

AGROMEDICINE PROGRAM UPDATE

MUSC DEPARTMENT OF FAMILY MEDICINE – DIVISION OF PUBLIC HEALTH AND PUBLIC SERVICE
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Previous issues are available at www.musc.edu/oem/apunews.html

PROGRAM NOTES

>Would you prefer to receive your copy of the Agromedicine Program Update by email? If so, please contact JoAnn Stukes at: stukesj@musc.edu and we'll put you on our email list.

>We continue to have invitations to speak around the state, but have more time available if there are groups looking for a speaker on agromedicine topics. Contact me by email, telephone or fax.

>Brochures are available on request on the following topics:

1. Health Effects of Imported Fire Ants
2. Noise-Induced Hearing Loss
3. Health Tips for the Older Farmer
4. Heat Illness
5. Skin Cancer
6. Birth Defects
7. Environmental Estrogens and Breast Cancer
8. Allergy and Pesticides
9. Acute Pesticide Poisoning
10. Eye Protection

11. Procedures for Handling Ticks

These publications have been recently updated and are also available at the Agromedicine Program website at:

www.musc.edu/oem/brochure.html

> Please give us your feedback on these resources and suggestions for additional brochure topics.

>CONSULTATIONS (Just a reminder of how they work)

County Extension agents, health care providers, and other professionals, as well as their clients and patients can contact the Agromedicine Program for free medical consultation. Telephone our office at 843-792-2281 from 8 a.m. to 5 p.m., Monday through Friday. We can also be reached after hours through MEDULINE (800-922-5250), via fax or through the web. Advise the MEDULINE operator that you are requesting a consultation from the Agromedicine Program.

RECENT CONSULTS

>Safety of Interior Pest Control Treatments for Patients on Chemotherapy

A call similar to one reported last month, only this time the question is on interior pest control rather than termiticides. A patient undergoing chemotherapy for lung cancer asks about recommended products for control of roaches, ants, etc. An insecticide in gel form such as hydramethylnon (*Maxforce*, and other trade names) is ideal for use in this patient's home. The product has minimal to no "off-gassing" of chemical, requiring that the insect track through the material to be affected. However, it works well and has good persistence—usually only one or two applications per year are necessary.

>Five-Line Skink Bites

A ten-year-old boy picked up a stick with an 8 in. long dark brown-black lizard with red stripes. The lizard bit the child on the finger tip and ran away! Though unable to positively identify the culprit, it was probably an

older male five-line skink. As skinks age they become darker in color overall and lose the blue coloration of the tail. The "5-Lines" also darken from yellow to orangeish-red. We could find no specific literature dealing with skink bites, but they are known to be non-toxic and respond to thorough local cleansing and observation for possible secondary infection. Remember to check for tetanus status.

>Too Much of a Good Thing

A 35-year old woman was referred for evaluation for a high serum mercury level. She gave a history of heavy swordfish consumption (approximately two pounds per week for the past 2-3 years) and similar consumption of tuna steak for the three years prior to that. Her serum mercury was 10 times the upper limit of normal. She had no symptoms or physical findings of mercury toxicity.

Studies have reported values up to 20 times the upper limit of normal in high predatory fish consumers like this patient.

Because of the absence of symptoms, we elected to have her cease seafood consumption for a week and repeat the serum mercury. Unfortunately, her repeat value is not available at "press time." Follow-up and more details in next month's issue.

FROM THE LITERATURE

>Methicillin-resistant *S. aureus* (MRSA) Infections

Two recently reported studies should be of interest to the agromedicine community. Moran *et al* report the recognition of MRSA in skin and soft tissue infections in 11 large emergency departments in the US. Prevalence of MRSA was 59 percent overall and ranged from 15-74 percent. 29 percent of MRSA positive wounds were reported to have been caused by a spider bite. No further evaluation of these patients regarding the method of diagnosis of the spider bite was described. Only having a personal history of MRSA or close or household contacts with MRSA were stronger risk factors for MRSA than a "reported spider bite."

LeBlanc *et al* report on risk for MRSA in 7000+ hospitalized patients in a single hospital from 2003-4. Fluoroquinolones (FQ) were the only antimicrobial drugs associated with MRSA colonization and infection.

These studies raise more questions than they answer. Are spider bites frequently secondarily infected with MRSA, or are MRSA skin infections frequently misdiagnosed as spider bites? Does what happens when hospital inpatients are given FQ's also happen when we use them in the outpatient setting?

My bottom lines: I will be more careful making a "spider bite" diagnosis without an observed bite or strong history of contact with a high spider bite risk area. I would like to have anti-biogram data from my area to decide how much MRSA is in my community (check with your hospital or lab service to see if outpatient numbers are available) but, in the absence of that information, will be quick to choose trimethoprim-sulfamethoxazole for purulent skin and soft tissue infections (the MRSA isolates in the Moran article were 100% susceptible to it). I will also be slow to reach for an FQ unless I have a very good reason (i.e.-Sanford tells me an FQ is first choice and there are no other close alternatives).

-Moran GJ et al. N Engl J Med 2006;355:666-674

-LeBlanc L et al. Emerg Infect Dis 2006;12(9): 1398-1405

UPCOMING MEETINGS:

North American Agromedicine Consortium. Oct. 17-19, 2006. Tuscaloosa, AL. For info: www.agromedicine.org

Preparedness and Response to Agricultural Terrorism Course taught by the National Center for Biomedical Research and Training-Louisiana State University. Nov. 28-30, 2006, Charleston, SC. For info: contact Patty Thornton at 843-958-4071