



The Spirogram

Winter 2011



Contributors

- Anne Dixon, MD
- Renee Stapleton, MD, PhD
- Laurie Leclair, MD

Research

Coordinators

- Stephanie Burns
- Sandra Diehl
- Laurianne Griffes
- Joan Lippmann

Inside This Issue

- What is Asthma? **1**
- CPR **2**
- Current Studies **3**
- CF Corner **4**



What is Asthma?

Anne Dixon, MD



Asthma afflicts approximately 11 million Americans including 3.8 million children. Asthma is responsible for 5,000 deaths each year in the U.S. But what exactly is asthma? How can it be treated?

We used to think that asthma was just “twitchy” airways. We thought that some people had sensitive airways that would contract in response to some stimulus in the air. But we now know that asthma is much more than that. The airways of people with asthma are inflamed: they can be red, swollen and have increased secretions in the airway causing severe narrowing and difficulty in getting air in and out of the lungs. In some people, the inflammation may be triggered by something in the atmosphere such as pollen, animal fur or just cold air, but in many people we do not know what first triggers their asthma. It can afflict people at any age, and can present with a wide range of symptoms: some people just have a troublesome cough. Others notice wheezing or shortness of breath when they go outside on a cold day.

It is important to have specialized breathing tests to confirm the diagnosis of asthma and follow the progress of the disease. Do you know how well your asthma is controlled? Are you at risk of having a serious asthma attack? These are questions your doctor can help you with.

How is asthma treated? Treatment usually consists of rescue and controller medication. Rescue medication (such as albuterol) is to be used when you get a sudden attack, ideally you should need this very infrequently. This sort of

medication works to relax the muscles in the airway walls, but does nothing to prevent inflammation. The other type of medication that most people need is controller medication that acts as an anti-inflammatory, such as an inhaled steroid (e.g. Flovent® or Pulmicort®).

The alarming news about asthma is that it appears many people are suffering with poorly controlled asthma. Our recent study of the flu vaccine, in which many of you participated, found that 28% of patients experienced an asthma exacerbation within 14 days of their clinic visit. This was similar to the findings of “Asthma in America”, a survey study conducted by the pharmaceutical company Glaxo-Smith-Kline. They found that 1 in 10 people with asthma are hospitalized within a 12 month period; 1 in 4 adults missed work within a 12 month period because of their asthma, and 1 in 3 people wake up at least once a week with asthma symptoms.

Asthma is out of control in the US: our goal at the Vermont Lung Center is to research new and innovative treatments to improve the control of asthma, so people with asthma can live their lives to the full.



Interested in Volunteering?

Things to know:

- 1) **The Vermont Lung Center staff is responsible for making sure you know what is expected of you in regards to the study.**
- 2) **Once the study is explained to you, you will be asked to read and sign an “Informed Consent”. This form is designed to explain everything you need to know about the study.**
- 3) **Studies may be therapeutic (involving observation of lung function). However The Vermont Lung Center can make no claims that your involvement in a research study will improve your condition.**
- 4) **Compensation may or may not be provided to you for your involvement in a study. If compensation is provided, it is meant to cover your time and expenses incurred—it does not constitute employment.**

If you are interested in finding out more about volunteering for a research study, please call us at

(802) 847-2193



CPR

Renee Stapleton, MD, PhD



Cardiopulmonary resuscitation, or CPR, is a medical procedure that is often used when a person’s heart or lungs stop working, for example during a cardiac arrest. CPR is a combination of shocks to the heart, chest compressions, artificial breathing, and special medicines for the heart. On TV and in the movies, people who get CPR usually survive. In real life, however, this isn’t the case; the outcomes after CPR are actually much worse than the media would lead us to believe.

Among all people who get CPR while in the hospital, only about 15% (or less than 1 in 7) survive to leave the hospital. Among patients with COPD and emphysema who use oxygen, and among those with advanced cancer, only about 1 in 20 patients survive to leave the hospital. Even if those patients do leave the hospital, their average lifespan is only about 3 months, and most patients spend that time in a nursing home. Therefore, CPR is probably not an appropriate procedure for many patients who are very ill.

Even though the outcomes after CPR are very poor and it rarely works, the medical culture in America is such that everybody gets CPR unless they specifically say they don’t want it. In other words, CPR is automatically provided to everyone whose heart or lungs stop working unless there is paperwork stating that they don’t want to receive CPR. To complicate things further, opting out of CPR for a patient is complicated. A health provider has to have a conversation with the patient about what CPR is and what the results of CPR are. They also need to talk about what things are important to the patient, what kind of quality of life is meaningful to the patient, and what the patient’s overall health care goals are. After all this is done, then the patient has to communicate their wishes to their loved ones and family members; so that if the patient is ever too sick to make his or her own decisions, someone they love and trust can carry out their wishes. Because all of these steps are hard to get into place and because doctors and patients are sometimes reluctant to start discussing these issues, we believe that a lot of people receive CPR when it either does not benefit them or they would have chosen not to receive it if they had more information.

With this in mind, our research group is especially interested in studying how we communicate about CPR and other end of life issues. We are currently conducting a study to gather the opinions on a particular communication approach about CPR with patients who have either COPD and use oxygen or have advanced cancer. We hope this research will help us understand how health care providers can improve their communication about CPR and provide better care to all patients.



The Vermont Lung Center is affiliated with the following organizations:



Current Ongoing VLC Studies

ASTHMA

Asthma Patient Registry (APR)

Primary Investigator: Charles Irvin, Ph.D., Director, Vermont Lung Center

Coordinator: Stephanie Burns

Who: Anyone with a physician diagnosis of asthma

What: 1 visit lasting approximately 30 minutes

Compensation: none

A Randomized, Placebo-Controlled Pilot Study of Pioglitazone for the Treatment of Moderate to Severe Asthma in Obese Asthmatics (GLITZ)

Primary Investigator: Anne Dixon, M.D.

