog

(I hope it made you laugh, however I do not recommend it!)

Heartiest Congratulations on successfully completing Unitec /Asthma New Zealand Asthma Nursing Course 2013 – 1st semester

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Nita Brown	Taumaruni
Sandi Evans	Christchurch
Sarah Mary Henderson	Napier
Vicki Lyford	Temuka
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dear nurse

Dear Nurse, I took my 12 year old daughter to see her asthma specialist because her asthma was not under control. The focus of the visit was on "road blocks". What does this mean?

Road blocks are where something appears to be stopping your daughter and gets in the way of controlling her asthma. Your doctor may have been looking at some common road blocks such as

- Not taking her metered dose inhaler morning and night, as prescribed.
- Not using an inhaler or a spacer with the right technique, or even using the wrong type of inhaler for your child
- If your child has a nasal allergy to pollen, this may need to be addressed. Research show that if the nose it out of control, the asthma becomes out of control.
- Not addressing allergy environmental control, for example, sleeping with the family cat you're allergic to, or not using dust mite proof barrier protection for pillows and mattresses.

Of course it is not always possible to identify or avoid every road block. Here at Asthma Auckland we are able as trained asthma nurse educators to talk with you to help make your home as asthma-friendly as possible. We can discuss the imortance of having an asthma action plan which details how and when to take medications, what to do when asthma gets worse, and how to identify and/or avoid asthma triggers. Your child ideally should always be prepared for asthma symptoms and carry a reliever inhaler at all times. Hopefully armed with these tools, both you and your child are able to take charge of the asthma and avoid the road blocks.

Dear Nurse, I have been diagnosed with occupational asthma. What is occupational asthma?

Occupational asthma is a lung disorder in which substances in the workplace cause the airways of the lungs to swell and narrow, leading to episodes of tight chest, coughing, wheezing and shortness of breath.

There are many substances in the work place that can cause occupational asthma such as wood or concrete dust, grain dust, animal dander, fungi, chemicals and fumes.

Symptoms usually occur shortly after you are exposed to the substance, and often improve or go away when you leave work.

The symptoms usually get worse towards the end of the week and may improve or go away on the weekend or while on holiday.

If you have asthma, you may find that your asthma is not as well controlled as it has been.

See your doctor and discuss your symptoms. Ask for a peak flow metre and monitor your peak flow at work and at home.

You may require referral to a respiratory specialist for pulmonary function tests and a bronchial provocation test (a test to measure a reaction to the suspected allergen).

Avoid exposure to the allergen if possible, or reduce exposure as much as possible e.g. wear a mask or position in the work place. You may have to change your job.

If you are on preventer medication, ensure you are using it every day morning and night and using the inhaler device correctly to ensure optimum deposition of the medication in the lungs.

Ask your GP to review your medications.

Dear Nurse, I want to stop taking my Flixotide as I keep getting oral thrush and I heard that the Flixotide causes it.

You are right oral thrush is a common side effect from inhaling Flixotide, in fact 1 in 10 people may experience this. Always rinse your mouth out, clean your teeth or gargle and spit. Using a spacer correctly will reduce this rate. Are you on the correct dose of Flixotide?, the stronger the dose the higher the rate of side effects. Dry powder inhalers (rather than puffers) seem to especially predispose people to getting oral thrush. If you have dentures keep them clean and remove them at night. Smoking encourages yeast growth in your mouth. If you do have oral thrush please see your Doctor so he can prescribe a mouth wash or an oral treatment.

Dear nurse, I heard that there was a tablet you could take now for asthma, if I take this tablet can I stop my puffers.

The tablet that is now funded for asthma if you meet a certain criteria is called Singulair. This tablet is taken with your asthma medications it does not replace them.

IF YOU HAVE A QUESTION PLEASE EMAIL OR POST TO:
editor@asthma.org.nz or Dear Nurse, Asthma New Zealand,
PO Box 67 066, Mt Eden, Auckland 1349.

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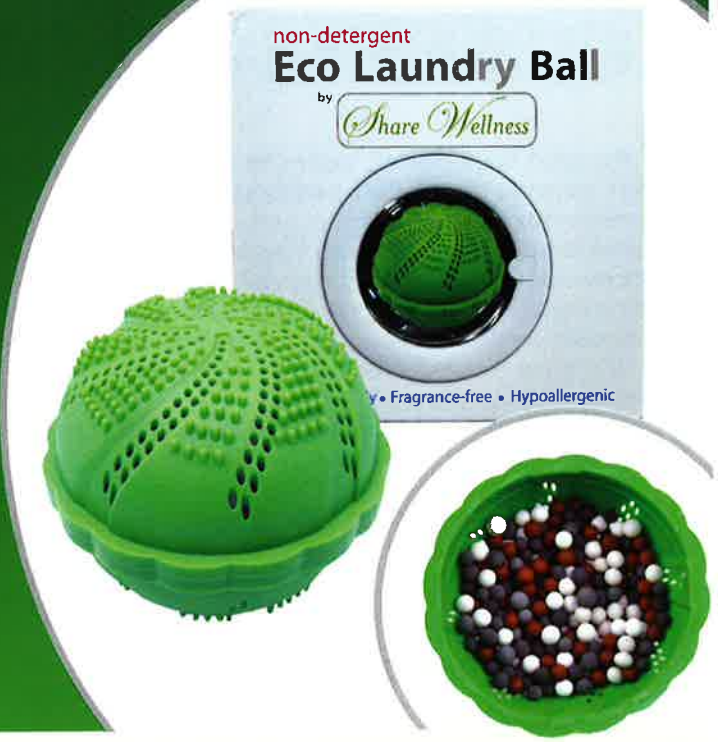

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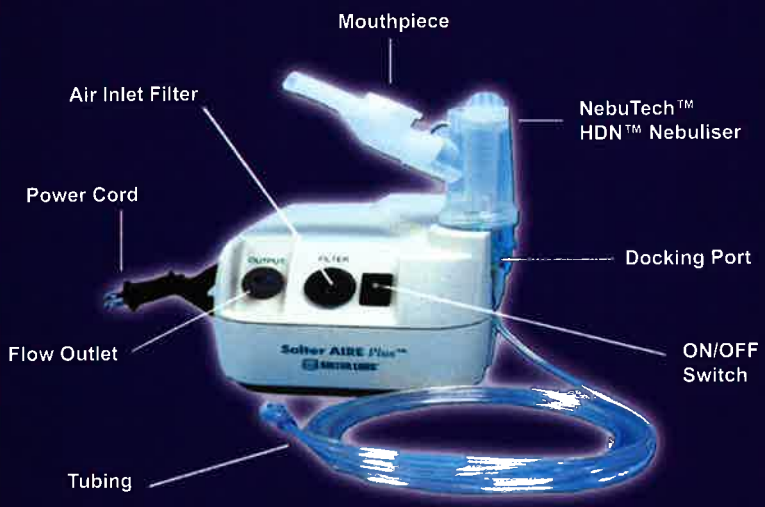

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managing asthma in the school environment

by Adie Riddell RN
Asthma Nurse Educator

New Zealand has one of the highest rates of childhood asthma in the world affecting over 25% of school aged children. Last year there were over **550,000** school days lost to asthma (reason given for absence).

In an average classroom there will be at least 5 children with Asthma.

For most of our kids asthma symptoms are managed very effectively with medication (preventers) taken each morning and at night even (and importantly) when well. If not well controlled, asthma can affect school attendance and/or performance, as well as impacting on 'work' attendance by parents. These children can often fall behind their peers in the classroom and this can impact on the student both academically and socially.

Poorly controlled asthma symptoms commonly occur overnight, which can mean a lack of sleep, often leading to a reduced ability to concentrate in class the next day. These students may also show signs of worsening asthma throughout the school day, especially after physical exercise, and may have an asthma flare up while at school, which requires an immediate response.

Whose responsibility is it? Responsibility for the management of a student's asthma is shared.

Parents should:

- Inform the school that their child has asthma and give them a written Asthma Action Plan written for the child by the family doctor
- Provide sufficient information and equipment medication/spacers to school staff to allow them to support the child at school
- Ensure the child has their reliever medication along with a spacer with them each day at school. The medication must not have expired, should contain plenty of doses and be labelled clearly with the child's name
- Ensure that your child is able to self-administer their medication when required
- Aim for good asthma management at home by taking the child to the doctor for regular reviews, and following medical advice on taking medication

Schools should:

- Encourage parents to provide up to date information about their child with asthma, and keep this information in a central location of which all staff are aware
- Enable and encourage staff to attend training and obtain information about asthma and how to manage an asthma emergency
- Ensure sufficient Asthma Emergency Kits are available and that staff are aware of the location and they are easily accessible (dates and contents of kits need to be regularly checked and updated accordingly)
- Have policies that support the staff to act appropriately and effectively in an asthma emergency, including during off-site activities
- Allow students to access (or carry with them) and administer their reliever medication at all times, unless the child is too young to be responsible for using their medication appropriately.
- Advise parents if their child has required medical assistance while at school

Display Asthma First Aid posters around the school

The Wellington Asthma Society provides free Asthma Training and Education to teachers and school staff. Phone 04 237 4520 or email wras@asthma-nz.org.nz

Students should:

- Take their regular preventer medication (generally taken at home in the mornings and evenings) if advised by their doctor
- Know how to recognise when their asthma is getting worse and what to do
- Have their reliever medication readily available at all times, particularly during exercise and other physical activities
- Tell their friends that they have asthma, and what to do if they have an asthma attack

At the beginning of every school term there appears to be an increase in the number of school-aged children presenting to hospital with asthma. This often happens in the first few weeks after every school holiday break. The increase in hospital visits probably occurs because kids tend to pick up cold and flu viruses from each other when they are together. Other factors such as stress, a change of environment or allergens, or less strict asthma management over the holidays could all be problems leading to this 'spike' in hospital visits.

