

AGROMEDICINE PROGRAM UPDATE

MUSC DEPARTMENT OF FAMILY MEDICINE – DIVISION OF PUBLIC HEALTH AND PUBLIC SERVICE
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PROGRAM NOTES

>Best Wishes for a Happy New Year!

We've gotten used to our "new digs," but still haven't found everything yet. It is amazing what can be accumulated over almost 20 years in one office.

Our brochures, reprints and reference materials are newly rearranged and accessible, so contact the office if you need any of these resources.

The content of all brochures was reviewed and updated in 2006.

>Several presentations are on the schedule for the first two months of the year, but more times are available. Contact the office to request a talk for your group (of whatever size). We are happy to make presentations to small groups (less than 10) or larger ones. When a drive of several hours is required, we try to schedule more than one presentation in the area, so a few weeks notice is appreciated. Shorter notice can sometimes be accommodated, so call anytime.

For a full list of available presentations, contact the office.

>Dr. Simpson gave presentations during December on avian influenza and "Christmas Plants and Foliage: Myths and Risks" to groups in Florence and Charleston.



RECENT CONSULTS

>Elevated Serum Mercury

Following up on a couple of recent consults, readers may remember a patient with an elevated serum mercury level secondary to eating large amounts of swordfish. After repeated tests showed levels persistently around 100 micrograms/L (more than 5 times normal), the patient was given succimer (DMSA [2,3 dimercaptosuccinic acid]) chelation following the standard protocol for lead toxicity. Her level dropped by

more than 60% one week after completion of the three week course of the therapy. She is scheduled to have another mercury level at six weeks post therapy to determine whether another course of chelation is needed.

>Reaction to Lyme Disease Treatment

Another recent consult resulted in diagnosis and treatment for Lyme disease. (The case was not from the southeast, but was, instead, from a Lyme disease endemic area). Shortly after beginning standard oral antibiotic therapy, the patient developed a probable Jarisch-Herxheimer reaction. The reaction, characterized by fever, malaise and sometimes severe headache was first described in patients being treated for syphilis with mercury. It is felt to be due to release of large amounts of endotoxin and other antigens when many organisms are killed early in the course of therapy. The patient was hospitalized briefly and had an uneventful recovery.

>Spider Bite

A patient reported reaching under a chair and noted several small spiders on his hand. Several hours later he noted a red area at the end of his finger. He was seen by his physician with no systemic allergic symptoms, but anxiety complaints, worried that this might have been a brown recluse. He was given anti-histamines, observed with no progression of symptoms and eventual resolution of his complaints over a couple of hours. He did not return for follow-up. He brought a sample of the spiders into his physician for identification. Our entomologist friends identified the spider as an American house spider-*Achaearanea globosa*. Recognizable by its tiny size (2mm body) and patches and streaks on the sides of its globular abdomen, they are harmless.

The South Carolina Pest Control Association will feature three speakers and an open forum on spiders at their annual meeting in February. Dr. Ivar Frithsen of our program will join Drs. Rick Vetter and Joe Culin to discuss brown recluse spiders, spider bite misconceptions, and our recent survey of primary care physicians regarding care for spider bites. The session will be held from 1:30 to 5:00 pm on Wednesday, February 14, at the Columbia Marriott. Contact Jackie Ellis at Clemson for more information: jells@clemson.edu

FROM THE LITERATURE

>Childhood Asthma Less Likely in Farm Residents

Dr. Steve Kirkhorn, medical director of the National Farm Medicine Center reports preliminary results of a study involving 570 children from Wisconsin which indicate that those who grow up on farms are less likely to develop allergic or atopic conditions and, to a lesser degree, asthma, than their non-rural counterparts.

--Kirkhorn S. Nurture 2006
9(2):3.

>Removing Pesticide Residues from Inside Homes

McCauley and her co-authors at U Penn and Oregon report on the effectiveness of cleaning practices in removing pesticides from home environments. Ten farm-worker homes were sampled for six organophosphate pesticides. All homes had detectable levels of one or more of the OP's. Kitchen floors were swept, mopped twice with Pine-Sol and water, mop-rinsed with hot water and allowed to air dry. Window-sills were wiped with a dilute solution of Pine-Sol and allowed to air dry. Carpets were steam cleaned by a professional carpet cleaning company.

Total pesticide residues were not significantly changed in the post-cleaning samples from the kitchen floors. Window sill cleaning reduced total pes-

ticide residues by about 75% immediately post-cleaning. Steam cleaning of carpets reduced pesticide residues to non-detectable levels immediately post-cleaning. In 12 months the levels had accumulated to one third of the baseline levels.

--McCauley LA, Travers P, La-sarev M et al. J Agromed 2006;11(2):81-8

So, some cleaning practices appear to be effective and even persistently so. However, the unasked question remains—do current levels of pesticide residues in homes have any clinical significance?

--Ed.

>SAD BUT TRUE

According to the World Health Organization, in 2006 the number of overweight people in the world became greater than the number suffering from hunger. The world's population of overweight individuals has "grown" to over 1 billion, while the number who are chronically malnourished is 800 million. Barry Popkin, a nutritionist at the University of North Carolina, says that the number of hungry people is falling gradually, but the number of obese people is increasing rapidly. Popkin suggests that governments should subsidize the production of fruits and vegetables and enact higher taxes on "sugary" items to stem the rise in obesity.