Coordinator: Laurianne Griffes

Who: Adults with a BMI of 30-60 with poorly controlled asthma

What: 5 visits and one phone call over 13 weeks

Compensation: up to \$170

The Study of Soy Isoflavones in Asthma (SOYA)

Primary Investigator: Charles Irvin, Ph.D., Director, Vermont Lung Center

Coordinator: Stephanie Burns

Who: Adults and Children 12 years and older with symptomatic asthma

What: 9 visits over 24 weeks

Compensation: up to \$400

Study of Asthma and Nasal Steroids (STAN)

Primary Investigator: Anne Dixon, M.D.

Coordinator: Stephanie Burns

Who: Adults and Children 6 years and older with rhinitis or sinusitis and asthma

What: 10 visits over 6 months

Compensation: up to \$350

STAT Signaling in Allergic Lymphocytes

Primary Investigator: Sean Diehl, Ph.D.

Coordinator: Stephanie Burns

Who: Asthmatics and Non-Asthmatics ages 12 - 60

What: Up to 2 visits

Compensation: up to \$100

Do you or one of your family members have ASTHMA?

*If so you may be able to participate in one of our asthma research studies at the **Vermont Lung Center**.*

What are the Benefits of being in a Study?

- * *Gain a better understanding of your asthma*
- * *Financial compensation provided*

Who can participate in our studies?

- * *Children 6 – 17 and adults up to 70 (depending on the study)*
- * *Physician diagnosed asthma*
- * *Non-smoker (for at least 1 year)*

If you are interested in learning more, please call us at: (802)847-2193 or e-mail us at Laurianne.Griffes@vtmednet.org or Stephanie.Burns@vtmednet.org

SARCOIDOSIS

A Phase 2, Multicenter, Randomized, Double-blind, Parallel-group, Placebo-controlled Study Evaluating the Safety and Efficacy of Treatment with Ustekinumab or Golimumab in Subjects with Chronic Sarcoidosis

Primary Investigator: Gerald Davis, M.D.

Coordinator: Laurianne Griffes

Who: People with Chronic Sarcoidosis

What: Treatment every 4 week for 24 weeks, follow up visits every 4 weeks through week 44.

Compensation: up to \$560

IDIOPATHIC PULMONARY FIBROSIS (IPF)

Celgene: A Phase 2, Sequential, Ascending Dose Study To Characterize The Safety, Tolerability, Pharmacokinetic And Biological Activity Of CC-930 In Idiopathic Pulmonary Fibrosis (IPF)

Primary Investigator: Yolanda Mageto, M.D.

Coordinator: Joan Lippmann

Who: People with Idiopathic Pulmonary Fibrosis

What: 56 weeks of treatment followed by 52 weeks of observation

Compensation: Up to \$1,050

ImmuneWorks: A Phase 1, Open Label, Multi-Dose Study to Evaluate the Safety, Tolerability, and Biologic Effects of Three Doses of IW001 in Patients with Idiopathic Pulmonary Fibrosis (IPF)

Primary Investigator: Yolanda Mageto, M.D.

Coordinator: Laurianne Griffes

Who: People with Idiopathic Pulmonary Fibrosis

What: 8 visit plus one phone call over 6 months

Compensation: Mileage over 20 miles one way

CYSTIC FIBROSIS

Management of Bacterial Air Contamination in Cystic Fibrosis Clinics

Primary Investigators: Laurie Leclair, M.D./Thomas Lahiri, M.D.

Coordinators: Joan Lippmann/Sandra Diehl

Who: People with Cystic Fibrosis

A Phase 3, Multi-center, Multinational, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Safety, Efficacy and Tolerability of MP-376 Inhalation Solution (Aeroquin) Given to Stable Cystic Fibrosis Patients

Primary Investigators: Laurie Leclair, M.D./Thomas Lahiri, M.D.

Coordinators: Joan Lippmann/Sandra Diehl

Who: People with Cystic Fibrosis

What: 6 visits over 70 days

Compensation: Up to \$550

For more information on these studies, please visit our website @

www.vermontlung.org



The Vermont Lung Center is supported in part by the following organizations:



**The Vermont Lung Center
The University of Vermont
MOB, Suite 305
792 College Parkway
Colchester, VT 05446
Phone: 802-847-2193**



We're on the web:

www.vermontlung.org

The Vermont Lung Center
The University of Vermont
MOB, Suite 305
792 College Parkway
Colchester, VT 05446

**Non-Profit Org.
U.S. Postage
PAID
Permit No. 143
Burlington, VT**

CF Corner

A New Study

Laurie Whittaker Leclair, MD



People with lung disease often have bacteria living either intermittently or long term within their airways. This is especially true for patients with cystic fibrosis (CF). CF is a genetic disease in which patients' get progressive destruction of their airways from long term infections, particularly by the bacteria *Pseudomonas aeruginosa*. Current practices are focused on the prevention of spread of bacteria between patients however the best approach to accomplish this goal is not completely known. From prior studies we know that bacteria are spread by respiratory droplets and can be detected in the air after a routine clinic visit. Dr. Jonathan Zuckerman, a CF physician and researcher at Maine Medical Center, in conjunction with three other centers including the CF Center at Fletcher Allen Health Care, are performing a study to determine if the use of a mask during a CF clinic visit will decrease the shedding of bacteria into the air. Further, the study will also determine if shedding is more likely to occur during the measurement of lung function, where deep breathing and forced expiration is required. The study will also determine if when shedding does occur, how long it takes before the air is cleared of bacteria. The study, which is funded by the CF Foundation, is now active in the adult CF clinic and will start recruiting patients from the pediatric program early in 2011.