A few tips

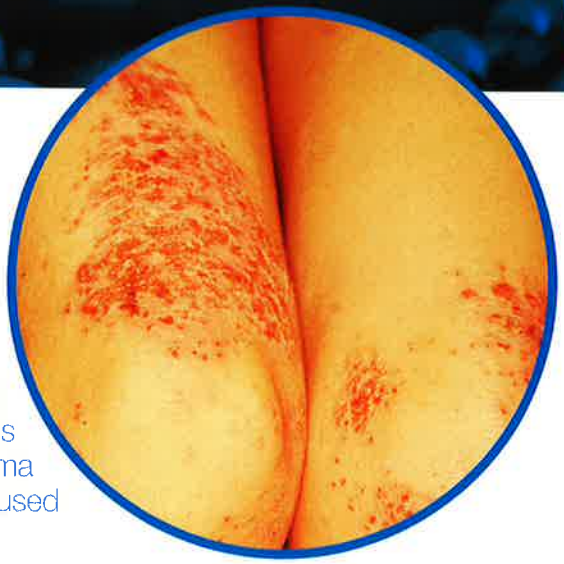
Take your child to the doctor for an Asthma review yearly to make sure their asthma is well controlled and that they have an updated written Asthma Action Plan. Check if your child's school is Asthma Friendly. This means they have the information, skills and policies to best support a child with asthma

- Make sure your child takes their prescribed preventer medication before they go off to school
- Make sure they always take their reliever medication (and spacer) with them to school
- Tell the staff if your child needs help with taking medication
- Consider giving the school a spare reliever and spacer for your child in case they leave theirs at home
- If your child is going on an overnight excursion, make sure you give the school up to date medication information, and that your child takes all their medication and information with them.

References:
http:/asthmafoundation.org.nz
Asthma & Physical Activity in the School NIH publication 2012 No. 12-3651

atopic eczema/ atopic dermatitis

by Karen Little RN
Asthma Nurse Educator



Atopic refers to diseases that are hereditary, tend to run in families, and often occur together. These include asthma, hay fever, and atopic dermatitis. The term atopic is from the Greek meaning "strange" the term dermatitis means inflammation of the skin. Eczema is a general term for many types of skin inflammation (dermatitis); the word eczema comes from Greek meaning 'to boil over". Atopic dermatitis is the most common of the many types of eczema. The terms eczema and dermatitis are often used interchangeably.[1] Dermatitis often is used more to imply an external trigger.

Atopic dermatitis is also known as atopic eczema. It is characterised by itchy, inflamed skin. This affects males and females and is very common; it mainly occurs in infants and children. 90% develop symptoms before the age of 5, and about 60% continue to have symptoms when they become adults. About 10% of all infants and children experience symptoms of atopic dermatitis.[2]

Topical steroids are used to control flare ups but should not be used long term. Extremely dry skin can break down and ooze or weep, the skin should be moisturised preferably when the skin is warm following a bath or shower. Scratching can cause skin thickening and darkening and may lead to bacterial infection when topical or oral antibiotics may be prescribed. Staphylococcus aureus has been studied as a possible trigger factor as it is found on the skin on more than 90% of all atopic dermatitis patients and only on 5% of people without. This is why in many cases atopic dermatitis can be improved by systemic antibiotics.[3]

Oral antihistamines may be prescribed to break the "itch-scratch" cycle. Many things can worsen atopic dermatitis including low humidity, seasonal allergies, exposure to soaps and detergents and cold weather. The immune system of people with atopic dermatitis is active in a particular way. They especially make large amounts of a protein called IgE. IgE is one of a handful of proteins called immunoglobulins or antibodies – the purpose of which are to act as catalysts for the protective cells of the immune system to recognise and lock on to the protein components of foreign invaders. IgE is present in small amounts in everyone; however, in atopic dermatitis more is produced because of increased sensitivity to substances that are inhaled or eaten, or substances in contact with the skin. These could be animal dander, foodstuffs, house dust mite, or bacteria or yeasts that live on the skin on everyone and usually cause no problems. Most individuals with atopic dermatitis react to all of these things to varying degrees.[4] Hypersensitivity to house dust mites antigen is found in up to 90% of people with atopic dermatitis, inhalation and skin contact with these antigens may worsen the skin condition. Sensitisation to animal dander may also be associated with skin reactions. Therefore contact with animals should be avoided even if no respiratory symptoms are present. Up to 40% of people with eczema may not produce specific IgE responses to allergens. It has been suggested that the term eczema should be split into atopic eczema and non-atopic eczema.[3]

There are some general patterns to where the eczema is found on the body according to the age of the person. In infants the eczema is often widely distributed and the cheeks are often the first affected. As they get a bit older the rash often spreads to the body and limbs. The eczema may first affect the outer aspects of joints then as they become older the pattern may change to involve the creases of the joints especially the elbow and knee creases. Children can develop a "discoid" or "nummular" pattern which looks like small coin-like areas scattered over the body and may be mistaken for ringworm.[2] Adults may continue to have a diffuse pattern of eczema but the skin is often more dry and lichenified than in children. Adults may have persistent localised eczema possibly confined to the hands, eyelids or flexures. With persistent, generalized, moderately severe atopic dermatitis based on most of the studies it is recommended that food allergy should always be excluded.[3] Fortunately these food allergies do not always continue into adulthood.

A defective skin barrier function is the underlying cause of atopic eczema. Moisturisers add moisture to the skin and emollients soften the skin. An ideal preparation for dry skin should have both properties. It is important to use moisturizers daily regardless if the person's eczema is in remission or not. Topical steroid ointments are better for dry skin and creams are better for moist oozing skin. People with atopic eczema may have sensitivity to contact allergens in ingredients of common preparations, either prescribed steroid preparations, or in moisturises or emollients. If the eczema is becoming worse or not responding a patch test may be required to identify any allergens. An hour's break should be left between the application of a moisturiser and topical steroids so that the steroid is not diluted. Wet wraps are occasionally used in infants and young children, a weak steroid is applied to the skin then a wet bandage is wrapped over this.

As an asthma nurse educator I regularly have clients with asthma, eczema and hay fever. The effects of eczema can be physical as well as psychological. I have seen children who have been bullied physically and verbally, being called "crusty" can be devastating for a young person. We are frequently contacted by school and public health nurses about children and teenagers having frequent days off school for asthma. It is less commonly understood however how eczema can disrupt a night's sleep due to the constant scratching, often children do not wake up but their rest is severely disturbed and will affect their performance at school. It is essential for self-image both psychological and physical that atopic eczema/atopic dermatitis is well controlled and well managed.

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planning an overseas holiday?

by Janet Delooze BN
Asthma Nurse Educator

Now that summer is here and the weather is changing for the better, many of us are thinking of planning our holidays. However, for those of us with a chronic condition such as asthma or COPD, there are a few more items to consider on the checklist. Failing to plan might be planning to fail, so to speak. Planning ahead will help ensure a safe and happy holiday. One point to remember is that if your asthma or COPD is well controlled before you go on holiday there is a better chance of it remaining well controlled while you are away.

Firstly, have you booked your travel insurance? When planning ahead, talk to your health practitioner about vaccinations or medications, such as malaria treatment, that may be necessary for your destination. Also, ensure that you are well enough to travel. If your journey is likely to arduous, are you fit enough to undertake this? Is the climate going to suit your needs?

Medications

Make sure you have a good supply of medications to take away with you. For asthma, this includes any preventer and reliever medications. It's probably a good idea to pack a little extra medication, so you don't run out whilst on holiday. It's also worth familiarising yourself with the generic names of your medications in case you do run out. Generic names are the chemical names of the medicine. No matter where you are the generic name will be recognised and can be replaced with a local brand prescription. Other things to pack include your peak flow meter (if you use one) and a copy of your asthma action management plan.

Consider asking your family doctor for a letter stating that you will be travelling with medication. This can help you with airport security or customs. Keep your medications and spacer in your carry-on bag so they are readily available to use if needed. Depending on your condition, some doctors may give steroids and antibiotics in case you take a turn for the worst whilst away. It's a good idea too to make sure you know where the local doctor and hospital are located, just in case.

