THE NZ JOURNAL OF RESPIRATORY HEALTH

April 2009

O2

Community Support

Raising awareness, raising funds!

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asthma NEW ZEALAND THE LUNG ASSOCIATION
THE NZ JOURNAL OF RESPIRATORY HEALTH
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Photo by Steven Neville, ASP Photography.

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PRODUCTION & ADVERTISING
Asthma New Zealand

Unitec NEW ZEALAND
Te Whare Wānanga o Wairaka

asthma NEW ZEALAND
THE LUNG ASSOCIATION

Applications are now invited from registered nurses wanting to enrol in the Asthma New Zealand/Unitec, Asthma Nursing course in June 2009 and COPD Nursing course in March 2010. The programmes are offered by distance learning. The primary aim of the Asthma and COPD Nursing Courses are to provide nursing health professionals with a high level of evidence based asthma and COPD knowledge that promotes best practice, and is consistent with national policy.

In the eight years since commencement of the Asthma Nursing Course and six years since commencement of the COPD Nursing Course, 749 nurses have enrolled over 24 intakes. Many applicants have not undertaken any additional study since completing their initial nursing education, and for some this had been many years. While most find the asthma course to be challenging, they enjoy the learning experience as it provides necessary knowledge that supports their role and scope of practice.

Asthma New Zealand in association with Unitec New Zealand offers these Asthma and COPD Nursing course within Unitec Bachelor of Nursing Programme. Asthma Nursing Course is a level 7, 24 credit course & COPD Nursing Course is a level 7, 12 credit course. A grant towards the cost may be available for students.

For an enrolment form for the June 2009 Asthma Nursing Course and March 2010 COPD Nursing Course please contact:

Ann or Swarna
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Email: annw@asthma-nz.org.nz or swarnah@asthma-nz.org.nz

Upcoming events and courses

1 DAY 'NEAT' ASTHMA COURSE FOR REGISTERED NURSES
17th June
9th September

½ DAY COPD COURSE FOR REGISTERED NURSES
8th July
7th October

Phone Asthma Auckland to enrol – 09 630 2293

New Zealand's Gluten Free Food and Allergy Show – Auckland 23-24 May, ASB Showgrounds.

asthma AUCKLAND

WORLD ASTHMA DAY 5 MAY 2009

Asthma Auckland will be at St Lukes Shopping Mall and Botany Town Centre on Saturday 9 May for free education.

2009 Breathe Easy T-Shirts will be available to purchase.

Asthma Auckland staff (Left to Right): Ann, Linda, Debra, Rochelle, David, Gerry, Swarna and Jee Ho

Message to Readers

Dear Readers

Recently I wrote to all Asthma Societies across New Zealand inviting them to consider the development of a Branch-based system throughout New Zealand. The "asthma" movement is fragmented and the current position limits our services to children and adults with asthma throughout the country. What we need is a strong National Body that will be able to more effectively lobby Government and the District Health Boards for more funding support in order to increase services to people with asthma and their families.

Unfortunately, a number of Societies, and associated groups, have gone "into recess" because they have not been supported financially and otherwise, to ensure quality services to those with asthma.

A number of Societies have asked Asthma New Zealand to look at their becoming Branches and Asthma New Zealand is responding to that request. It is time for Societies to put away an "isolationist" approach and work together nationally – more will be achieved by this approach.

As all of you are aware, Asthma New Zealand was established, because many perceived that it was totally inappropriate for an asthma organisation to be "a pharmaceutical supplier" in the asthma area. In 2005, the New Zealand Paediatric Society stated quite clearly "that children should not be unnecessarily exposed to alcohol". The asthma movement is compromised when this happens.

So, Asthma New Zealand will develop a national – based organisation. The "Branch-based" system will be phased in over the next two years.

Societies will act "in tandem" with Asthma New Zealand over this period to ensure that this approach is gradual, non-threatening, and in the best interests of people with asthma across New Zealand.

Please consider this invitation carefully and ask "what is in the best interests of children and adults with asthma across New Zealand"?

Yours sincerely
Gerry A. Hanna
Secretary/Treasurer
Asthma New Zealand – the Lung Association (Inc)

Why on earth would I want to use a peak flow meter?

Dr James M. Lello MB CHB, DCH,FRNZCGP

Introduction

Most people with a diagnosis of asthma have a portable peak flow meter gathering dust somewhere about the house. Many people with asthma would consider that they know themselves and their condition well enough to sense when an acute episode is coming and use more reliever medication. This is not always, or even, often the case. Although not all studies looking at whether regular Peak Expiratory Flow (PEF) monitoring have shown a beneficial effect of the practice it is generally agreed that combining subjective and objective recording of asthma control contributes to less days limited by asthma and less visits to hospital and after hours medical centres. This short article by Dr Jim Lello (Auckland Asthma Society medical advisor, General Practice) reviews the rationale and use of PEF meters for adults with moderate to severe asthma.

Those with moderate to severe asthma are recommended to self-monitor at home on a weekly to daily basis by checking and recording the peak expiratory flow (PEF) using a PEF meter. PEF results should help one to adjust medication use as instructed by your doctor using an asthma action plan. PEF monitoring becomes life-saving for those who are unable to sense worsening of their asthma.

The portable PEF meter has three main uses:

- To regularly monitor lung function and response to treatment over the short and long-term
- To determine the severity of an asthma episode
- To assess response to treatment during an acute episode

So what is PEF and why should we measure it?

Peak Expiratory Flow is the highest flow rate of exhaled air from a maximal in breath.

Like most biological variables (height, weight and blood pressure) have a range of values and these are dependent on our age, gender and the actual size of our lungs (most easily indicated by our height). Physiologists have measured of measurements of lung function and compiled normal data from large groups of people with no known respiratory condition so calculation of a "predicted" PEF can be made.

The more mathematically inclined might like to calculate their own using the equation below:

Figure 1:

$$\text{PEF Female} = e^{((0.376*\ln(\text{Age}))-(0.012*\text{Age})-(58.8/\text{Height})+5.63)}$$
$$\text{PEF Male} = e^{((0.544*\ln(\text{Age}))-(0.0151*\text{Age})-(74.7/\text{Height})+5.48)}$$

For the rest of us a visit to the link below offers a calculator to do this – **http://www.dynamicmt.com/PEFform.html**

The PEF is not, however, as accurate a measure of lung function as the forced expiratory volume at 1 second (FEV1) and the FEV1/forced vital capacity (FVC) ratio. Lung function testing (otherwise known as spirometry) is carried out by most Asthma Societies and can be performed or arranged through the family doctor. The frequency of the testing depends on the severity of the patient's symptoms. In mildly symptomatic, well-controlled people with asthma, the test could be completed once every 1 to 2 years. In people with more severe asthma, testing should be done more frequently to determine medication compliance and the patient's ability to monitor and control symptoms.

Peak flow meters for individual use are available free of charge through your family doctor who obtains them through a wholesale supply order. They are funded for NZ residents through PHARMAC. They are easy to use. However, the resulting measurements are highly dependent upon the user's technique. It is therefore important that the family doctor periodically checks the use of the meter, and corrects any mistakes in technique.

Every person with asthma should be instructed in how to establish a baseline measure of peak flow when feeling entirely well: the "personal best" peak flow value (see page 7). The personal best Peak Expiratory Flow Rate (PEFR) is then used to determine the normal PEFR range, which is between 85 and 100 percent of the personal best recording. The concept of the "personal best" PEF is a good one because it focuses on the maintenance of optimal lung function which is the aim of all asthma management.

Readings below this normal range indicate airway narrowing, a change that may occur before symptoms are noted.

