A Breath of Fresh Air

A newsletter for Reliant Medical Group COPD patients and their families

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Turn, turn, turn...

So here we are again, about to start celebrating another, hopefully joyous, holiday season. Before we know it, another year will have gone by and although it may not have been all good, most of us tend to remember only the good things. (I guess that's where the idea of the good old days comes from.) I have heard all kinds of predictions about what kind of winter to expect this year and have decided to only listen to those who promise us a relatively warm winter without too much snow!

In this issue, Dr. Kevin Martin would like to share with you important findings from some recent studies that show that lack of sleep is linked to a higher risk for catching a cold. These are important findings for you since they can help you reduce your chances of getting sick. Dr. Daniel Steigman has also written an article on oxygen therapy and COPD, a very important topic.

Lack of sleep could lead to more colds

By Kevin Martin, MD

On September 1st, *The Washington Post*'s "To Your Health" blog reported that research published online in the publication *Sleep* suggests that individuals "who sleep six hours a night or less are four times more likely to catch a cold than those who sleep for more than seven hours."

On its website, *NBC News* reported that investigators asked 164 healthy participants with an average age of 30 to wear an electronic device for one week to monitor their rest/activity cycles to establish their baseline sleep habits. Then, they sequestered the participants in a hotel and, using nasal drops, dosed each of them with a rhinovirus (the most common virus that causes colds). The investigators found that participants who had slept less than six hours a night the week before were 4.2 times more likely to catch a cold when compared to those who slept for more than seven hours a night. Participants who slept less than five hours were 4.5 times more likely to get sick, according to the study.

Also in September, *TIME* magazine reported that how many hours a person slept was one of the strongest predictors of whether or not study participants got sick – even more than other factors like a person's age, body mass, stress levels or emotional state. Clearly, how much sleep we get at night can impact our body's ability to fight off a cold. So, try to get a good night's rest, especially during the cold and flu season.



Oxygen therapy and COPD

By Daniel Steigman, MD

All animals (humans included) require oxygen to survive. Oxygen is transported from the atmosphere through the lungs to the bloodstream where most of the oxygen attaches to hemoglobin in red blood cells and is transferred to the tissues. If there is damage to the lungs as one would see with chronic obstructive pulmonary

disease (COPD), the ability of the lungs to provide oxygen to the body is sometimes compromised and there is a decreased amount of oxygen available for transport to the tissues. Under certain circumstances, supplemental oxygen is used to provide more oxygen to the lungs and subsequently into the tissues.

Only a minority of patients who have COPD require oxygen. The treatment for the vast majority of patients with COPD is inhaler therapy and smoking cessation along with adjuncts such as pulmonary rehabilitation. Only patients whose oxygen level is below a certain level at rest, with exertion, or with sleep, require oxygen. There are several ways that we measure oxygen in the blood. The most accurate is called an arterial blood gas (ABG). This is a blood test in which blood is removed from an artery in the wrist and the oxygen level is directly measured. The other way of measuring oxygen levels is with oximetry. This is a small electronic device that shoots a beam of light through a finger and measures the oxygen level indirectly. This is what is measured when you come into the office for a visit. The oxygen level that is measured by a blood gas test is called a "PO2." A normal PO2 is between 75 and 95 depending on age. The value that is measured on a pulse oximeter is a different number called a "SaO2" or O2 saturation. A normal O2 saturation is around 95. The numbers from a blood gas and from a pulse oximeter are totally different numbers.

To have oxygen covered by your insurance company to be used 24 hours a day the PO2 has to be at or below 55 or the SaO2 at or below 88. Under some special circumstances, the PO2 can be between 55 and 59. As you can see, you can have quite a low oxygen level on a blood gas and still not be a candidate for continuous oxygen.

If your oxygen level goes down with a walk, oxygen can be supplied for exertion only. Sometimes this can decrease your shortness of breath. Oxygen is not supplied if you get short of breath and your oxygen level does not go down. Many people confuse shortness of breath with a decrease in oxygen level. Although oxygen levels can decrease with shortness of breath it does not happen all the time. There are multiple other reasons why patients with COPD become short of breath besides decreased oxygen levels.

Sometimes we measure oxygen with an oximetry device overnight during sleep. If it is low at night, oxygen can be supplied to be used only at night to correct this problem.

Why do we give oxygen?

In patients with oxygen levels that are low at rest (at the levels mentioned above) we know that supplying oxygen for between 18 and 24 hours a day can help people live longer. Many people who have low oxygen and are supposed to wear oxygen continuously sometimes only use their oxygen as needed when they are short of breath. This is not the right thing to do. I sometimes tell my patients that wearing oxygen if you have been told to wear it 24 hours a day is like being treated with medicine for hypertension. We treat people with hypertension not to make them feel better but to lower the blood pressure so they have a decreased risk of cardiovascular complications. It is the same thing in patients who require continuous oxygen. If you wear the oxygen between 18 and 24 hours a day it may improve your life expectancy. Many people are self-conscious about wearing oxygen outside. In that case it's best not to refuse to use oxygen but wear it as much as you can at home and while sleeping.

Activity Trackers Can Help You Stay Active

If you are looking for a good present this holiday season here is an idea that will help improve your health without breaking the bank. Pam and I have been reminding you to stay active since it's so important both for your physical as well as mental health. Exercise very simply makes you feel better. So why not ask for an activity tracker? These are new devices that you wear like a watch or bracelet. They track every step you take, how many calories you have burned, and can even tell you how soundly you have slept. There are various devices on the market, the most popular, but not the cheapest, is called Fitbit. I suggest you let your kids or grandkids take this as a project for the holiday and choose the right one for you. They range in price from \$25 to more than \$200. Most of you will benefit from the simpler versions that don't track things you don't do anyway (like swimming or biking) and are therefore less expensive.

Words to live by.





Patients' Contributions

I realize that summer is over but if you still want to remember its flavor why don't you do what Clyde Buzzell has done. Clyde has found a healthy and tasty way to enjoy a "pretend" ice cream. He freezes his BOOST[®] and says it feels exactly like eating real ice cream – you can do this with Ensure[®] too.

Bon Appétit!

• **Clyde Buzzell** has another great idea to share with you. Like many of you, Clyde uses a BiPAP. Some of you use CPAP. Either way, you can benefit from Clyde's great idea to make the mask fit better over your face. Clyde

uses baby wipes to clean his face prior to putting the mask on. The wipes wipe away the excess oil on your face and ensure a better fit. Give it a try.

Barbara Flagg tells us that she purchased a small, battery-operated fan which she uses to blow air in her face when she is having a little bit of difficulty breathing. She states that the use of the fan helps her breathing. She purchased four of these hand-held fans for \$10.00 at O2Cool.com. The fan Barbara has chosen of all the fans offered on that site is called the Pocket Carabiner Fan Model No. FP02001. You can get four fans for about \$10.00. They are available in four different colors.

• Diane Bianculli has found a fun way to improve her lung capacity. She blows up balloons for her grandchildren. She does it every day and, as you can imagine, her grandkids love it. She gets the balloons at the Dollar Store for very little money. Why don't you too give it a try? Your lungs and your grandkids will thank you.

Here's how to reach us

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