If you have allergies, what allergens and irritants are common where you are going right now? Check the pollen counts at your destination.[1]

No matter what form of transportation you take to get to your destination, it's impossible to avoid allergens. But a few easy steps can keep your exposure to a minimum. All modes of transport – car, train, plane or coach – might have dust mites and mould trapped in the upholstery or the ventilation system. In reality, there isn't much you can do about the train or bus except to make sure you've taken your preventer medication and to have your reliever medication handy. Using anti-histamines can also reduce allergic responses so make sure you've packed them too.

When travelling in a car make the most of the air conditioner with the car window firmly closed. Travel during low-traffic periods, like early morning and late evening. Not only will you avoid the higher levels of air pollution caused by idling vehicles as traffic slows to a crawl, you'll spend less time on the road! An article featured in WebMD (2013)[2] recommends to avoid driving with the windows down, and to use the air conditioner instead. Be sure to use the 'recirculation' setting rather than the outdoor vent setting, and try turning on the air conditioning for about 10 minutes before you set out. This may help to remove dust mite and mould from the upholstery.

Will you be flying? The air on planes can be very dry, and this can trigger an asthma exacerbation. It is important to keep hydrated so drink plenty of water. Also, ensure reliever medication and a spacer is handy to access if needed.

If you're staying in a hotel, you may discover that the room triggers your asthma. Requesting a sunny, dry room away from the hotel's pool might help. You will probably need to do this in advance. Some people may react to the chemicals in the pool. A recent study[3] found that swimmers using outdoor chlorine chemical pools are at significant risk of developing asthma or having flair up of their asthma.

When addressing a dust mite allergy, it would be unrealistic to take all your protective bedding with you but a protective pillow or dust mite travel sheet may help reduce dust mite symptoms.

Of course, the importance of an asthma action plan is vital. It provides instruction and information on how to self-manage one's asthma daily, including taking medications appropriately, and identifying and avoiding exposure to allergens and irritants that can bring about asthma symptoms. In addition, the asthma action plan provides information on how to recognise and handle worsening asthma.[4]

If you ignore your asthma by not taking precautions, there's a chance you could end up in the emergency department.

Having said all that, relax in the knowledge that you are well prepared, and have a happy and safe holiday.

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josh brodie...

Professional cricketer, Josh Brodie from the Wellington Firebirds has joined Asthma Wellington as an Ambassador, to support children with asthma. Josh has had asthma all his life and is keen to mentor kids with asthma, to help them reach their full potential.

Josh says "I still remember it like it was last night, waking up suddenly short of breath and not be able to breathe. Another asthma attack has hit me; it feels like I'm trying to breathe through a straw. The usual routine follows, into my parent's room and off to the hospital we go to get serious treatment. This was a constant thing for me growing up.

I've had asthma all my life and I continue to take medication today. I take my Flixotide inhaler (preventer) every day and Ventolin (reliever) when I need it for asthma symptoms. Growing up I didn't want asthma holding me back from anything I wanted to do. I didn't want to be different from the other kids. I used to play rugby with an inhaler in my sock; I used to play cricket with an inhaler in my pocket right up to the age of about sixteen. I did not want asthma to stop me or hold me back from what I wanted to do growing up.

I have had a lot of doubters and haters in my life and in particular my cricket career so far. I had doctors tell me my asthma was too bad to play sport when I was older.

I've had coaches doubt whether or not they should pick me for particular teams because of my bad asthma. I have always wanted to be a professional cricketer and play cricket for New Zealand.

Yes, asthma has been a huge part of my life and will continue to be for the rest of my life but I will not let it stop me from doing what I want to do. I am now 25 years old and playing professional cricket for the Wellington Firebirds. I am living my dream every day. I love my life. Yes I have asthma and I always will but I will never let asthma stop me from living my dreams. If I can beat asthma and live my dreams, then so can anyone else.

Josh Brodie
Professional cricketer

If you have any kids who you think would benefit from being mentored by Josh contact Asthma Wellington on 04 237 4520 and we can facilitate a meeting.

asthma WELLINGTON

north & south

NEWS FROM AROUND THE REGIONS ...

gerry's reti

After 17 years of service to Asthma Auck announced his retirement, it was time for h ideas to come to the fore and take the orga

Gerry Hanna with Linda Thompson

Gerry cutting the cake

Gerry Hanna

Gerry was the brains behind Asthma New Zealand which is now thriving and the leading authority on asthma and respiratory conditions in New Zealand.

Gerry was involved with the Unitec NZ Asthma Nursing Course and the COPD Nursing Course from their inception in 2000 and 2002 respectively, along with the late Janette Reid. He was instrumental in helping to develop the partnership and commitment between Unitec NZ and Asthma New Zealand for this combined venture and worked hard to ensure the venture came to fruition. They worked to develop a Memorandum of Understanding so that both parties were able to have input into the two distance learning courses for nurses working in various New Zealand health fields to help them assist patients with asthma and COPD. To date there has been almost 1000 Registered Nurses undertaking the course throughout New Zealand. As well as the course Gerry was also a member for many years on the Unitec Advisory Committee.

Gerry's vision saw him employing staff with expertise and their own vision to lead the organisation into the future and I had Gerry's full support implementing two amazing products into the New Zealand market.

Together with VADR who was co responsible for developing the hugely successful Asthma New Zealand asthma management smartphone App which is available free to download from the App store. Both parties are now developing a web based dashboard that allows users and medical professionals the ability to review and manage their

Judy and Gerry Hanna

George Reid with Judy Hanna

Gerry Hanna with George Reid

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and Asthma New Zealand, Gerry Hanna o step aside and allow a new generation of tion even further.

asthma remotely. The dashboard will allow medical professionals to adjust users' asthma action plans through a web interface and for the users to receive advice directly from their care giver.

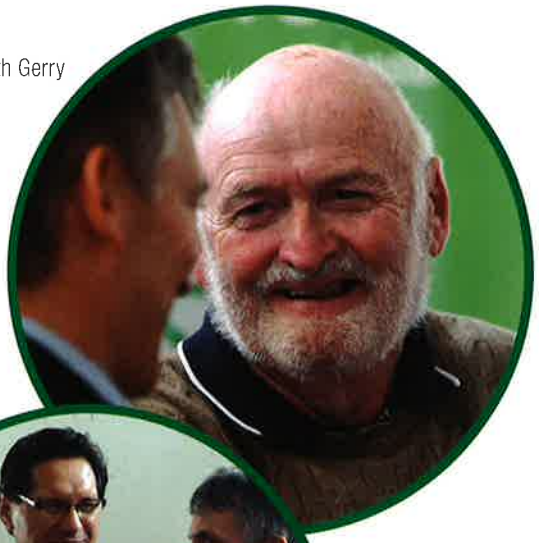
Medication adherence is a main issue for people with asthma in New Zealand and when inventor Catherine Huxford came to Asthma New Zealand for assistance in launching her AsthmaMinder™ – it's a simple holder that house your preventer medication with your toothbrush so when you reach for your toothbrush your inhaler is already in your hand ready to use. Gerry and his team were right there with her and are proud to offer the AsthmaMinder™ to the public free of charge.

In addition to this one of Gerry's main visions was to have a national branch based system and we are well on our way to achieving this with Wellington and South Canterbury already branches and Southland and Rotorua set to join us in 2014.

Without Gerry's persistence in lobbying Pharmac and the Ministry of Health, New Zealand may have been a country without subsidised Ventolin, our only alcohol free metred dose reliever and I am sure those hundreds of thousands users are grateful for his attention to detail.

We will miss you Gerry and may your legacy live on, enjoy your retirement you deserve it!

Linda Thompson
CEO



Dr Jim Lello with Gerry

Tony Davison (Boehringer-Ingelheim) with Dr. Jim Lello

Gerry with son Michael Hanna and family

Mary Grierson (Boehringer-Ingelheim)

e Butland with Swarna Hemachandra

Sherrie Morgan with Lorraine Brown

Gerry Hanna with Linda Thompson

Committee member Lynne Watson with Asthma Nurse Elaine Murray

NEWS FROM AROUND THE REGIONS ...

adidas auckland marathon – run for charity

Why not run in a great event and raise money for charity at the same time?

Marathons all over the globe raise millions of dollars for charity and I wanted Asthma Auckland to be right up there as one of the golden charities in this event. We knew that with your help we could do our bit to get your support both locally and nationwide and support Asthma Auckland and make a difference in our plight to fight asthma together and make Auckland one of the top charity marathons worldwide. We were determined that 2013 would be the start of something special.

I got to work and I decided to put myself out there and do my first ever half marathon and found 9 other unsuspecting hero's to help me. Each of these hero's made a pledge to raise money for asthma, all for different reasons and all for the same reason too. Either they had asthma themselves or they knew someone with asthma or lost someone to asthma.