Peak Flow normally changes throughout the day normally reaching a trough in the early hours of the morning. In asthma this undulation of the PEF is exaggerated. Many people with asthma will have experienced the uncomfortable wakening in the early hours of the morning needing to reach out or rummage around in the dark for the reliever medication. This "morning dipping" is an important sign indicating deteriorating control.

Once you have an up to date knowledge of your best personal peak flow measurement regular monitoring can indicate early changes in symptoms.

This advance warning of worsening asthma can be very useful with modern management strategies of asthma control. Typically, some days before an acute episode is apparent with the onset of cough, wheeze or shortness of breath, there is an exaggeration of the normal day-night undulation of PEF. This is the first clue that could indicate a worsening time ahead. Next there is an absolute drop in PEF often occurring even though there may be no symptoms. This "advance warning" of an acute episode can help prepare those with an asthma action plan to increase medications and prevent this occurring.

HOW TO USE A PEAK FLOW METER

Getting the best readings — several steps are important to make sure the peak flow meter records an accurate value:

- The peak flow meter should read zero or its lowest reading when not in use
- Use the peak flow meter while standing up straight
- Take in as deep a breath as possible
- Place the peak flow meter in the mouth, with the tongue under the mouthpiece
- Close the lips tightly around the mouthpiece
- Blow out as hard and fast as possible; do not throw the head forward while blowing out
- Breathe a few normal breaths and then repeat the process two more times. Write down the highest number obtained. Do not average the numbers.

Note: The test should be repeated if the tongue partially blocks the mouthpiece or if the patient coughs or spits during the test. Most peak flow meters need to be cleaned periodically; cleaning instructions should be available when the unit is first received or purchased.

Establishing a baseline measurement — unlike a blood pressure reading or a cholesterol test, there is no PEFR that is normal for everyone. For this reason, it is important to determine what PEFR value is normal for you.

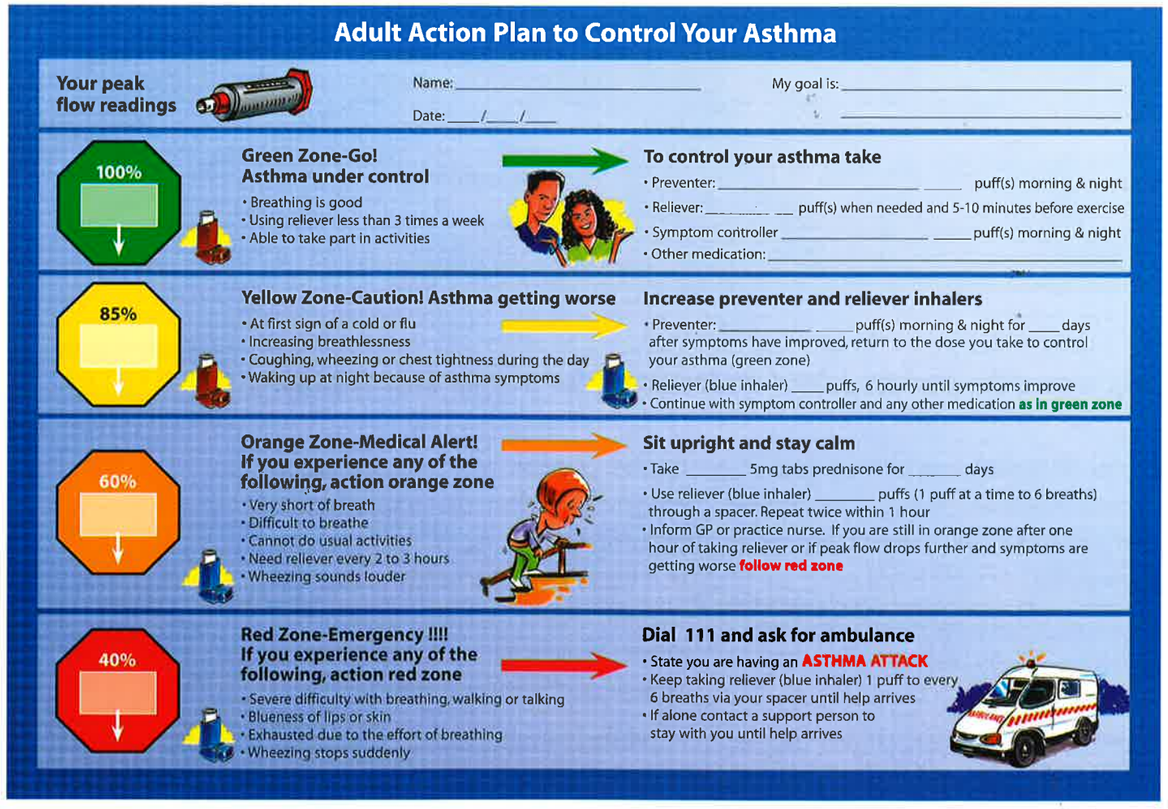
To determine your normal PEF, you should measure your PEFR when you have no asthma symptoms and have been using your asthma medications as instructed by your medical advisor and asthma nurse. Three PEF measurements should be done with the same peak flow meter twice daily (morning and night prior to inhaler use) for two to three weeks.

You should note the highest PEF measure achieved each time; then after the two to three week period the highest achieved will become your "personal best" PEFR. This number is used to determine if future PEFR readings are normal or low, and is also used to create a normal PEFR range (between 85 and 100 percent of the personal best PEFR).

Readings below the normal range are a sign of airway narrowing in the lungs. A low PEFR can occur before asthma symptoms such as wheezing or shortness of breath develop.

A personal best PEFR value should be re-measured once per year to account for growth (in children) or changes in the disease (in both children and adults). In addition, home PEFR measurements should be verified with readings taken with equipment in a healthcare provider's office since this equipment is more sensitive. For long term management, most clinicians will recommend PEFR testing once per day, usually in the morning.

The below Action Plan can be downloaded from www.asthma.org.nz



Food and Allergy in Asthma

After the initial diagnosis of asthma has been given to an individual, usually after enduring weeks, if not perhaps, months of miserable untreated symptoms, treatment with the appropriate relievers and preventers usually brings about moderate or complete relief.

Little thought is seldom given to diet and its effects on the individual who has asthma, with most emphasis being given to avoiding inhaled triggers, such as house dust mite, cigarette smoke, mould and plant pollens and just a passing nod to triggers within food.

There has been research which indicates that diet during early childhood is an important determinant of the development of allergy, particularly in high-risk infants who have a parental history of atopy. (Chandra, R.K. 1991).

Symptoms of food allergy vary widely, with some individuals reporting either a swelling in the mouth or lips (swelling or tingling), gut (vomiting, diarrhoea), skin (rash, swelling of face) or in their chest (wheezing, shortness of breath). (Asthma UK, 2006).

You might be asking which foods should I be avoiding? You may already have some suspicions and my advice would be to complete a daily asthma symptom diary and record the foods eaten on a daily basis over a period of a few weeks – noting on which particular days asthma symptoms were greatest, (Record how many times you had to use your 'Blue' (Salbutamol) reliever inhaler), and see if any correlation to any particular food eaten identifies itself – a pattern may emerge.

The currently known suspects are foods containing peanuts, nuts, sesame, fish, shellfish, dairy products and eggs.

Processed foods, also known as convenience foods (T.V. dinners!) have hidden perils as they frequently contain additives used in the manufacturing process – the dye tartrazine (a trigger), (E102), is found in many foods and also medicines.

Aspirin use in individuals with tartrazine allergy, can also trigger asthma symptoms e.g.:– wheezing, coughing.

The preservative benzoic acid (E210) found in fruit products and soft drinks can also be a trigger.

Some foods and wines contain chemicals similar to histamine (also a trigger) as well as containing sodium metabisulphate (E220-227) found in home brewed beer, fizzy drinks and prepared meats and salads. Dried apricots, which contain sulphate preservatives, can trigger asthma. (Healthy Foods and Eating Healthy, n.d.).

