



Physician Allergy Times

Fall/Winter 2006

Published as a service to our customers

CML 2nd Allergy Conference Training a Huge Success

Commonwealth Medical Laboratories, Inc. was pleased to hold its second annual ACT (Allergy Training and Conference) conference in Louisville, KY. The meeting was held October 20 and 21, 2006 at the prestigious Brown Hotel. Attendance surpassed our expectations as the meeting was filled to capacity. CML's ACT meetings are intended to be instructional and informative, yet not a replacement for formal academy instruction. These meetings serve to "wet the whistle" of attendees and spur them on to further education in allergy.

Our Course Director, Jeffrey Powell, MD, DDS, FACS also serves as Medical Director for Commonwealth Medical Laboratories. Included in our impressive roster of speakers were: John R. Stram,

MD, long known to the ENT community; Robert Knox, MD, an ENT specializing in motivational speaking with expertise in endoscopy as well as other areas; Mary Morris, MD an expert in sublingual immunotherapy spoke of new advancements in this cutting edge therapy. Our lecturing nurses, Renee DeWitt, RN and Bonnie Dooley, RN, added valuable information about emergency treatment. Ms. Connie Mardis spoke of new 3rd generation allergy testing through Diagnostic Products Corporation, Michael Cullen of Hycor Biomedical spoke of allergy reimbursement and Rosemary Alden of Phadia addressed the "Allergy March." Carol Bennett, of Commonwealth Medical Laboratories, was the coordinator of this impressive



The 2nd annual Allergy Conference & Training (ACT II) seminar was held at The Brown Hotel in Louisville, KY.

event and received a 100% satisfaction rating in the surveys passed out after the meeting ended.

Again, our goal is to educate and introduce practitioners and staff to the cutting edge in allergy as well as some basics. We are very proud of our meetings as they are professional and non-company biased. We are currently selecting the date and location of ACT III, so stay tuned!

Inside this issue:

Food Allergy Protein Identified	2
Nurse Consulting Services	2
Grapefruit and Some Medications Don't Mix	2
Adult Onset Asthma	3
Top 10 States at Risk for Mold	4

Second Hand Smoke Exacerbates Allergic Airway Disease

Researchers at UCLA conducted a randomized, placebo-controlled study on non-smokers with ragweed allergy to determine the effects of environmental tobacco smoke (ETS).

The study results indicated that ETS promoted the production of allergen-specific IgE in nasal

lavage fluid. Four days after exposure to ETS/ragweed, levels were on average 16.6-fold higher than after clean air/ragweed challenge. In addition, ETS promoted the increase of a TH2-cytokine nasal milieu characteristic of an active allergic response. The nasal histamine levels were 3.3-fold greater.

Another study of 633 infants conducted by the University of Cincinnati and Children's Hospital Medical Center revealed that an infant's chance of developing allergic rhinitis by age one triples when exposed to second-hand smoke.

Online articles:
Journal Allergy & Clin Immunol
Pediatr Allergy Immunol 2006



Study identifies one of the proteins that may be responsible for causing food allergies.

Protein Associated with Food Allergy Identified

Researchers at the Mount Sinai School of Medicine, New York, have identified a protein in the intestinal tract that acts as a receptor for IgE and enables it to participate in food-allergic reactions.

Stool samples were collected from nine pediatric patients (ages 3 to 17) who underwent an oral food challenge, during which they were administered egg or milk. Symptoms that oc-

curred less than two hours after the food challenge included skin reactions, breathing problems, gastrointestinal problems, or a combination of symptoms.

They were matched with five pediatric controls with no food allergies.

Results of this study showed that this protein, CD23, was detectable in stool samples from food allergic patients, but not the controls suggesting either increased

levels of CD23 on intestinal cells or an allergen-induced shedding of CD23 in food allergic patients. There was also a strong correlation between the level of CD23 and food-specific IgE in the stool, demonstrated by the availability of IgE antibodies to interact with CD23 on the outside surface of the gastrointestinal wall.

Gastroenterology (July 2006)



On-site training can be scheduled and customized to meet your needs.

Experienced, Cost-Effective Nurse Consulting Services

Commonwealth Medical Laboratories is pleased to be able to offer on-site nurse consulting services to assist you in incorporating allergy testing and treatment into your practice. Our registered nurses are available to provide training to your office staff to include such things as: provide an overview of allergic disease, set up space in your office, utilize in vitro (blood) allergy testing, recommend custom regional and food allergen panels, educate your staff of the various treatment options available including sublingual immunotherapy, set up your own treatment boards and much more. By utilizing on-site training, there is no lost time from your practice; it can be scheduled to accommodate your patient schedule; you reap the advantages of hands-on instruction and it can be customized to meet your needs.

If adding this new revenue center to your practice is of interest to you, call CML today at 800-222-5775 for additional information.



Study participants who drank grapefruit juice that contained furanocoumarins when taking their hypertension medication had a 420% increase in blood levels of this drug at any one time.