I am very proud of my team: Claire Brokken, Kirsten Hartnoll, Alison Borland, Paula Pearce, Adam Chard, Anna Paul, James Thompson, Desiree Meiring and Kevin Holland who was our only full marathon entry.

We all did an amazing job and I am so proud of each and every one of us, we raised over $10,000 but we also raised awareness of asthma in New Zealand.

Congratulations to everyone who took part and to a huge thank you to all of our sponsors! The team for the various fundraisers and those who supported them, a special thanks to "Billie" an amazing covers band that played for free at our Spit Roast Dinner helping us reach our goal.

I knew it wouldn't be easy but I didn't think it would be this hard either, I felt emotional at times and the last 5 km's were the longest 5 km's I have ever walked, reaching the top of the bridge was definitely a moment I will treasure forever but nothing compares to the feeling of relief and achievement crossing that finish line and seeing the faces of my personal fan club cheering me on. It was a journey worth taking and one I would definitely recommend to others, I'm undecided if I will do it again but never say never! I was exhausted on the day but recovered well and can only attribute that to the training I did and special thanks to the team at 101 Fitness, I couldn't have done it without you!

Linda Thompson
CEO, Asthma Auckland

Claire Brokken with Linda Thompson

Kevin Holland

Linda Thompson at the start

What an amazing experience finishing another half marathon with some of my closest friends and my amazing Niece. I know my beautiful Logan would have been so proud of me, I did it all for him.
Kirsten Hartnoll – Auckland

I completed my first marathon running in the adidas Auckland Marathon in 4:13. It was harder than I hoped, I had an Asthma attack at 30 minutes and faded badly at 38 km, but I finished it, just like 2,700 others, many of whom had their own unique challenges.
It was poetic that I had an asthma attack, running for an asthma charity. It lasted for 15 minutes of coughing hard, so hard I thought I was going to lose all my food, but the inhaler and keeping calm saw me through. This has happened a few times in training, but this was the worst so far – race day jitters I guess. I think the runners around me were more concerned than I was. The last part of the run was harder than I wanted, but I guess that's marathon running for the social runner.
But the big success was as a team we raised $10,000 to support Asthma in New Zealand and, hopefully, I demonstrated that asthma need not be a barrier to such an event, I was able to finish in the middle of the field.
Thank you for your support, for your generosity. It helps me justify the insanity if the event! And hopefully will help other achieve their potential.
Kevin Holland – Christchurch

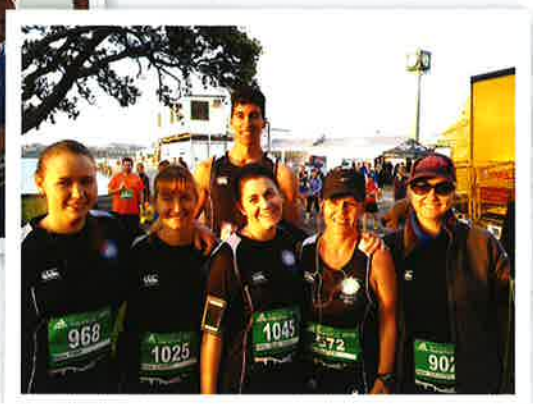
north & south

NEWS FROM AROUND THE REGIONS ...

Adam Chard

Kevin Holland

What a fantastic day. I enjoyed every minute and all in aid of such a fantastic cause.
Alison Borland – Auckland



Anna Paul, Kirsten Hartnoll, Adam Chard, Paula Pearce, Alison Borland and Desiree Meiring

President, Robert Muir, offering some comforting words at the end

Claire Brokken

Asthma Nurse, Karen Little, with other charity representatives

It was an honour to do my first ever half marathon for Asthma Auckland in memory of my cousin Logan. I thoroughly enjoyed this experience and am grateful to all who sponsored me.
Anna Paul – Auckland

I felt very privileged to be in a position where I could participate in a great event like the adidas Auckland Marathon for such a great cause like asthma. All of the blisters, swollen feet and sore legs I got from the Marathon are nothing compared to what people living with Asthma have to endure every day. The amazing feeling I got crossing the finish line knowing I have helped Asthma in some way made it all worthwhile.
James Thompson – Auckland

I have been able to tick this off my bucket list but I'm ready to do it all over again. Mad even crazy but that feeling of achievement cant be taken away.
Claire Brokken – Auckland

What a run! It was probably one of the best days of my life, right alongside having my children. The marathon started with the quiet calm that only comes in the mornings as we got onto the ferry with 50 or so other people dressed in running gear, all heading to do the same thing we were. As we exchanged nervous grins, the sunlight peeked out from behind the clouds. We headed to the starting line. I will never forget the sound of 10,000 running shoes hitting the road as we started off together. It was an eerie feeling as all the training we had done was finally going to be used. It was at that precise moment that I thought that I wish I had done more! The marathon itself is a bit of a blur, filled with images of a haka, smiles from people cheering us all on, signs saying, "Keep calm and Keep running", that view of the harbour bridge in the distance, seeing the 16 km mark, then the 19 km mark and then finally crossing the line with my dear friend Kirsten. The Powerade, lollies, banana and smiling face of Asthma Auckland's nurse educator Karen in the charity tent made the day complete.
I feel proud of myself that I was able to complete a half marathon but know I did not do it alone. Thank you to those that ran alongside me, pushed me to keep going, support from those who couldn't be there but backed me and for Logan, I wish I could have known you.
Paula Pearce – Auckland

north & south

NEWS FROM AROUND THE REGIONS ...

asthma south canterbury

Compiled by Vicki Lyford RN

This year has been a very interesting year for me.

In February, I was part of a group of non-profit organisations who held a health day in Waimate. This was attended by a variety of groups and was of great benefit to the people in the region. I provided a display stall at the Children's Day held in Caroline Bay which was only hampered by the drizzly weather. Hundreds of families came down to view the stalls, partake in food from the barbeque, and ride the free rides. Stalls from many community groups dealing with local children displayed their information and wares. Many children enjoyed guessing how many marshmallows were in the spacer and the prize was a $20 voucher kindly donated by McDonalds.

I join in with our Huffers and Puffers C.O.P.D. Support group which meets once a month.

I regularly have a stand with information displays at central points in Timaru to inform the community of the services Asthma South Canterbury provide and I am encouraged by the amount of people who stop to gather information. This has led to many further education sessions, which is positive.

I have begun doing Asthma Education sessions in Waimate, thanks to Waimate Pharmacy who provide the venue and booking service for me. I hope to do this on a more permanent basis next year.

Waimate High School also makes use of our school education sessions and I visit every term.

I have been providing education sessions to several schools and have had positive feedback from those who accessed this service. This is an area I would like to develop more within the schools of South Canterbury.

It is also positive to be able to provide education to teachers in schools; this is also an area I hope to improve on in the future.

I meet with the Respiratory Nurses of the South Canterbury District Health Board once a month and we discuss what is happening in our community and plan care and follow up for patients.

I also meet up with the Under 5's network of people who supply help and assistance to the children of the South Canterbury Region. This keeps me up to date with changes in legislation, and develops good working relationships with other providers, to link with and support each other.

I also have a growing group of clients with asthma/COPD who I see on a monthly basis individually, for support and education.

The maintenance team of the South Canterbury District Health Board service our nebulisers on an annual basis, and this is free of charge to us. We are very grateful to them for this service.

I held a stand at the Timaru Public Library on World Asthma Day and I spoke to a variety of people to pass on information about Asthma, either because they themselves have asthma or they have a family member with asthma. Many were surprised with the current statistics of prevalence of Asthma in our community, both adults and children, and to the mortality of asthma, which should be preventable. I will provide another stand for World COPD day in November.

I have also completed the Asthma course through Unitec and Asthma Auckland and am part way through the C.O.P.D. course. Study is my friend at the moment.

I am providing another stall at Caroline Bay in November for the public to view along with many other community groups.

So for me, it has been a steep learning curve for the job, which I relish and look forward to another exciting year in 2014

thoracic society of australia and new zealand queenstown meeting

On August 7 – 9 this year 6 nurses from Asthma New Zealand, (Ann Wheat, Janet Delooze, Sharron Erbacher, Adie Riddell, Alice Paul and Vicki Lyford) attended the New Zealand Branch Meeting of TSANZ. This meeting is a great opportunity to mix with scientists, specialists, nurse practitioners and other asthma and COPD nurses. It updated attendees on asthma, COPD and other respiratory conditions. There were several overseas speakers to add to the benefit of this conference as participants hear first-hand what is happening overseas. This conference is great value as the nurses program is heavily subsidised by GlaxoSmithKlein, making it more affordable for nurses to attend and our thanks to them for this great opportunity. Accommodation is close to the airport and on the lake front making it a beautiful venue for this conference. People can stay on at the end of the conference and enjoy the sight-seeing around Queentown.

Left to right: Asthma Nurse Educators – Adie, Vicki, Janet, Sharron, Ann and Alice

a warm welcome from the staff in the wellington office

As we near the end of 2013 we look back on a very 'active' year.