If you have real concerns that some foods are indeed making you quite ill, it would be advisable to bring it to the attention of your General Practitioner. A more in depth investigation by way of referral to a specialist to attend an allergy clinic may be of great benefit.

The condition of asthma should be treated as an opportunity to improve a lifestyle and pursue healthy choices when it comes to food and nutrition. Closer scrutiny of one's eating habits will generally reveal that it is indeed the 'junk foods' (fast foods) and cheap booze which inevitably contain asthma triggering substances – so by ditching the 'junk', eating healthy foods and getting 30 minutes exercise daily (SPARC, 2006), the person with asthma can make a 'positive' impact on their health.

I know from my experience of having asthma for the past 10 years that some of my own personal food triggers are alcoholic beverages and cheap processed 'white' breads and so stopped consuming both of these about 8 months ago...and yes, I have had less symptoms.

You know what to do.

David Halewood RN.
Asthma Nurse Educator.

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Asthma UK (2006). Fact file: Food Reactions and Asthma
Chandra, R.J. (2000). Symposium on 'Growing up with good nutrition: a focus on the first two decades'. *Food allergy and nutrition in early life: implications for later health*. Proceedings of the Nutrition Society, 59, 273-277
Healthy Foods and Eating Healthy, (n.d.). Apricots Can Trigger Asthma – Posted by Mark under Healthy Foods to Eat. Retrieved from World Wide Web Mar 2 2009 http://www.healthyfoodsandeatinghealthy.com/healthy-foods-to-eat/apricots-can-trigger-asthma
Sparc (2000). Push Play - if you're a busy, working person, this activity programme has lots of great ideas for ways you can fit 30 minutes of exercise into your day. Retrieved from the World Wide Web on Mar 2 2009 www.sparc.org.nz/getting-active/push-play/activity-programmes/weekday

Hyperventilation and Asthma – Is there a connection?

Compiled by Ann Wheat

During the course of researching this article, the first conundrum was what is hyperventilation, hyperventilation syndrome and dysfunctional breathing patterns – why are they important in connection with asthma, are they the same and if not what are the differences?

First of all though, before discussing Hyperventilation and Asthma, it is necessary to understand the importance of breathing for our health. Bradley & Clifton-Smith (2008), state that 'Breathing has three important components'. Breathing allows oxygen to be carried through the lungs so that it can be absorbed into the blood stream. Oxygen is required to convert food into energy which allows every cell to function correctly and is known as the metabolic process. Breathing removes and maintains carbon dioxide (CO_2) levels required in the body. CO_2 is the end result of the metabolic process. CO_2 also regulates our breathing and our nervous system. Breathing also regulates our body's pH, that is, the acid-alkaline balance which maintains the body's internal balance. This pH level must remain at an even level (Bradley & Clifton-Smith, 2008). It can be seen therefore, that if breathing is disrupted in any way, then our health will be at risk, not only in normal people but even more so for people with asthma.

So it is important to understand what some of the breathing difficulties are, that some people may have.

Hyperventilation is according to the Oxford Dictionary for Nurses (1996), 'breathing at an abnormally rapid rate at rest which causes reduction in the carbon dioxide level in arterial blood which results in dizziness, tingling in lips and limbs, titanic cramps of the hands and tightness across the chest'. Prolonged hyperventilation is described as **Hyperventilation Syndrome**.

Dysfunctional breathing is a term used to describe chronic or recurrent changes in the breathing pattern. People with this type of breathing pattern will often over-breathe or have an increased respiratory rate (Henderson, 2007). He goes on to say that this is often called **Hyperventilation Syndrome**. Thomas, McKinley, Freeman & Foy (2001), support this by stating that abnormal breathing causes breathlessness, chest tightness, chest pain, light-headedness, paraesthesiae and anxiety.

Hyperventilation Syndrome is often caused by psychological factors.

It can be seen therefore that hyperventilation syndrome has many symptoms in common with asthma. This can sometimes make diagnosis difficult as to whether it is asthma, hyperventilation syndrome or even both as they often co-exist in one person. Thomas, McKinley, Freeman & Foy (2001), say that 'Hyperventilation may be a factor contributing to the symptoms of patients with asthma'. This is supported by Ritz, Rosenfield, Meuret, Bobb & Steptoe (2008), who advise that hyperventilation has been a recognised problem in asthma for some time.

Why is Hyperventilation and its related condition important?

Many patients with asthma will often be anxious when they are finding it difficult to breathe and as a result end up over breathing not only with asthma but also because of their anxiety. As its often difficult to tell the symptoms apart, patients use their reliever medication more frequently. This in itself is not harmful, but it can be possible to reduce the amount of reliever medication by controlling breathing patterns thus reducing hypocapnia which create similar symptoms to an asthma exacerbation in asthma patients (Ritz, Rosenfield, Meuret & Steptoe, 2008). So it is vitally important that the right diagnosis is made, so that the right treatments can be undertaken (Keeley & Osman, 2001).

How is the diagnosis of Hyperventilation and Breathing Disorders made?

A thorough medical check up by a doctor or specialist is essential as it is often difficult to diagnose because there is no recognised diagnostic test (Henderson, 2007). The Nijmergen questionnaire is most frequently used as this evaluates the symptoms common to Hyperventilation. It does need to be used with care for patients diagnosed with asthma (Henderson, 2007). Questionnaires that have been used in other studies include the Asthma Symptom Checklist and the Perceived Control of Asthma Checklist (Ritz, Rosenfield, Meurent and Steptoe, 2008). Using a peak flow meter can also assist in the diagnosis as it can distinguish between bronchospasm and hyperventilation (Keeley and Osman, 2001).

Management of Hyperventilation and Breathing Disorders in Patients with Asthma

The first important consideration when treating asthma patients, who may have hyperventilation or breathing disorders, is that asthma is in under excellent control. By using medications that are prescribed especially preventer medication regularly twice a day, (preventer medications are essential for excellent asthma control), asthma can be managed and there should be minimal asthma symptoms or exacerbations. The use of reliever medication should for well-controlled asthma be less than 2 puffs twice a week.

The second most important aspect is that if asthma symptoms persist despite optimal medication, and a diagnosis of hyperventilation or breathing disorders are suspected, the patient be referred to and treated with an appropriate specialist. This is usually a physiotherapist, who can teach breathing retraining which becomes the mainstay of treatment (Henderson, 2007). By reducing the amount of over breathing, asthma can often be controlled much easier.

Conclusion

Hyperventilation is a common adjunct to asthma and can often be both the cause of worsening asthma as well as asthma being the cause of hyperventilation due to anxiety. It is therefore imperative that both conditions are diagnosed correctly and treated appropriately to maintain good health.

References:

Bradley, D., & Clifton-Smith, T., (2006). Dynamic breathing for asthma. Random House New Zealand:Auckland

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Congratulations

Asthma New Zealand – The Lung Association, in conjunction with Unitec is proud to announce successful students from Asthma Nursing Course July 2008

Grace Beckley – Whangarei
Annette Bethell – Hawkes Bay
Sandra Coulter – Timaru
Darryl Francis – Kawakawa
Kelly Gray – Auckland
Vivenne Isles – Christchurch
Gabrielle Miller – Tauranga
Jennifer Quist – Kumeu
Anne Scollay – Napier
Alison Slack – Palmerston North
Alison Valois – Tauranga
Kristy Zimmerman – Auckland

Unitec NEW ZEALAND Te Whare Wananga o Wairaka

asthma NEW ZEALAND THE LUNG ASSOCIATION

Winners of the Allerzero competition December 2008...

