Spotlight on Lung Disease

Asthma

Asthma is a chronic breathing disorder affecting both children and adults. It is characterized by frequent episodes of persistent symptoms such as dyspnea, chest tightness, wheezing, sputum production and cough. The cough may be worse at night and in the early morning. In 2010, 8.5% of Canadians aged 12 and over were diagnosed with asthma. In 2003, 287 people died of asthma in Canada.

Diagnosis

Asthma should be considered in anyone with recurrent symptoms.1 These symptoms often develop with viral infections, after exercise, or when a person is exposed to an allergen.

Lung function testing is needed to confirm a diagnosis of asthma. This usually involves spirometry testing before and after bronchodilator. Several videos of spirometry can be found on YouTube including through the Lung Association of Saskatchewan YouTube site: http://www.youtube.com/user/LungAssociationSK. Asthma is confirmed when airflow obstruction is improved (reversed) by 12% after a bronchodilator and the results are in the normal range for that person.

Unfortunately, a large Canadian study2 found that nearly half of patients who were diagnosed with asthma had never had a spirometry test. Another Canadian study3 found that about one third of patients who were diagnosed with asthma did not, in fact, have asthma once objective testing was done.

(cont’d on page 2)
Asthma Treatment

The first action taken to manage asthma is to avoid irritant and allergic triggers that affect that person. Patient education and a written action plan should also be given to every person with asthma.

All asthmatics should have fast-acting bronchodilator to use prn. Control of asthma is achieved and maintained with inhaled corticosteroids. The Canadian Thoracic Society has published a care continuum which describes therapy adjustments to achieve control of asthma\(^1\). Patients with asthma should not need to use a fast-acting Beta\(_2\)-agonist (ventolin) more than 4 times per week, and should not be waking up with symptoms, or missing school or work because of their asthma. Medications are adjusted as needed to achieve this level of control.

Inhaler technique should be regularly assessed by health care providers. Don’t just believe your patients – ask them to demonstrate their technique to you. For a laugh regarding inhalers, please go to YouTube to see the video clip from the T.V. show House titled House inhaler: [http://www.youtube.com/watch?v=pB6IPFYZzOs](http://www.youtube.com/watch?v=pB6IPFYZzOs)

References:


New phone number(s) for SAIL

SAIL has changed their phone number to **1-888-787-8996** or for Regina: **787-8996**.

Both phone numbers are a mailbox; messages will be checked and returned morning and afternoon.

**Case Study: Peanut Allergy after Lung Transplant**

A 47-year-old woman with non-specific interstitial pneumonitis received a lung transplant. The donor was a 12 year-old boy with a known history of peanut allergy, but did not have a history of peanut anaphylaxis. The recipient had no history of peanut or tree nut allergy.

During the first four weeks after the transplant the woman experienced four anaphylactic episodes. Although none of these episodes clearly involved peanuts, the foods she ate were not certified to be nut free.

The woman’s allergy testing revealed a positive response to peanuts. This response steadily declined over the next few months and one year later an oral peanut challenge was negative.
Radon Information for Homeowners

Radon is a colourless, odourless, radioactive gas. It occurs naturally in the environment as a result of the breakdown of uranium found in soil and rocks. In the outdoor air, radon is diluted and is not a health risk. Radon can seep from the ground into buildings through the foundation, basement windows and the plumbing system. If radon seeps into an enclosed space such as a house or apartment building it can build up to levels that are a health risk.

The age of your house is not a factor when it comes to radon gas levels. The Canadian National Building Code issued November 29, 2010 requires that engineers and designers consider radon protection in their designs. This includes an air barrier between the soil and the foundation, as well as a rough-in for a future radon mitigation system. The Canadian Mortgage and Housing Corporation has an excellent publication: Radon: A Guide for Canadian Homeowners available through their web site: www.cmhc-schl.gc.ca or by phone: 1-800-668-2642.

Test kits to determine the level of radon in your home are available through the Lung Association of Saskatchewan at a cost of $50.00. This includes the analysis by the Saskatchewan Research Council.