In May we made the major move to Johnsonville and are now in the Salvation Army building on the main road. This is proving a great position as we are nice and close to public transport and very accessible. Look out for our signage when you are next driving through Johnsonville and drop in for information on your respiratory condition or to book an education session or Spirometry with one of our two Asthma Nurses. The office I not always manned so it's a good idea to phone first if making a special trip.

Referrals: we are happy to receive referrals from both health professionals and members of the public. We do have a referral form but if you don't have one phone Kim on 04 237 4520 or email kimj@asthma-nz.org.nz.

In October we had the first of our evening public asthma education forums at our Johnsonville rooms. This was well attended and the feedback has been very positive so we will continue these monthly in 2014. To book your place contact Kim on 04 237 4520 or email kimj@asthma-nz.org.nz.

The asthma program in schools is growing in the Wellington area. Our goal is to provide the opportunity for all year nine students with asthma to have the opportunity of an asthma assessment in their first year at college. Ensuring that their asthma is well controlled means less absences from the classroom, better sleep patterns and increased energy.

We are also providing asthma education sessions to the staff and parents of early childhood centres and primary schools, so do get in touch if you want one of the nurses to visit your centre/school.

Our very supportive governing committee meets bi-monthly, and we are currently looking for new members to join us for 2014. We would particularly welcome health professionals who would like to help the Society maintain its presence in the community. Give Kim a call on 04 237 4520 if you are able to give some time to support this valuable service.

We would like to thank our members for their on-going support and donations. We have received several bequests this year which are invaluable in enabling us to continue to provide asthma education in the Wellington region.

world copd day wednesday 20th november

World COPD Day 2013

The theme for this year's world COPD day (Chronic Obstructive Pulmonary Disease) was "It's Not Too Late". At Asthma Auckland we held an open day for people around the Auckland area to come in and talk with the nurses about COPD and to undertake Spirometry testing if necessary. This year we had about 34 people take up this opportunity to come in. The day should have started at 10 a.m. but the first person eagerly arrived at 9 a.m. We had a constant stream of people coming in all day. The day was very beneficial to many people who were looking for information and advice about their condition and who had been feeling so unwell with ongoing symptoms. We offered education and advise about how to manage their condition and advised many that it is Never Too Late to Stop Smoking (cigarettes, tobacco and or any other inhaled substances) Many were given a management plan and advised to see their General Practitioner for further discussion and review. A very worthwhile day but for those who may not have been able to attend on the day, we offer free in home education sessions. Please call 09 630 2293 to make an appointment with one of the nurse educators. Asthma Auckland would like to acknowledge the support of Boehringer-Ingelheim for their financial assistance

Boehringer Ingelheim

The Holidays

Written by Karen Little
Asthma Nurse Educator

Joe was very excited as his cousins were staying with his family for a week in the school holidays.

He really loved it when all the kids were allowed to sleep in the living room on the mattresses that were usually kept in the garage. They told scary stories and were allowed to watch TV in the early morning and late at night.

The first night Joe had his orange puffer through his spacer as usual. All the cousins thought the idea of his toothbrush hanging down from his orange Asthma MinderTM was awesome. "You lucky thing, Joe" said his cousin, TJ, "I never know where my toothbrush is because all my family just use the one that is nearest. Mum doesn't buy any more for my sister because she keeps losing it". Joe explained that the Asthma Nurse had given it to him because he kept forgetting to take his orange puffer morning and night even when he was well. He was supposed to have a drink of water after his orange puffer so cleaning his teeth was a good way to rinse his mouth out.

All the cousins found a mattress and after a while tried to go to sleep. It was very difficult to sleep. First of all TJ started coughing then his sister Mary, quickly followed by Thomas and Sam. Even although the cough was not loud it was very annoying.

"Wake up TJ" whispered Joe. This had no effect so Joe shook TJ awake. "You haven't stopped coughing since we lay down on our mattresses, are you sick?"

"Whhaaat do you mean" complained TJ, "buzz off, I am asleep". He rolled over went back to sleep and the coughing stared up again.

Joe gave up trying to quieten his cousins and put his T-shirt over his head and tried to sleep.

In the morning everyone was very tired and grumpy.

"Do you know how often you were all coughing last night?" asked Joe. All the cousins said they did not cough and were not sick at all. "Every one coughs in the winter anyway" replied TJ.

"I am sick of coughing" complained Mary.

Mum came into the living room and helped to put all the mattresses up against the wall.

"Mum do you think that Mary might have asthma as well? Remember how the Asthma Nurse said that coughing at night when you did not have a cold could be a sign of asthma?" asked Joe.

"You could be right Joe. Now I think about it, Mary has not been running around as much as she used to and she does seem to cough a lot," Mum looked worried. "We need to see the doctor soon anyway as you have not been for months and the doctor said we are supposed to see him three times a year to make sure that your asthma is under control".

Joe went to see the doctor with Mum and Mary the next day. The doctor said he was very pleased with Joe as Joe did not need his blue puffer more than twice a week and was playing lots of rugby. In fact, he had finally been chosen for the school team. He listened to Mary's chest with his stethoscope.

"Well I can definitely hear a whistling sound, I think it is time to start Mary on the orange puffer as well" explained the doctor. "As she has been sleeping on an old mattress, I will also order a skin prick test to see if she is allergic to dust mites, as there would be thousands of them in an old mattress".

Mary was pleased because she had seen how much better Joe was since he started taking it.

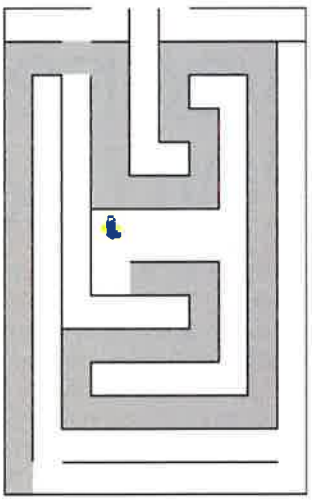
Mum decided to tell TJ's Mum about the night-time coughing so she could find out if maybe TJ had asthma as well.

Answers

1 Sri Lanka
Argentina
Norway
Switzerland
Brazil
Taiwan
Vietnam
Denmark

2

3



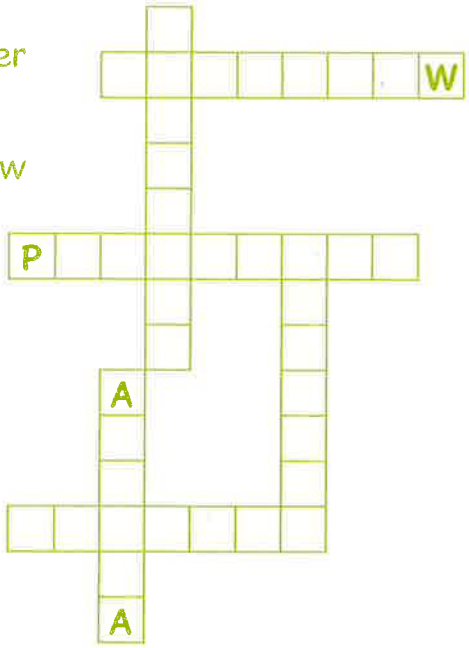
Kid's Page

1 Match up letters from the red column and green column to spell the name of a country – (to make it harder these letters are scrambled).

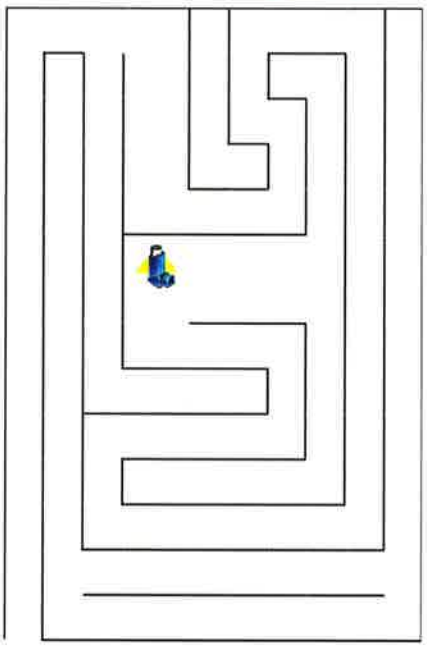
ENM	TAN
KALAN	GENT
NAY	NEWITZD
RAZ	VET
INAM	BIL
LARE	ORW
ARINA	IRS
WAI	DARK

2 Fit the words into the crossword

Preventer
Reliever
Asthma
Peak flow
Trigger
Inhaler



3 Help! Looking for her blue inhaler



4 WORD SEARCH - Find all the animals

F	M	O	N	K	E	Y	C	A	T
K	I	M	O	P	Q	R	Y	I	A
M	A	S	C	D	O	R	G	X	B
E	Y	U	H	W	F	E	I	Q	W
E	L	W	O	S	R	L	R	R	T
R	I	O	R	A	O	E	A	N	T
K	D	F	S	H	G	P	F	Z	X
A	N	O	E	P	J	H	F	E	V
T	L	A	M	A	K	A	E	B	W
A	I	C	H	E	J	N	X	R	E
L	I	O	N	I	T	T	C	A	Z