A Wedge – Manukau
E Collins – St Heliers
B Roberts – North Shore City
P Depledge – Hamilton
D Poole – Mt Eden

Where is your preventer inhaler?

Compiled by Debra Leutenegger

Is your preventer inhaler (orange or brown) sitting around in a drawer having been abandoned after it was prescribed for regular use, TWICE A DAY?

Now is the time to act!

By the time you are reading this people with asthma who don't require their preventer medication over the summer period but need it over winter should have already recommenced using it (generally by mid-March).

Although inhaled corticosteroids start to work in the first couple of days, optimum effect may take up to three weeks. It is important to gain optimum control prior to the first change in our weather. As daylight saving ends, cooler nights and changing weather are unavoidable and these may be the first triggers causing asthma symptoms.

Why do so many people not use their preventer?

This is not easy to answer. Asthma Auckland educators work daily with people in the community with asthma and listed below are some of the excuses!

- It doesn't work
- It's a steroid
- I only have to use it when I am unwell with asthma
- My asthma isn't really bad
- My blue inhaler works best
- I didn't know I had to keep using it
- I ran out of medication
- Don't understand how it works
- Doctor didn't tell me that I had to keep using it
- I'll become addicted to my inhalers

And on it goes...

So let's take some time to discuss these misunderstandings.

What will my preventer do for me?

Inhaled corticosteroids (e.g. Flixotide, Beclazone, Pulmicort or contained in the combination inhalers of Seretide, Symbicort and Vannair) work on reducing and controlling the inflammation and mucus in the airways. Preventers work slowly and quietly so even though we think that they don't work, they do!

In the long term, using your preventer regularly will help to reduce the number of problems you have with asthma, decrease the amount of medication you need and help prevent your asthma from interfering with your enjoyment and quality of life. It will also help reduce the need for repeated hospitalisation and doctors visits.

Do you use your reliever (blue) inhaler more than twice a week? If so your asthma is not under optimal control.

Preventers are important in the management and control of asthma symptoms and if you are using your preventer every night and morning you should not require the use of your reliever (blue) inhaler (Ventolin, Respigen, Bricanyl, Salamol) more than twice a week (except for exercise induced asthma).

Why is my reliever inhaler not enough?

Reliever inhalers (bronchodilators) work on the muscles of the airways, helping them to relax your airways therefore easing your breathlessness, but they do not remove the airway inflammation. When your airways are less inflamed (by using your preventer) they are less sensitive to triggers.

Do I really need to use my preventer inhaler every day?

Yes, in order for the preventers to work properly they need to be used every day as prescribed. Once you have gained control of your asthma if you miss the occasional dose this won't be a problem, however if you miss several days or stop completely your asthma symptoms will return as your protection has been removed.

What if I am using my preventer inhaler twice a day and I still need to use my reliever inhaler more than twice a week?

First of all have your inhaler technique checked by your doctor, nurse, or asthma educator since a poor or inadequate technique may be the problem. Secondly are you using your inhaler with a spacer? By using your inhaler with a spacer you will be able to get more of your medication and therefore gain better control of your symptoms.

If you are using a spacer, looking after it correctly (by washing weekly in warm soapy water, not rinsing and leaving to air dry) and have a good technique then you should inform your doctor as you may need to have your medication increased with a long-acting reliever e.g. Serevent or Oxis.

TIPS when using your preventer inhaler

- Use your preventer as prescribed – e.g. morning and night
- Use your inhaler with a spacer (spacers are free from your doctors surgery)
- Remember to rinse, gargle, spit afterwards or for children get them to clean their teeth and have a drink of water. This helps to prevent sore throats, hoarseness and oral thrush.
- Do not stop using your preventer unless advised to by your doctor.
- Monitoring your peak flow (see article page 6) will alert you to changes in your asthma.

References: www.asthma.org.uk

Kid's page

If you find it hard to breathe, your blue puffer will make you feel better!

BLUE

Fill in the blanks with a letter from the **BLUE**. The same letter will make three different words in each row.

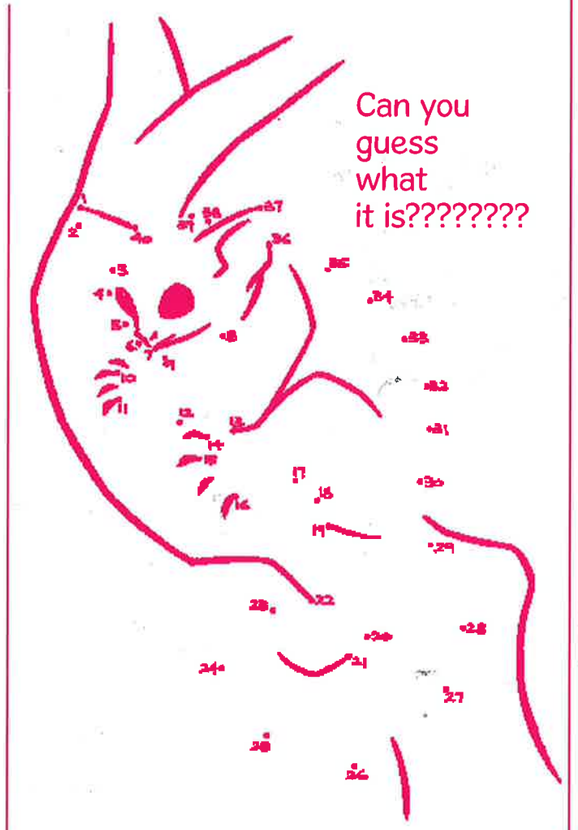
_AR BE_ G_T

I_L _OW _EG

_IN TU_ _IG

YO_ S_E J_G

Dot to Dot



Can you guess what it is????????

Louis Vuitton Pacific Series 2009 Charity Dinner

Some of the Louis Vuitton Cup's larger-than-life legends were among the more than 900 people who attended the glitzy and glamorous Louis Vuitton Pacific Series 2009 Charity Dinner at SkyCity, in February, to help New Zealand children breathe easier.

John Bertrand, the Australian skipper who stole the Auld Mug from American clutches in 1983, and Sir Michael Fay, who led New Zealand's first challenge three years later, were among the guest speakers. Sir Michael has done a lot for Asthma over the years and has been behind some great fundraising initiatives in the past.

Former teammates and now on-the-water rivals Russell Coutts and Dean Barker joined Ben Ainslie in a head-to-head skipper's panel discussion, moderated by Louis Vuitton Cup founder Bruno Trouble.

Funds raised at the prestigious event, which included a charity auction went to Asthma New Zealand. John Key was there, complete with cast, proving quite a popular man on the night with business leaders pouncing on any opportunity to hobnob. John Key was even offered up for auction, well a morning or afternoon tea with him in his beehive office at least. SOLD!

Asthma New Zealand would like to thank Duco and all those who made the event a successful one, in particular the presenting sponsors, Louis Vuitton and Emirates Team New Zealand and also Gold Sponsors Emirates, DNA Design, Royal New Zealand Yacht Squadron and Yealands Estate.

Thank you for your support!

Linda Thompson
PR Fundraising Manager
Asthma New Zealand

Oceanbridge 13th Annual Charity Golf Tournament 2009

In aid of Asthma Auckland and Cure Kids

OCEANBRIDGE

Another afternoon on the greens...

This time Asthma Auckland was one of two recipient charities of Oceanbridge's Annual Charity Golf Tournament and what a fantastic day it was. With a field of over 100 it was Oceanbridge's biggest turnout and I was privileged enough to be driving around in one of the refreshment carts with Lindsay Speedy and we had a ball! Oceanbridge staff put in a fantastic effort, starting with a BBQ lunch which continued to sizzle throughout the day, Shot-Gun Tee-off was at 12.30 and it was non–stop from here but everyone had a great time whether they were competitive golfers or not! As the day drew to a close we were all treated to a buffet dinner and prize giving which saw most going home with something.