<table>
<thead>
<tr>
<th>SAIL Stats - February 1, 2011</th>
<th>Lung Association Stats - 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous ......................1914</td>
<td>Nocturnal tests completed ........380</td>
</tr>
<tr>
<td>Exertional ........................429</td>
<td>Waiting list ........................61</td>
</tr>
<tr>
<td>Nocturnal ........................229</td>
<td>Waiting time ........................2.5 months</td>
</tr>
<tr>
<td>Infants ..........................19</td>
<td>% positive for sleep apnea ..........50%</td>
</tr>
<tr>
<td>Total ............................2591</td>
<td></td>
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</tbody>
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Testing Patients with High Oxygen Needs

As a home oxygen tester you may be faced with the challenge of a patient who is using high flows of oxygen or a patient who cannot be taken off oxygen for any length of time. What to do? In this case, the best and safest way to obtain the test results that are required for SAIL funding criteria is to use an oximeter to measure the saturation while on the oxygen. The next step is to turn the oxygen down while watching the saturation levels. Stop when the levels reach 87%. Record 2 minutes at ≤ 87%, and then return the oxygen back to a level that gives saturations of 90-92%.
SGI Medical Review Unit

The SGI Medical Review Unit (MRU) works to ensure that all Saskatchewan drivers have the medical fitness and the skills necessary to drive safely. The MRU tries to strike a balance between a person’s transportation needs and the public’s right to safety. The medical professionals at the MRU assess and monitor drivers who have medical conditions that may affect their ability to drive. They also work with drivers to help them keep their license as long as safely possible.

All drivers are required to report all medical conditions that might affect their driving and any changes in medical condition to SGI. A Supplementary Medical Form, available at any SGI issuer should be filled out at the time of diagnosis or when a driver’s license is renewed. Examples of reportable medical conditions include:

- Alzheimer’s disease, brain tumour, dementia, head injury
- Aneurysm – brain or abdominal aortic
- Arthritis, ataxia, loss of limb
- Diabetes
- Seizure disorders such as epilepsy
- Sleep apnea
- Heart conditions
- Stroke
- Progressive disease: MS, Parkinson’s, Huntington’s, etc.
- Vision: cataracts, macular degeneration, glaucoma, diabetic retinopathy
- Use of oxygen
- Fainting, loss of consciousness, vertigo
- Psychiatric disorders including: depression, schizophrenia, bipolar, etc.

Any condition for which medication is being taken regularly should also be reported to SGI. Physicians and optometrists are also legally required to report drivers who may be dangerous. Other people who can report a driver include police, courts, concerned citizens and family members. Their identity will be kept confidential. The SGI web site includes information on how to determine if a driver may be unsafe as well as the reporting form: http://www.sgi.sk.ca/individuals/medical/reportsomeone.html.

The MRU is also willing to give presentations on medical conditions and driving. They can be reached at: 1-800-667-8015 ext. 6176 or by email: mruinquiries@sgi.sk.ca.

Need to recertify? Please go on-line to www.sk.lung.ca

Look under health professionals, then choose oxygen testers.

Lost your tester number or password? Contact marion.laroque@sk.lung.ca
The Choking Game

Call it the Choking Game, Pass Out, Space Monkey, the Fainting Game, or Flatliner - whatever the name - Canadian children are putting their lives at risk for a quick high. Children who engage in this dangerous ‘game’ use a belt or rope wrapped around the neck to cut off the blood supply and oxygen to the brain. In a group, they may take turns choking each other with their hands. The idea is to choke the player or themselves to the point of almost passing out. The lack of oxygen causes a quick, exhilarating high. The greatest danger is to children who play the game alone with no one nearby to release the pressure if they lose consciousness.

A study conducted in 2007 in Ontario found that approximately 79,000 students in grades 7-12 have played the Choking Game. At least 74 Canadian children have been sent to the hospital and at least 82 children in the USA have died. Many of the children who died were bright, athletic students intrigued by the idea of getting high without using drugs or alcohol. Some deaths that have been listed as suicides may, in fact, be accidentally caused by the Choking Game. A Texas study published in January, 2012, found that the average age of the players was 14 years old.

The Choking Game has been around for generations. In 1921, the famous actress Kathryn Hepburn found her beloved older brother Tom who had accidentally hung himself practising a hanging trick. The internet and social media have broadened children’s awareness of the Choking Game. In a 2009 study, Dalhousie University found 65 YouTube videos of the game that had been watched 174,000 times. The web site rotten.com has an explanation of the game without any warnings or indications that it may be harmful.