Fish
Monkey
Cat
Horse
Tiger

Bat
Giraffe
Owl
Crow
Ant

Elephant
Meerkat
Zebra
Lama
Lion

5

G	A	S	O	L	I	N	E	U	L
O	D	R	M	P	A	O	E	L	I
O	Z	J	E	A	A	U	S	K	G
C	O	R	D	S	T	O	V	E	H
A	H	E	W	D	N	C	Q	A	T
T	O	A	S	T	E	R	H	P	E
F	I	R	E	P	L	A	C	E	R
H	R	V	M	D	R	H	S	C	S
A	O	U	T	L	E	T	S	C	L
T	N	A	R	M	W	J	A	Q	Y

Find the words (Fire Hazards)

Matches
Iron
Toaster
Stove
Outlets

Fireplace
Lighters
Cords
Gasoline

Answers opposite page

asthma – COPD overlap syndrome (ACOS)

by Janet Delooze BN
Asthma Nurse Educator

Asthma and chronic obstructive pulmonary disease (COPD) are long-term conditions that are common in New Zealand. Some people, however, have overlapping diagnoses where they have components of both conditions, known as overlap syndrome (ACOS).

Incidence

Currently, there does not appear to be statistics available of New Zealanders with overlap syndrome although we know that it is more prevalent in older adults.[1] In a small study in Australia of 44 adults, 65% were found to have overlap syndrome.[2] A larger study carried out in Finland in 2011 found that 15% of the 1,546 participants had clinical features of both asthma and COPD.[3] Data from three pulmonary clinics in the US found between 15.8% and 24.3% with overlap syndrome.[1]

Characteristics of obstructive airways diseases

Asthma is characterized by episodic airflow obstruction that is reversible. It tends to start from an early age however it can occur at any age. It is often triggered by allergens but exercise, irritants and viral infections can also trigger symptoms.

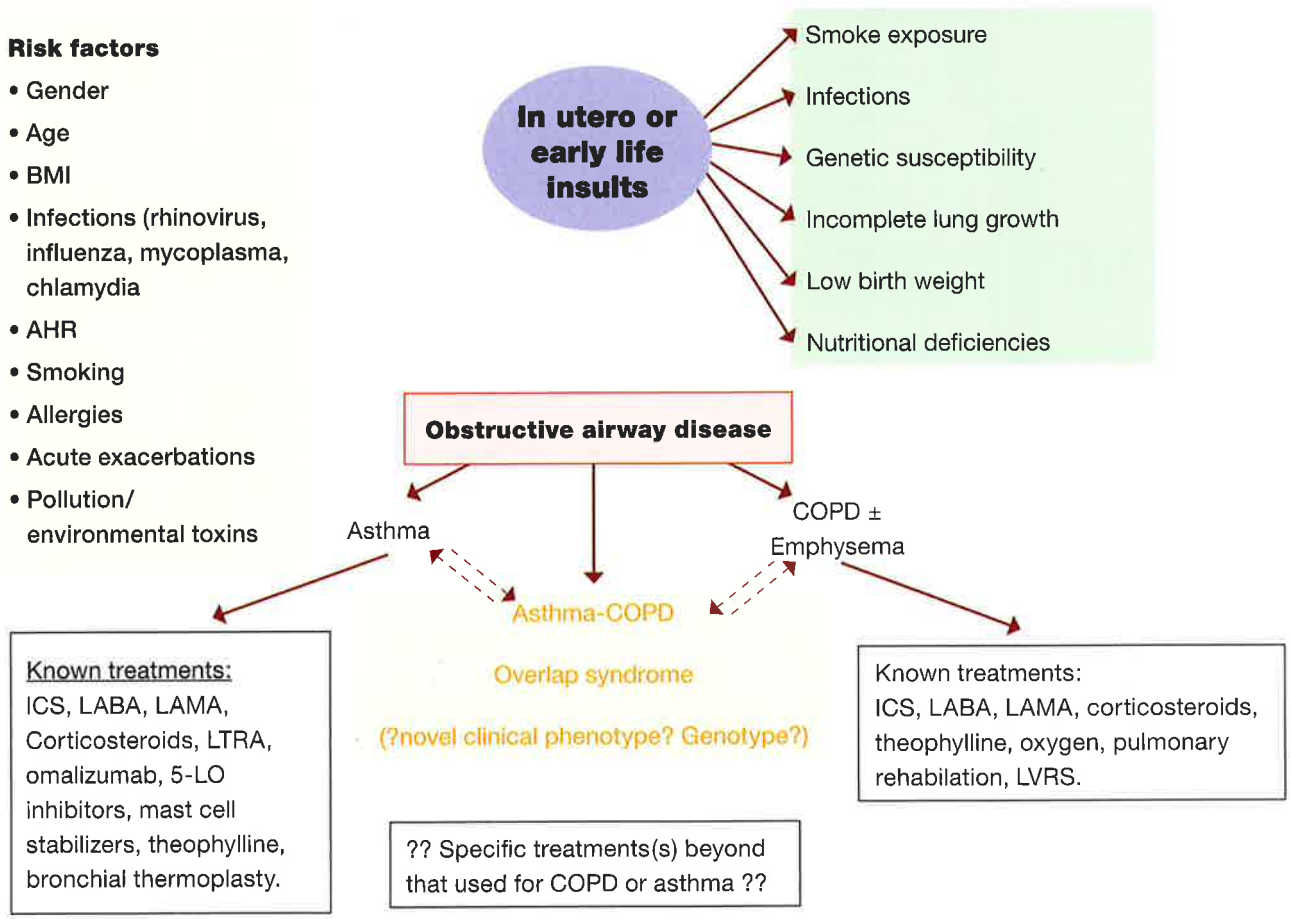
COPD tends to occur in older age groups and is mostly caused by smoking (90%) 4, although occupational irritants, biofuels and genetic factors can also be causative. COPD is a disease state that is characterized by airflow limitation that is progressive and not fully reversible.

COPD is an umbrella term for chronic bronchitis and emphysema, though for most patients there is usually an element of both conditions.

Chronic bronchitis is defined as the presence of a cough productive of sputum on most days for at least three months of two successive years. Emphysema is characterised by abnormal airspace enlargement and destruction of lung parenchyma.

The mechanisms of inflammation are different in asthma and COPD: asthma is primarily characterised by an eosinophilic inflammation whereas COPD is associated with a neutrophil and macrophage-induced inflammation (Figure 1).[5]

Figure 1. Differentiating chronic obstructive pulmonary disease from asthma



With ACOS, there are variable clinical features, such as patients with COPD where there is reversible airflow obstruction, others with asthma where there is incomplete reversibility and airway remodelling, and non-smokers who develop COPD.

In the Wellington Respiratory Survey, five clinical phenotypes were identified as follows:

- ***Cluster 1:*** severe and markedly variable airflow obstruction with features of atopic asthma, chronic bronchitis and emphysema
- ***Cluster 2:*** features of emphysema alone
- ***Cluster 3:*** atopic asthma with eosinophilic airways inflammation
- ***Cluster 4:*** mild airflow obstruction without other dominant phenotypic features
- ***Cluster 5:*** chronic bronchitis in nonsmokers[6]

Possible reasons for its occurrence

- the association between childhood respiratory illness and impaired adult lung function
- a decline in lung function comes with advancing age; in asthma, reversibility lessens as age increases[2]
- the Dutch hypothesis which states that asthma and airway hyperresponsiveness predispose patients to COPD in later life, and that asthma, COPD, chronic bronchitis and emphysema are different expressions of a single airway disease.[7]

Why is it important?

Patients who have both asthma and COPD have more frequent exacerbations, more rapid disease progression, increased co-morbidities and worse health-related quality of life than if they had one condition.[7]

The Global Initiative for Asthma (GINA)[8] guidelines advocate a step-wise approach in the treatment of asthma, and for COPD, there is the Global Initiative for Obstructive Lung Disease (GOLD). Overlap syndrome patients are often excluded from clinical trials of asthma and COPD and therefore there are no set guidelines for the management of this specific phenotype.

Treatment

At the moment, the treatment tends to be drawn from the existing guidelines of GINA or GOLD depending upon the most prevalent clinical features.[1] Establishing whether the inflammation is eosinophilic or neutrophilic may be helpful, either by sputum or exhaled FeNO testing; there is poor response to inhaled corticosteroids (ICS) in non-eosinophilic inflammation 9. In a recent study it was found that most patients were easily classified as either asthma or COPD but up to 19.8% of patients were difficult to diagnose based on clinical presentation and spirometry 10.

In conclusion, overlap syndrome is present in a proportion of patients with obstructive airways disease and several classifications or phenotypes have been suggested. However, with few clinical trials being carried out with ACOS there is still no data to guide treatment regimes. Hopefully, more work will be carried on this important area of respiratory disease.