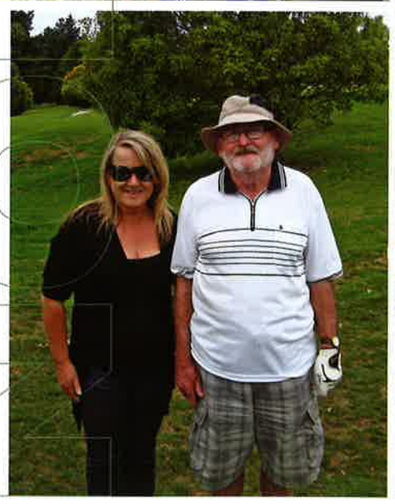
Asthma Auckland would like to thank Oceanbridge for organising this event and for the very generous $15,000 donation to Asthma! Special thanks to Dean O'Cass, Alister Wishart, Liz Mahuru, Morwenna Henderson, Bill and Lindsay Speedy and to the entire Oceanbridge team, your continued support to the community is appreciated.

Thank you...

Linda Thompson
PR/ Fundraising Manager








Should all children play?

Balmoral School year 5 and 6 students were asked that very question. The answer was simple – YES! Some children are not always fortunate enough to though! The solution was to hold a market day, each class on a different day and the proceeds going to each class's chosen charity with the aim to help children who can't play! Asthma Auckland was Room 19's chosen charity and what a day it was. The class took it upon themselves, with the assistance of teacher Neal Davison, to bake cakes and biscuits, make sherbet (this kept selling out and an emergency batch was brought in) they sold drinks, provided bus tours of our Mobile Asthma Clinic giving out Breathe Easy® Stickers to their loyal following. There was face painting and even I had the word "ASTHMA" kindly painted in blue across my face for the day. The afternoon provided an opportunity to douse their teacher with water bombs, an extremely popular event among many. This class, who were all very respectful and polite at all times,are a credit to Balmoral School and Asthma Auckland wishes to thank the school for allowing them the opportunity to support their community in this way and raising $642.00 for Asthma. Particular thanks to Alex, Jono and Sam who were the "Three Asthmateers" who started the ball rolling to choose ASTHMA as their class's recipient charity, they interviewed me and put forward a good argument to their fellow classmates with Asthma winning the vote! THANK YOU!

Linda Thompson
PR/ Fundraising Manager

BALMORAL
PRIMARY • INTERMEDIATE

Alex Thompson (10) of Room 19 wrote this account of the day.

The sun shone brightly upon us on the 4th December, this proved to be a great start to Room 19 of Balmoral School's, highly successful, Market Day. "It was very lovely to see all the children working to success" says Miss Oona Palmer, representative of Balmoral School. We raised $642 for the Auckland Asthma Society!

In the morning an exquisite raffle was held with exotic prizes, for men, ladies and children. The prizes were high quality and professionally packaged, streams of customers flooded through the courtyard to get their hands on a ticket.

We baked cakes, made sherbet, cool refreshing drinks and the afternoon games were fantastic with the cool refreshing drinks coming in very handy at this point. We even managed to throw water bombs at Mr Davison!

Overall this was a very successful day raising $642 for Asthma, everyone was thoroughly impressed! All stocks of food and drink were used and everyone went home pleased.












NEWS FROM AROUND THE REGIONS ...

George & William Richardson

TOP LEFT: It's tough having to play second fiddle to a highly talented younger brother but with the spotlight off him, George has assiduously worked on his game to the point that the rivalry between them now, more often than not goes George's way. BOTTOM LEFT: William is said by many to have the most beautiful single-handed backhand and backhand slice of any junior in the game. He is often compared to Frenchman Richard Gasquet, regarded as one of the finest backhand proponents in world tennis today.

Tennis role-models to raise money for Asthma

By Kate Matthews

They're not world famous... yet, but George and William Richardson have been very much centrecourt in the past few years and are now set to make their mark as the fresh new faces of Asthma awareness. Their aspirational Dare the Dream International Pathway 'Buddy' campaign has been a huge success; having captured the hearts and minds, of not just the sporting world, but people from every walk of life.

Having quietly gone about their business beneath the radar, they are shortly to go public with the launch of their long awaited website; teamrichardsontennis.com.

For these brothers, winning is as much about helping others to aspire and take personal responsibility for their lives, as it is about chasing titles and daring big dreams. The opportunity to have an association with Asthma New Zealand could not have been more appropriate given William's asthmatic condition, and the Organisation is quick to recognise the benefits the boys wholesome image and obvious public appeal bring to their cause.

"Anything that helps raise Asthma awareness is good," says Linda Thompson, PR and Fundraising Manager of Asthma New Zealand," adding,"to have two such wonderful role models to put our cause out there as living, breathing examples of good asthma management and control, is a breath of fresh air for asthma sufferers and kids in particular."

George and William have pledged to donate all their fundraising proceeds from engagements and activities related to their Buddy Programme outside of their Buddy membership subscriptions and sponsorships.

"It's a good cause," says William, adding, "if through our profile we can help bring a greater awareness of the affliction which affects one in four kiwi kids, then it is our duty to do so. Kids need to know that they shouldn't let disabilities of any kind be an excuse for not daring their dreams." "We're so lucky to grow up in New Zealand," says George. "Any kid can achieve great things if only they understood that it's over to them. We have seven newspaper runs in between training, yet we still make time to help and encourage other kids wherever we can."

It's a message that clearly resonates with the mood of the nation reflected by the success of their audacious campaign - two boys and a dream to be the best in the world. "We try to be excellent in every respect," insists George, adding, "self-discipline is the secret to that."

They are proud of the fact that they have never received a warning or 'code violation' between them, and that speaks volumes given the pressure and expectation of winning that William, in particular, has had to carry throughout his career.

"He's managed his asthma remarkably well given the stress of being such a naturally competitive player," says Linda, noting that stress is a trigger for asthma sufferers. "That's why George and Will will be so good for getting our message across. They're young, authentic, empathise with our cause and have rare star quality."

• To read more about George and William's story go to our website.

www.asthma-nz.org.nz

Annus Horribilis

(A horrible year)

Still in his NIKE tennis attire, emergency staff desperately try to stabilise William as his condition rapidly deteriorates.

William suffers from Asthma. Throughout his life it's been carefully managed, but in recent times external pressures related to his tennis sent his health spiralling out of control, almost costing him his life last year.

On three occasions he was rushed to Starship Hospital by priority-one ambulance. The warning signs were there at the beginning of 2008, and as the year progressed, so too did William's health deteriorate.

Having been off school for a week and with a peak-flow reading of just 100, he bravely filled in for brother George at the inter-school AIMES tournament in Tauranga. Keeping his respiratory condition to himself he uncharacteristically struggled to compete. His shortage of breath and lack of energy said it all.

The following week, at an Auckland senior men's interclub game, the stress he had been carrying finally took its toll. William collapsed on centre court. Reluctant to quit and after medical time-out he insisted on finishing the game. He won, but two weeks later at the Counties Junior Open, as top seed, William paid the price and was left fighting for his life.

In the first game of his first match, in what normally would have seen him in cruise mode, the distress was immediately evident. Unable to run, he let balls go. His serves couldn't reach the net. He could barely find the energy to lift his racquet, and his wheezing and coughing could be heard from afar as his medication stubbornly refused to kick in. He was deteriorating fast.

Unable to continue and once again on the verge of collapse, he was rushed to emergency services where medical staff anxiously fought to stabilise him as he quickly slipped into hyperventilation.

For William, 2008 was a horrible year.