Grapefruit Juice and Medications Don't Mix

Researchers at the University of North Carolina at Chapel Hill, have identified that furanocoumarins in grapefruit juice are responsible for increasing the absorption rate of certain medications, including cholesterol lowering drugs, some antihistamines, erectile dysfunction drugs and blood pressure medications.

There is an enzyme in our intestine that destroys a certain amount of some drugs and therefore slows the amount of drug that enters the bloodstream. Furanocoumarins prevent this enzyme from working.

The study involved 18 healthy volunteers who were given felodipine, a blood pressure lowering medication. One group took the drug with orange juice, one group with grapefruit juice and one group with grapefruit juice with the furanocoumarins removed. The subjects who drank the orange juice and the grapefruit juice with the furanocoumarins removed had the normal amount of the medication in their blood, however, the subjects who drank the normal grapefruit juice had a 420% increase in blood levels of felodipine at any one time.

The identification of furanocoumarins as the substance responsible for the increase in the absorption rate of certain medications may lead to identifying other foods that may contain furanocoumarins. For drugs that do not enter the body easily, furanocoumarins may be considered as an addition to the pills to help them be absorbed by the intestine.

Published in the *American Journal of Clinical Nutrition*

Adult Onset Asthma

Several factors make a person more likely to develop adult onset asthma. Women are more likely to develop asthma after age 20 due to hormonal fluctuations. For others, obesity, allergy to cats, and exposure to cigarettes, molds, dust, feather bedding, perfume and other environmental substances appear to significantly increase the risk of developing asthma as an adult. Aspirin (and other NSAIDs), oral beta-blockers and beta-blocker eye drops can also trigger or exacerbate asthma.

In most cases, asthma is caused by inhaling an allergen that sets off a chain of biochemical and tissue changes, leading to airway inflammation, bronchoconstriction and wheezing. Since avoiding or minimizing exposure to these allergens is the most effective way to treat asthma, it is vital to identify which allergen or irritant is causing asthma symptoms.

Asthma is frequently mistaken for other respiratory illnesses such as bronchitis, pneumonia and upper respiratory infection. These illnesses can, however, increase the frequency of asthma attacks. Many patients also contribute to misdiagnosis by tolerating the intermittent symptoms and self-medicating with OTC medications. Some individuals with asthma may only experience symptoms at night and present at the physician's office during the day with no symptoms. One health-related factor that may cause asthma to worsen at night is gastroesophageal reflux disease.

Asthma symptoms may be seasonal. Heat, humidity, air pollution and higher pollen counts in the summer can trigger an asthma episode. For others, the wet conditions in spring and fall that encourage mold growth can trigger an attack. During the winter months, asthma may be aggravated by the indoor buildup of smoke, animal dander and mites.

Indoor Pollutants	Medication Triggers
Dust Mites	Aspirin
Cockroaches	Ibuprofen
Bacteria	Indomethacin
Molds	Naproxen
Fungi	Sulfites
Animal hair	Tuna
Animal dander	Salad bars
Secondhand smoke	Dried apples
Environmental Pollutants	Dried raisins
Pollen	Lemon juice
Pesticides	Grape juice
Ozone	Wine
Carbon monoxide	
Nitrogen	
Sulfur compounds	
Wood dust	



The symptoms of asthma can vary and often have rapid onset.



Sulfites are a common asthma trigger.

4228 Aiken Drive
Warrenton, VA 20187

Phone: **800-222-5775**
Fax: 540-428-2905

We're on the Web
www.allergytest.com

Commonwealth Medical Laboratories, Inc.
4228 Aiken Drive
Warrenton, VA 20187

Top 10 States at Risk for Mold

The relative hazard ranking model developed by American Risk Management Resources (ARMR) is now being used by GREENGUARD Environmental Institute (GEI). The GEI/ARMR relative hazard ranking model was developed by comparing mold losses on insurance claims with premiums paid on property and liability coverage in each of the 50 states.

Contrary to popular belief, and as you can see from the states listed in the chart, climate is not a good gauge for mold risk. States with dry climates made it to the top of the list whereas some Gulf States did not.

Many houses in dry climates develop mold issues when moisture is nurtured within walls and windows that are tightly sealed from the hot

Top 10	Mold Ranking
Texas	2.95
Florida	2.50
Oklahoma	2.45
South Carolina	1.91
Nevada	1.90
Arizona	1.90
California	1.73
South Dakota	1.47
Tennessee	1.33
Kansas	1.25
Bottom 5	Mold Ranking
Wisconsin	.06
West Virginia	.07
Alabama	.13
Massachusetts	.18
Minnesota	.19

temperatures outside. "Think of a glass of ice water sitting on your porch in 95-degree heat," said Carl Smith, CEO/Exec. Director of GEI. "Condensation quickly forms on the outside of the glass, but unlike your drink, condensation in a home or business has nowhere to run off so it builds up in the cavities of the structure, creating an ideal climate for mold contamination."

**One important thing to note from the rankings in this chart is that the claims associated with the 2005 hurricanes that struck the Southeastern United States have not yet been included.