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pollution and how it affects respiratory conditions such as asthma and copd

by Ann Wheat RN BN
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Is it safe to use wood and coal fires if you have asthma and Chronic Obstructive Pulmonary Disease (COPD)? How do these two fuels affect both indoor and outdoor air quality? What can you do to not only help the environment but also your health? These are the questions that will be addressed in this article.

Pollution from cars and trucks is very well known to cause exacerbations and worsening of asthma and COPD. What is not so well known is that pollution from wood fires and coal fires can also be major contributors to the worsening of each of the two conditions[1] plus a trigger for acute exacerbations requiring hospital admission as well.[2] It has also been suggested that air pollution can have a role in the development of asthma and COPD as well.[3] It is the smallest of the particulate matter (less than PM10) that can have the most effects on the lungs[3] as they are more easily breathed into the small airways. Some of the chemicals, as well as the particulate matter that are released in both indoor and outdoor pollution are sulphur oxides, nitrogen oxides, volatile organic compounds, carbon monoxide plus many other toxic materials.[5]

In winter, we all like to be warm and there is nothing nicer than sitting in front of roaring fire on a cold winter's day. But for some people, this can be a major problem. For many, fires can be their only means of heating as they cannot afford electricity to warm their homes. Electricity is a clean heat but the cost of running heaters is becoming too much for many people today. One problem though is that the wood/coal fire may only heat one room of the house and so people with asthma go from a beautifully warm room into cold rooms. Cold air of course is another trigger for asthma and a problem for people with COPD, so it is imperative that our homes are kept warm and dry especially in winter, thus a heating system that can heat the whole house is very important. If this is not possible, then economy heaters should be installed in all bedrooms so that they are not cold at night.

What do we know about these two fuels?

Wood smoke and coal smoke affect both indoor and outdoor air quality. Smoke that is released by chimneys into the atmosphere can seep into nearby homes thereby causing harm to others that may not use this type of heating.[5,6] In fact if you have lung disease then you may have symptoms earlier and with lower smoke levels than people with healthy lungs.[6]

It is also known that weather conditions can increase air pollution. If it is very windy, then pollutants can be carried for quite a distance and on less windy days, pollutants can remain close to their source.[7] Inversion layers can also increase air pollution on especially when the upper inversion layer is warm as it acts as a lid to keep in the pollution[7], sometimes to a high level. Windy days and warmer air in the lower layer as the ground warms up will disperse the inversion layer.

For people who cannot afford electricity, wood fires can be a cheaper option[2] even in areas with lesser populations. But despite the satisfaction of having a wood fire, if they are not used correctly they can increase the amount of smoke[2] that goes out into the atmosphere. To reduce this, there are a number of measures that can be taken to reduce both indoor and outdoor pollution:

1 Ensure that the wood burner and chimney are checked yearly
2 Burn small, hot fires – they produce more heat and less smoke
3 Always keep air vent open in a wood burner as this helps to increase the air circulation and improves burning
4 Use dry hard wood as this produces less smoke
5 Use wood pieces that are about 10 – 15cms in size as fires burn better with more surface area exposed to flames
6 Never burn treated wood, particle board or plywood
7 Always store wood outside, off the ground and keep it covered.1

So, if wood is your only source of heating, by following these rules, you are not only protecting yourself but others, as well by reducing the pollution both indoors and outdoors.

Coal has similar problems to wood fires. Coal burning affects very young children to a greater extent as they spend more time at home than their older siblings and as a result become more prone to having lower respiratory illnesses.[6] It has also been found that in homes where there are non-smokers, the indoor air pollution is from nearby homes that burn coal.[6]

Throughout the world, coal is still burned in some places in large quantities. As a result in China, for instance, they have developed stoves that increase the efficiency of coal burning by increasing the air that is in the stove. They have also developed different types of coal (honeycomb) that burns more efficiently[9]. In England today there is little use of coal fires as these have been replaced by other forms of heating. In New Zealand therefore we also need to be reducing this type of heating to reduce the respiratory effects on all ages of people.

In conclusion, wood and coal fires cause both indoor and outdoor pollution that is harmful to people's respiratory health. It is therefore important that measures are put in place to help reduce these effects not only by the people using these types of heating but by the authorities to legislate about the types of burners that can be used. We need to protect people's respiratory health so that they can lead normal happy lives.

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Int Arch Allergy Immunol

The Effect of Obesity on the Level of Fractional Exhaled Nitric Oxide in Children with Asthma;

Erkoçoğlu M, Kaya A, Ozcan C, Akan A, Vezir E, Azkur D, Kara

BACKGROUND: Several studies have demonstrated a relationship between asthma and obesity. However, the results have been conflicting with regard to the relationship between fractional exhaled nitric oxide (FeNO), used as a marker of airway inflammation in asthmatic patients, and obesity. We aimed to evaluate the association of FeNO with obesity and obesity-related metabolic complications in asthmatic and nonasthmatic children. Methods: The study population included children aged between 6 and 17 years and consisted of 4 groups: obese asthmatics (n = 52), normal-weight asthmatics (n = 49), obese nonasthmatics (n = 51) and normal-weight nonasthmatics (n = 42). FeNO measurement and spirometry were performed for all patients. To evaluate the metabolic complications, serum lipids, glucose and insulin levels were measured. Insulin resistance (IR) was estimated by the homeostasis model assessment, HOMA-IR. All participants were evaluated for the presence of metabolic syndrome (MS). Results: The mean age for the 194 subjects participating in the study was 11.6 ± 2.5 years. The FeNO level of asthma patients with MS was not different from those without MS (14.5 ± 8.0 and 16.7 ± 8.7, respectively, p = 0.449). In the nonasthmatic group, subjects with MS had a higher FeNO level than subjects without MS (12.5 ± 5.1 and 17.3 ± 8.3, respectively, p = 0.014). Spearman's rank correlation coefficients revealed a positive correlation between FeNO and body mass index (BMI; p = 0.049, r(2): 0.204) in the nonasthmatic group and after multivariate regression analysis, BMI still persisted as an independent risk factor for FeNO. CONCLUSION: We found a positive correlation between BMI and FeNO level which suggests a link between obesity and increased airway inflammation in nonasthmatic children.

Int J Pediatr Otorhinolaryngol

The effect of montelukast on wheal reactions in skin prick tests: A double-blind-placebo-controlled randomized trial;

Bulan K, Aydogan M, Siraneci R, Aydogmus C; International Journal of Pediatric Otorhinolaryngology 77 (10), 1655-8 (Oct 2013)

OBJECTIVE: It is well-known that number of drugs may interfere with wheal reactions in skin prick test. However, the effect of long-term use of montelukast, a cystenil leukotriene receptor antagonist, on skin prick test hasn't been full elucidated. The aim of present study was to demonstrate the effect of montelukast on skin prick tests (SPT).

METHODS: This is a single-center, randomized, double-blinded, placebo-controlled study including two treatment periods with a wash-out interval. The subjects received montelukast (5mg per day), fexofenadine HCl (60mg per day) and placebo (lactose) with a double-blinded manner during 7- and 21-days treatment periods with a 14 days wash-out period. Dermatophagoides farinae (D. farinae) was used as the skin test material, while histamine as positive control and normal saline as negative control. Overall, 7 skin prick tests were performed at following time points: before treatment periods, on the last days of both treatment periods, 24h after completion of treatment periods, and on the last day of 14-days interval.

RESULTS: Sixty house dust mite (HDM) allergic children (23 girls and 37 boys) with allergic rhinitis and/or asthma completed the study. Mean age was 8.3±2.0 years. In the fexofenadine group, a significant suppression was observed in post-treatment values when compared to baseline values in SPT with D. farinae (p=0.019). In the montelukast group, no significant suppression was observed in SPT with D. farinae at all time points when compared to baseline.

CONCLUSIONS: Our results showed that montelukast had no effect on measurements of SPT. Thus, we concluded that there is no need to discontinue the treatment in order to perform SPT in patients receiving montelukast, even in those on montelukast treatment for at least 21 days.

Clin Pediatr

How Often Do Providers Discuss Asthma Action Plans With Children? Analysis of Transcripts of Medical Visits;

Gillette C, Carpenter D, Ayala G, Williams D, Davis S, Tudor G, Yeatts K, Sleath B; Clinical Pediatrics (Oct 2013)

OBJECTIVE: To examine how often providers discussed asthma action plans with children and their caregivers and child, clinical, and provider characteristics that were associated with those discussions. Method. This was a cross-sectional analysis of audio-recorded visits between 35 general pediatric providers and 260 children (8-16 years old) with asthma and their caregivers. The visits were transcribed into text. The transcripts were coded for discussions about written asthma action plans. Results. Providers discussed written asthma action plans with 21.0% of children and caregivers. Providers were significantly more likely to discuss asthma action plans when the child was enrolled in Medicaid, the visit was asthma related, the visit was longer, the provider was not White, or more provider education. Conclusion. In our sample, providers rarely discussed action plans with children and their caregivers. Providers should discuss asthma action plans with every child with persistent asthma and their caregivers and revise them regularly.