Introducing... Sally Levie

Hello, my name is Sally Levie. Since becoming the new Asthma Respiratory nurse educator with Asthma South Canterbury my feet have hardly touched the ground. The South Island Respiratory Educators Forum introduced me to inspiring colleagues and I have been very impressed by the level of dedication evident in the field of respiratory medicine and on the committees behind the scenes.

As a relatively new graduate in the mid 1980's, I nursed on the Respiratory Medical ward at Greenlane Hospital. But I was eager to work in the community and so left the hospital for Plunket, and later Practice Nursing. Now I am feeling fortunate to be working with people with asthma and respiratory conditions in their homes, schools and workplaces.

I have always loved to travel and before my family brought me closer to home I lived in Israel and the UK. In those days I was a kindergarten teacher. My daughter is now 14 years old and has gone to boarding school leaving me with her ponies to look after, so that takes care of my leisure time. We recently moved from Central Otago to Opihi where I can still see the mountains and walk by the river.

I have been warmly welcomed to my new position and am looking forward to contributing to the South Canterbury Team.

North & South

NEWS FROM AROUND THE REGIONS ...

Health days = Health promotion

Health promotion has been the target of several Auckland communities over the past few months and Asthma Auckland staff has participated in providing asthma education to the wider community.

Events include the Otara Health Day, Mangere Health Day, Toddler Day (out West), Sri Lankan Community Group, and Bunnings Warehouse Mt Roskill who held a Community Fun Day inviting many not-for profit groups to share with the community, raising awareness.

All of these days were a great success, bringing people together to raise awareness of community services available to assist them. Health days give people the opportunity to ask questions, seek advice regarding health issues, such as asthma, and to gain skills in self management for themselves, family or whanau.

Watch out for upcoming Health Days in your area. If you are organising an event and would like to have Asthma Auckland present please do not hesitate to contact us.

Asthma Auckland will be celebrating World Asthma Day (Tuesday 5th May) on Saturday 9th May by having a stand in local shopping malls and will also be present at the Gluten Free Food and Allergy Show on the 23-24th May.

With a song in my lungs

Tricks for Living with Chronic Obstructive Pulmonary Disease (COPD)

Compiled by Heather Swanney-Jones

I have no tricks for quitting smoking. I spent about 30 years trying and failing. I finally made it just a year ago, more than 15 years after a COPD diagnosis and faced with a clear choice between smoking and breathing. If you're in that awful place where you know you're getting sick but you haven't managed to quit, my empathy and commiserations – and keep on trying. At 65 I'd almost decided it was too late to quit, but there have been great benefits, and my focus has shifted to learning to live with COPD as comfortably as possible.

Breathlessness is the worst symptom, and a severe episode can arouse feelings of desperation and misery. But once I'd survived some bad bouts, realised these weren't going to kill me and that the panicky feelings made things worse, I looked for ways to get my breath back more quickly. I find that sitting somewhere that's not too low, lowering the shoulders and relaxing as much as possible is a start, followed by some short panting breaths (I do groups of three, with a bit of force behind the out-breaths) alternating with slower, deeper ones. Lips should be pursed as for whistling or kissing, not that you'll feel like doing either of those things. Just having a procedure to follow helps with the feeling of anxiety that may arise, as does reminding yourself that relief will start to come soon.

I've found recovery can be sped up by using the voice. Make some noises. Talking to another person is best, because you get distracted from your distress and this is hugely helpful. But if you're alone at least talk to yourself, if only in little snatches at first. Count, recite nursery rhymes (or Shakespeare if that's your thing), or read aloud from whatever's in sight, even if it's the Weetbix packet. Singing is even better - as easy as la-la-la up the scale, or perhaps try a simple tune like Three Blind Mice. You'll be gasping your song out at first, and the effect is somewhat comical, so if you choose a song that amuses you, the whole recovery experience can become less grim. Anxiety and amusement are mutually exclusive. My current favourite recovery song is "Poor Judd is Dead" from Oklahoma, and the melodramatic "I Who Have Nothing" is fun to mangle too.

I don't know whether it's the distraction of doing all this that helps, or whether it's the actual exhalation using the vocal folds (they used to be called cords) but again and again I've found that vocalising brings about a quicker recovery from breathlessness. When I don't use the technique I stay breathless (and miserable) longer.

Most of us want to maintain some semblance of dignity in public, so you may not like to picture yourself leaning on a supermarket trolley pretending to inspect the pasta selection while gasping out some silly ditty from your youth – Zippity-Doo-Da, or Mairzy Doats, or Hot Diggetty! Perhaps concentrate on the pursed-lip breathing, although maybe you could quietly read aloud the recipe for macaroni cheese. (I admit it's hard to purse your lips and talk out of the side of your mouth.) Sometimes kind souls will notice your distress and ask how they can help. Tell them you're OK and that it helps to talk (that sentence might come out in several pieces), and you'll get your distraction and the quick relief from using your voice.

The return of a singing voice has been, for me, one of the great joys of quitting smoking. Music is enormously therapeutic, and singing requires controlled and sustained breaths, so warbling as I go about the house, or in the car, brings great benefit and enjoyment. There was something of a setback when I tried to teach myself to yodel via an Internet course and damaged my frail mezzo contralto – about as much as another year's smoking, I reckon, but it's coming back. The damage to my self esteem caused by the howls of laughter from my friends when I told this story may take a little longer to repair. Why do so many people find yodelling ludicrously funny?

Meanwhile, I take my medication. A Ventolin inhaler is essential, and I requested the pharmaceutical company to put a dose meter into the canister, as Seretide has. There is a greater need for one with Ventolin because this is the reliever (or rescue) inhaler for most people with respiratory disease, who might have more than one canister partly used and carry one when away from home. I know I worry that I'll find I have an empty canister when I'm out. So a meter on Ventolin would have benefits ranging from giving peace of mind to sparing great distress, even a life.

My approaches were unsuccessful and, Kiwi that I am, I tried to devise a meter from the legendary No 8 wire. I came up with something that uses paper clips and a piece of light card.

Units	Ventolin Dose Meter Slide on 3 paper clips to show number of puffs used – units, tens & hundread	Tens
1		10
2		20
3		30
4		40
5		50
6		60
7		70
8		80
9		90
10	Examples shows 162 puffs used	100

I use this for the Ventolin canister I carry when I go out, and keep it in the glove-box. A smaller, professionally-made version could be produced and enclosed in the box with every inhaler. True, using this meter is only one step away from recording puffs in a notebook, but it's more fun. Perhaps it's so ridiculous the company might reconsider a dose meter in the canister?

Then there's exercise (sigh), it really helps, mores' the pity. I mean, a walk around the block on a nice day is quite pleasant, and doing even a few exercises while sitting on, or leaning on the back of, a chair really makes me feel better. But exercising regularly takes discipline and effort – things I've spent my life avoiding. My ever-encouraging Respiratory Nurse tells me all physical activity counts. Great! My numerous trips through the house because I've forgotten and left something I want in another room may do me some good, even though the constant little memory lapses annoy the heck out of me. I walk to the mailbox several times each morning too, expecting something delightful even in these days of email and cheap tolls. So I guess one just does what one can.

That applies across the board. We need to focus on what we can do rather than what we can't, and generally do our damnedest to find some amusement along the way. Laughing gets air out of the lungs in an effective manner, and feels very pleasant. It's near Christmas as I write this, so I tried a few ho ho hoes. Marvellous! It's a bit like coughing and we're all well-practised at that. Put it to a descending arpeggio or Beethoven's 5th, and there's a winner – Ho ho ho ho-o-o!

Working Wise

Exercises for people with COPD

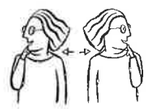
Asthma New Zealand wishes to thank Working Wise for the use of their exercise sheet below – "Exercises to help prevent and manage OOS".