Sean and Dawn Dawson of Saskatoon believe their son Zachary died last October while playing the Choking Game. They hope that public awareness of the dangerous practise will help to protect other children from the same fate. The advocacy group GASP (Games Adolescents Shouldn’t Play) is working to increase awareness among parents and educators about the dangers. In Canada, the contact for this group is Sharron Grant, whose son 12-year-old Jesse died in 2005. The group’s web site: www.gaspinfo.com publishes warning signs that parents should look for:

- Blood shot eyes
- Frequent or unusual headaches
- Strange marks on the neck
- Doors always locked
- Knots tied in objects in their bedrooms
- Marks on bedposts and closet rods where it’s worn down
- Frequent disorientation after spending time alone
2012 Respirology State of the Art Conference
An update for family physicians and nurse practitioners

Saturday, May 26, 2012

Travelodge Hotel & Conference Centre, Regina

Presentations: 8:00 to 14:00

Spirometry Interpretation Workshop: 14:15 to 17:30

Topics:
Sleep apnea, pediatric respirology, COPD, asthma, lung transplantation

To register please contact
The Lung Association of Saskatchewan: 343-9511 or info@sk.lung.ca

Did you know?

✓ Research on lung disease receives only 4.5% of federal government funding - yet almost 20% of Canadians suffer from a respiratory illness.
✓ Pneumococcal pneumonia is a complication of influenza.
✓ COPD patients who are underweight are 1.7 times more likely to die than people with a normal body weight.
✓ Hot chilli peppers are known to make people "tear up," but a new study led by University of Cincinnati allergy researcher Jonathan Bernstein, MD, found that a nasal spray containing an ingredient derived from hot chilli peppers (Capsicum annum) may help people "clear up" certain types of sinus inflammation.
✓ Respiratory illnesses, particularly pneumonia, asthma and acute bronchitis were the leading reason for hospitalisation of children up to age 17 in the USA in 2009. The rate for respiratory hospitalisations is twice the next leading cause.
✓ It's widely believed that hypoallergenic dogs produce less dander and saliva and shed less fur, making them a healthier choice for people with allergies. But a team at Henry Ford Hospital in Detroit found no scientific evidence that hypoallergenic dogs produce fewer allergens.
Tester Reminders

- Testing at rest for continuous oxygen funding can be done on an inpatient, within 48 hours of discharge home.
- Testing for exertional or nocturnal oxygen funding can be done only on outpatients who are stable.
- A stable patient has not had a hospitalization, change of treatment, or exacerbation of their cardio-respiratory disease in the past 30 days.
- If your client has qualified for continuous oxygen funding with testing at rest, it is not necessary to also do exertional testing. The continuous oxygen funding also covers the cost of tanks for exercise.

New Research

Improved Medication Use Could Reduce Severe Asthma Attacks

Researchers at Henry Ford Hospital found that one-quarter of severe asthma attacks could be prevented if patients took their inhaled corticosteroids as prescribed. They also found that with every 25% increase in use of inhaled corticosteroids asthma attacks were decreased by 11%.

"Patients must use their asthma controller medications as prescribed if they want to have the best chance of preventing serious asthma attacks," states Dr. K. Williams, lead author of the study.

Life after Cigarettes

People who successfully quit smoking are more satisfied with their lives and feel healthier, both at one year and three years afterwards when compared to those who continue to smoke. This is according to new research from the University of Wisconsin School of Medicine. The authors measured overall quality of life, health-related quality of life, emotions, relationships and stressors.

Some smokers worry that their quality of life may deteriorate if they stop smoking. They believe it disrupts routines, interferes with relationships, and leads to a loss of smoking-related pleasure, or worry that it deprives them of a coping strategy. This does not seem to be the case.

This research proves that quitting smoking benefits a person’s well-being compared to continued smoking. Over the long term, people who successfully quit smoking seem to be happier, and more satisfied with their lives.
Phone Numbers

Saskatchewan Aids to Independent Living (SAIL)
3475 Albert Street
Regina, SK  S4S 6X6
Phone: (new!) 1-888-787-8996   Fax: 787-8679

Oxygen Supply Companies

Airgas Puritan Medical
Prince Albert:  922-9040 or 1-800-677-0220
Regina:  522-0220 or 1-888-469-9436
Saskatoon:  933-0202 or 1-800-677-0220

Medigas A Praxair Company
Regina:  721-2380 or 1-866-446-6302
Saskatoon:  242-3325 or 1-866-446-6302
Swift Current:  773-8064 or 1-866-446-6302

Prairie Oxygen Ltd.
Regina:  545-8883 or 1-877-738-8702
Saskatoon:  384-5255 or 1-877-738-8702

Provincial Home Oxygen Inc.
Regina:  790-8491 or 1-877-352-5025
Saskatoon:  651-1243 or 1-877-352-5025

VitalAire Healthcare
Lloydminster:  1-780-875-9777
Regina:  721-0071 or 1-800-567-0071
Saskatoon:  931-3334 or 1-800-461-0096

THE LUNG ASSOCIATION™
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