BMC Pulm Med

Association between chronic obstructive pulmonary disease and gastroesophageal reflux disease: a national cross-sectional cohort study;

Kim J, Lee J, Kim Y, Kim K, Oh Y, Yoo K, Rhee C, Yoon H, Kim Y, Park Y, Lee S, Lee S; BMC Pulmonary Medicine 13 (1), 51 (Aug 2013)

BACKGROUND: Gastroesophageal reflux disease (GERD) is one of the most common causes of chronic cough and a potential risk factor for exacerbation of chronic obstructive pulmonary disease (COPD). The aim of this study was to investigate the prevalence and risk factors of GERD in patients with COPD and association between GERD and COPD exacerbation.

METHODS: Data were collected from the National Health Insurance Database of Korea. The subjects were 40 years old and older, who had COPD as primary or secondary diagnosis codes and utilized health care resource to receive prescriptions of COPD medication at least twice in 2009. Univariate logistic regression was performed to understand the relationship between COPD and GERD, and multiple logistic regression analysis was performed with adjustment for several confounding factors.

RESULTS: The prevalence of GERD in COPD patients was 28% (39,987/141,057). Old age, female gender, medical aid insurance type, hospitalization, and emergency room (ER) visit were associated with GERD. Most of COPD medications except inhaled muscarinic antagonists were associated with GERD. The logistic regression analysis showed that the presence of GERD was associated with increased risk of hospitalization (OR 1.54, CI 1.50 to 1.58, p<0.001) and frequent ER visits (OR 1.55, CI 1.48 to 1.62, p<0.001).

CONCLUSIONS: The prevalence of GERD in patients with COPD was high. Old age, female gender, medical aid insurance type, and many COPD medications except inhaled muscarinic antagonists were associated with GERD. The presence of GERD was associated with COPD exacerbation.

COPD

Co-morbidities and Hyperinflation Are Independent Risk Factors of All-cause Mortality in Very Severe COPD;

Budweiser S, Harlacher M, Pfeifer M, Jörres R; COPD (Oct 2013)

ABSTRACT BACKGROUND: COPD is a multi-component disease that is not sufficiently reflected by FEV1 alone. We studied in patients with very severe COPD, which dimensions of the disease, including co-morbidities, dominate prognosis. Methods: In patients with FEV1<30% predicted,

anthropometric, laboratory, spirometric and body plethysmographic data, smoking status, alcohol consumption, the level of dyspnoea and exercise performance were assessed. Co-morbidities were categorized by the Charlson-index and the COPD-specific co-morbidity test (COTE). The prognostic value of multiple dimensions was explored using uni- and multivariate survival analyses regarding death from any or respiratory cause. Results: Among 209 patients included (58/151 female/male; FEV1 25.0 (22.0-26.9)%predicted), arterial hypertension (54.1%), hyperlipidemia (38.3%) and diabetes (19.6%) were most common, 57.9% showing a COTE-index of ≥1 point. During follow-up (28 (14-45) months), 121 patients had died, mostly (56.2%) due to respiratory causes. Age, BMI, the ratio of residual volume to total lung capacity (RV/TLC), co-morbidities in terms of the COTE- and Charlson-index, but not FEV1, were significantly associated with all-cause and respiratory mortality. The association of the median values of the Charlson- (HR 1.911 [95%-CI 1.338-2.730]) and COTE-index (HR 1.852 [95%-CI 1.297-2.644], p<0.001 each) with mortality was similar and stronger when combined with age. In multivariate analyses, only RV/TLC and co-morbidities were independent risk factors of all-cause mortality (p<0.05 each). CONCLUSION: In very severe COPD, resting hyperinflation and co-morbidities provide the major prognostic information, whereas the association of the recently introduced COTE-index with mortality was similar to that of the established Charlson-index and even stronger when including age.

COPD

Use Patterns of Long-acting Bronchodilators in Routine COPD Care: The OUTPUL Study;

Martino M, Agabiti N, Bauleo L, Kirchmayer U, Cascini S, Pistelli R, Colamesta V, Patorno E, Pinnarelli L, Fusco D, Perucci C, Davoli M, on behalf of the OUTPUL Study Group ; COPD (Oct 2013)

ABSTRACT BACKGROUND: COPD is the fourth leading cause of death in the world. In the case of exacerbations or persistent symptoms, regular treatment with long-acting bronchodilators is recommended to control the symptoms, reduce exacerbations and improve health status. Objectives. To describe patterns of drug utilization among patients diagnosed with COPD, to measure continuity with long-acting bronchodilators, to identify determinants of not receiving long-acting therapy continuously. Methods. We identified a cohort of patients discharged from hospital with diagnosis of COPD between 2006 and 2008. Patients were observed for a two-year follow-up period, starting from the day of discharge. Follow-up was segmented in six-month periods, in order to dynamically evaluate prescription patterns of Long-Acting Beta-Agonists (LABA), tiotropium, and inhaled corticosteroids. Patients with prescriptions for LABA and/or tiotropium in each of the six-month periods were defined as'continuously treated with long-acting bronchodilators.'The degree of drug treatment coverage was measured through the Medication Possession Ratio (MPR). Logistic regression was performed to identify determinants of not receiving long-acting bronchodilators continuously. Results. A total of 11,452 patients diagnosed with COPD were enrolled. Only 34.8% received long-acting bronchodilators continuously. The MPR was greater than 75% in 19.6% of cases. Among the determinants of not receiving long-acting bronchodilators continuously, older age and co-morbidities played an important role. CONCLUSIONS: In clinical practice, the COPD pharmacotherapy is not consistent with clinical guidelines. Medical education is needed to disseminate evidence-based prescribing patterns for COPD, and to raise awareness among physicians and patients on the health benefits of an appropriate pharmacological treatment.

Marine lipid fraction PCSO-524TM (lyprinol ® / omega XL®) of the New Zealand green lipped mussel attenuates hyperpnea-induced bronchoconstriction in asthma

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PURPOSE: Evaluate the effect of the marine lipid fraction of the New Zealand green-lipped mussel (Perna canaliculus) PCSO-524TM (Lyprinol®/Omega XL®), rich in omega-3 fatty acids,on airway inflammation and the bronchoconstrictor response to eucapnic voluntary hyperpnea (EVH) in asthmatics.

METHODS: Twenty asthmatic subjects, with documented HIB, participated in a placebo controlled double-blind randomized crossover trial. Subjects entered the study on their usual diet and were then placed on 3 weeks of PCSO-524_ or placebo supplementation, followed by a 2 week washout period, before crossing over to the alternative diet. Pre- and post-eucapnic voluntary hyperpnea (EVH) pulmonary function, fraction of exhaled nitric oxide (FENO), asthma symptom scores, medication use, exhaled breath condensate (EBC) pH, cysteinyl leukotrienes (cyst-LT), 8-isoprostane and urinary 9a, 11b-prostaglandin (PG)F2 and Clara (CC16) protein concentrations were assessed at the beginning of the trial and at the end of each treatment period.

RESULTS: The PCSO-524™ diet significantly reduced ($p < 0.05$) the maximum fall in post-EVH

FEV1 (-8.4 ± 3.2%) compared to usual (-19.3 ±5.4%) and placebo diet (-22.5 ±13.7%).

Pre- and post- EVH EBC cyst-LT and 8-isoprostane, and urinary 9a, 11b-PGF2 and CC16 concentrations were significantly reduced ($p < 0.05$) on the PCSO-524™ diet compared to the usual and placebo diet. EBC pH and asthma symptom scores were significantly improved ($p < 0.05$) and rescue medication use significantly reduced ($p < 0.05$) on the PCSO-524™ diet.

Randomised, double-blind, placebo-controlled trial of EPs 7630 in adults with COPD

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BACKGROUND: Preventing and managing exacerbations is one major component in COPD treatment.

We investigated whether EPs 7630, a herbal drug preparation from the roots of Pelargonium sidoides, could prolong time to acute exacerbation in patients with COPD stage II/III.

METHODS: In this randomised, double-blind, placebo-controlled clinical trial, patients were randomly allocated to oral 24-week add-on therapy with 3 _ 30 drops/day EPs 7630 (n Z 99) or placebo (n Z 101) to a standardised baseline-treatment. Primary endpoint was time to first exacerbation of COPD. Secondary endpoints were number of exacerbations, consumption of antibiotics, quality of life, patient satisfaction, inability to work, and tolerability.

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Fluticasone propionate/Salmeterol xinafoate

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References: 1. Global Initiative for Asthma; *Global Strategy for Asthma Management and Prevention.* Updated 2009. **2.** Woodcock AA et al. *Prim Care Respir J.* 2007;16(3):155-161. **3.** Bateman ED et al. *Am J Respir Crit Care Med.* 2004;170:836-844

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