1

CHIN TUCKS

Push in and hold for 10 seconds
or
Push in and let go 5 times

2



HEAD SIDE TURNS

Push chin in, turn neck both ways

Repeat 5 times

3

HEAD FORWARD & BACK

Tuck chin in

Drop head forward

Tip head back

4

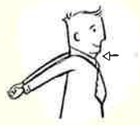
TRAPEZIUS STRETCH

Turn head 1/4 turn

Hold head with same arm

Bend head forward

5



SHOULDER BRACING

Roll shoulders back

Pull arms away from body

Squeeze shoulder blades together

6

SHOULDER CIRCLES

Pull shoulders up to ears

Roll shoulders backwards

Repeat 5 times

7

SHOULDER BLADES

Draw arm across body

Hold with other arm above elbow

8

UPPER BACK STRETCH

Link fingers

Arms out in front

Pull arms away from body

9

SHOULDER/NECK STRETCH

Relax shoulders

Tilt head and move arms the same way

10

PECTORAL STRETCH

Bend wrist back

Place hand on wall

Stretch feeling should go away in 20 seconds

11

WRIST TURNS

Relax arms

Rotate hands one way then the other

12

WRIST ROLLS

Loose fist, thumbs out

Rotate slowly - take 20 seconds either way

13

FOREARM STRETCH

Straight elbow

Flex wrist down, palm downwards

14

FOREARM STRETCH

Straight elbow

Extend wrist up, palm outwards

15

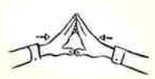
PRAYER STRETCH

Touch palms

Push down

Rotate toward and away from body

16



STEEPLE STRETCH

Touch fingers

Fingers wide apart

Push

17

CHEST STRETCH

Arms at right angles in doorway

Lean or step forward

18

CHICKEN WINGS

Tuck wrists on waist

Move elbows back

Relax hands and fingers

Yes!

I want to support Asthma Auckland

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_____

_____

Phone: _____ Date Of Birth: (optional) / /

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- Networking opportunities/support groups
- Access to information and medical research
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☐ Please debit my credit card $_____

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☐ I would like information about making a bequest.

Asthma info line:
Phone: 09 630 2293
Fax: 09 623 0774
Email: aas@asthma-nz.org.nz
Web: www.asthma-nz.org.nz
Information collected for Asthma Auckland use only. Under the Privacy Act members have the right to access and correct any information by contacting Asthma Auckland

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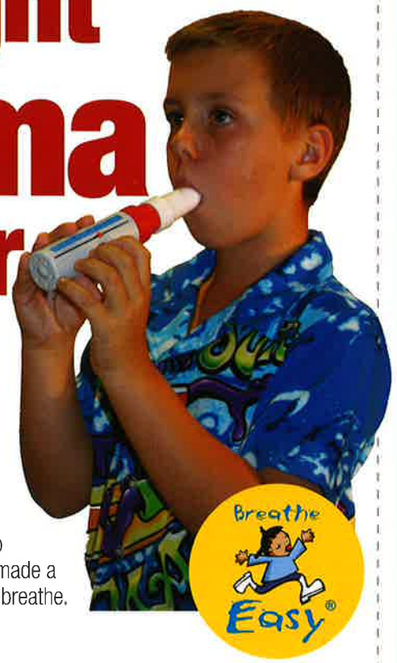
Return this form to:
Asthma Auckland, PO Box 67 066
Mt Eden 1349, Auckland
New Zealand Regional Office:
581 Mt Eden Rd, Mt Eden, Auckland 1024 NZ

Let's fight Asthma together

"We need your help"



Our family and friends may have asthma, but let's not let asthma have them. Your support to help our community breathe easy has always made a difference in thousands of people who fight to breathe.

Please support generously

☐ Yes, I would like to help New Zealanders breathe easy! Here's my gift to support your work

☐ $25 ☐ $50 ☐ $100 ☐ Other:

My gift marked above is to be charged to my credit card

☐ Visa ☐ American Express ☐ MasterCard

Card Number

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Mr/Mrs/Miss/Ms _____

Address: _____

_____

_____

Telephone: _____ Email: _____

☐ Please send me information on how I can help Asthma New Zealand through my will

☐ I have already left a bequest for the Asthma Society through my will

☐ I would love to do some voluntary work to fight asthma

Asthma New Zealand-the Lung Association
581 Mt Eden Rd, PO Box 67-066
Mt Eden, Auckland 1024, NZ.
Phone 09 623 0236, Fax 09 623 0774
Email anz@asthma-nz.org.nz

Thank you for helping us to fight asthma and make New Zealand breathe easy

Asthma New Zealand's partner societies around New Zealand:

AUCKLAND ASTHMA SOCIETY (INC.)
P O Box 67 066
581 Mt Eden Rd,
Auckland 1024
Ph (09) 630 2293

CANTERBURY ASTHMA SOCIETY (INC)
275 Cashel Street,
P O Box 13 091
Christchurch 8013
Ph (03) 366 5235

ROTORUA ASTHMA SOCIETY
2/285 Vaughan Road
P O Box 472
Rotorua 3010
Ph (07) 347 1012

SOUTH CANTERBURY ASTHMA SOCIETY
23 Aviemore Street
P O Box 267
Timaru 7910
Ph (03) 688 5571

SOUTHLAND ASTHMA SOCIETY
70 Forth Street
P O Box 1793,
Invercargill 9810
Ph (03) 214 2356

WHAKATANE ASTHMA AND COPD GROUP
P O Box 528
141 – 143 King St
Whakatane 3120
Ph (07) 307 1447

WELLINGTON REGIONAL ASTHMA SOCIETY
Level 4 Pember House
No 16 Hagley St,
Porirua
Wellington 5022
Ph 04 237 4520

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O_2 Journal welcomes dialogue with readers. Whether you are a person with asthma, a company involved in the sector, or a potential advertiser, we welcome your enquiries and communication.

Contact:
Asthma New Zealand
581 Mt Eden Road, Auckland
PO Box 67-066, Mt Eden
Phone (09) 623 0236
Email anz@asthma-nz.org.nz

newstream

Safety and efficacy of allergen immunotherapy in the treatment of allergic rhinitis and asthma in real life.

Zeldin Y, Weiler Z, Magen E, Tiosano L, Kidon MI.
Allergy Service, Clalit Health Services, Barzilai Medical Center, Ashkelon, Israel.

BACKGROUND: Subcutaneous allergen immunotherapy is effective in treating allergic airway disease. Disadvantages include immediate local and systemic adverse reactions and poor compliance. OBJECTIVES: To obtain real-life efficacy and safety data through a prospective observational study of SIT in the allergist's office. METHODS: We prospectively collected data from all patients with a diagnosis of allergic rhinitis and/or asthma and a specific immunoglobulin E-mediated sensitisation to one or more aeroallergens who began SIT during the 2 year period 1 January 2005 to 31 December 2006. As part of the routine immunotherapy care patients were asked to complete a disease activity questionnaire before and yearly during the treatment. The primary outcome measure was the combined rhinitis and asthma symptoms scores. Data from patients completing at least 1 year of immunotherapy were analysed. RESULTS: Altogether, 133 enrolled patients with a mean age of 22.7 years completed at least 1 year of SIT. The allergic rhinitis and asthma disease activity score decreased from a mean of 8.1 to 3.3 (rhinitis) and from 4.8 to 2.4 (asthma) on a 10 cm visual analogue scale after 1 year of SIT ($P < 0.001$ for all comparisons). Rhinitis medication use in all patients and asthma medication use in asthmatics decreased significantly. Mild local adverse reactions were almost universal. There were 11 patients (8%) who developed 14 immediate systemic, mild to moderate reactions. All reactions were successfully treated in the clinic; none required additional observation or hospitalisation. CONCLUSIONS: In the hands of experienced allergists subcutaneous allergy immunotherapy is a safe and efficacious option for patients with allergic rhinitis and asthma.
PMID: 19160945 [PubMed – indexed for MEDLINE]

First evidence of a possible association between gastric acid suppression during pregnancy and childhood asthma: a population-based register study.

Dehlink E, Yen E, Leichtner AM, Hait EJ, Fiebiger E.
Division of Gastroenterology and Nutrition, Children's Hospital Boston, Harvard Medical School, Boston, MA 02115, USA.

BACKGROUND: Recent data in mice suggest that acid suppression during pregnancy yields offspring with type 2 T helper-dominant immunity, suggesting a predisposition for allergy. OBJECTIVE: To determine the association of in utero exposure to acid-suppressive medications and the subsequent development of allergic diseases in children. METHODS: We studied a population-based observational cohort formed by linking data from three Swedish national healthcare registers: the Medical Birth Register, the Hospital Discharge Register, and the Swedish Prescribed Drug Register. Main outcome measures included a hospital discharge diagnosis of an allergic disease or prescription for asthma medications, epinephrine auto-injectors, antihistamines or steroid ointments in children. Data were analysed using the Mantel-Haenszel procedure. RESULTS: Twenty-nine thousand four hundred and ninety (5.03%) children had a discharge diagnosis of allergy or prescriptions for allergy medications. Five thousand six hundred and forty-five (0.96%) children had been exposed to acid suppression therapy during pregnancy; of these, 405 (0.07%) were treated for allergic diseases. Exposure to acid-suppressive medications in utero was associated with an increased odds ratio (OR) for developing allergy (OR 1.43, 95% confidence interval (95% CI) 1.29-1.59). We observed this association irrespective of the type of drug, time of exposure during pregnancy, and maternal history of allergy. The use of maternal acid-suppressive medication was associated with an increased OR for the development of childhood asthma (3.7% in the population at large vs. 5.6% in exposed children, OR 1.51, 95% CI 1.35-1.69), but not for other allergic diseases. CONCLUSION: These data provide first evidence of a significant association between in utero exposure to acid-suppressive drugs and the risk of developing childhood asthma.
Publication Types:
- Research Support, Non-U.S. Gov't

PMID: 19134022 [PubMed – in process]

Is structured allergy history sufficient when assessing patients with asthma and rhinitis in general practice?

Smith HE, Hogger C, Lallemant C, Crook D, Frew AJ.
Division of Primary Care and Public Health, Brighton and Sussex Medical School, Brighton, United Kingdom.

BACKGROUND: Many United Kingdom patients with asthma and rhinitis are allergic, but in primary care few diagnostic and management decisions are made with formal allergy assessment. Arguably, knowing a patient's atopic status might be helpful in distinguishing the cause of disease and in selecting appropriate treatments. OBJECTIVES: Our objective was to estimate the extent to which a formal allergy assessment (a structured allergy history and skin prick tests to 5 common aeroallergens) would improve the precision of allergy diagnosis compared with a patient's self-report or the structured allergy history alone. METHODS: One hundred twenty-seven patients with asthma, rhinitis, or both were recruited from 4 general practices in Wessex, United Kingdom. Allergy status based on the patient's opinion and on structured allergy history alone was compared with formal allergy assessment. Assessments were validated by an independent allergy specialist reviewing the files. Patients were given written advice specific to their allergies and followed up 3 months later to assess

satisfaction, recall, and effect on health and behavior. RESULTS: Self-reporting misclassified allergic status in many patients. A structured allergy history alone was little better and resulted in false-positive rates for cat allergy of 32%, grass pollen of 48%, house dust mite of 75%, tree pollen of 54%, and dog of 27% compared with formal allergy assessment. Skin prick testing combined with a structured history was essential to reach a correct causative diagnosis. Three months later, 41% patients had made changes to lifestyle, medications, or both, and 18% reported clinical improvement. CONCLUSIONS: Skin prick testing improves the accuracy of an assessment of allergic status based on patient opinion or a structured allergy history alone.
PMID: 19135237 [PubMed – as supplied by publisher]

Relationship between improved airflow limitation and changes in airway caliber induced by inhaled anticholinergics in chronic obstructive pulmonary disease.

Hasegawa M, Makita H, Nasuhara Y, Nagai K, Ito Y, Odajima N, Betsuyaku T, Nishimura M.
First Department of Medicine, Hokkaido University School of Medicine, Japan.

Rationale: Although airflow limitation improved by inhaled anticholinergic drugs varies among individuals with chronic obstructive pulmonary disease (COPD), the relationship between actual bronchodilation and improved pulmonary function and where in the lung such bronchodilation occurs remains unknown. To determine the relationship between improved pulmonary function and changes in airway caliber at various sites among airways in response to inhaled anticholinergics in patients with COPD, using 3-dimensional computed tomography (CT). METHODS: We performed CT at deep inspiration and detailed pulmonary function tests before and 1 week after daily inhalations of tiotropium bromide in 15 patients with clinically stable COPD. We analyzed the airway luminal area at the 3rd (segmental) to the 6th generations of 8 bronchi in the right lung. Measurements and MAIN RESULTS: Bronchodilation was demonstrated as an overall average of a 39% increase in the inner luminal area, and the mean forced expiratory volume in 1 sec (FEV1) increased from 1.23 +/- 0.11 to 1.47 +/- 0.13 (SE). The magnitude of bronchodilation closely correlated with improved pulmonary function, particularly with that of FEV1 ($r = 0.843$, $p < 0.001$). Such correlations were significant at the 4th to the 6th, but not at the 3rd generation of bronchi, and the slope of regression lines became steeper from the 3rd to the 6th generation. CONCLUSIONS: Inhaled anticholinergics induce overall bronchodilation in proportion to improvements in FEV1 in patients with COPD, and bronchodilation at distal, rather than proximal airways is the determinant of functional improvement.
PMID: 19074932 [PubMed – as supplied by publisher]

Low-dose theophylline enhances the anti-inflammatory effects of steroids during exacerbations of chronic obstructive pulmonary disease

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Rationale: Chronic obstructive pulmonary disease (COPD) is characterised by an abnormal inflammatory response to mainly cigarette smoke that flares up during exacerbations of the disease (ECOPD). A reduced activity of histone deacetylases (HDAC) contributes to enhanced inflammation in stable COPD. We hypothesized that HDAC activity is further reduced during ECOPD, and that theophylline, an HDAC activator, potentiates the anti-inflammatory effect of steroids in these patients. OBJECTIVES: To investigate HDAC activity during ECOPD and the effects of theophylline on the anti-inflammatory effects of steroids. METHODS: Thirty-five patients hospitalised because of ECOPD and treated according to international guidelines (including systemic steroids) were randomised to receive (or not) low-dose oral theophylline (100 mg bid). Before treatment and 3 months after discharge we measured HDAC and nuclear factor (NF)-kappaB activity in sputum macrophages, the concentration of nitric oxide in exhaled gas (eNO), and total anti-oxidant status (TAS), TNF-alpha, IL-6 and IL-8 levels in sputum supernatants. Measurements and MAIN RESULTS: Patients receiving standard therapy showed decreased NF-kappaB activity, eNO concentration and sputum levels of TNF-alpha, IL-6 and IL-8, as well as increased TAS during recovery of ECOPD, but HDAC activity did not change. The addition of low-dose theophylline increased HDAC activity ($p=0.02$)and further reduced IL-8 and TNF-alpha concentrations ($p=0.031$). CONCLUSIONS: During ECOPD, low dose theophylline increases HDAC activity and improves the anti-inflammatory effects of steroids.
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