PROGRAM NOTES

> Another three months has come and gone and much has transpired. As you can see from our masthead, the Department’s address has changed.

Our home of more than 40 years at 295 Calhoun Street is no longer ours, a victim of an outdated HVAC system (among other things) and a very tight fiscal situation that made finding new quarters less expensive than upgrading our old facility.

So, the department is now in five “pieces” — our residency training site at Trident Hospital, three clinical sites (East Cooper, Summerville and our new “downtown” site on James Island) and faculty offices at the Charleston Center, still on Calhoun Street, but a block closer to the Ashley River and on the other side of the street.

Come by to see our new locations when you’re in Charleston! Our contact information (telephone, etc) is the same as before.

RECENT CONSULTS

> As the weather has cooled, consultations have slowed substantially — would you believe — to a standstill?

This quarter we’ll finish our discussion of the effect of last year’s mild winter on tick-borne diseases. The most recent issue of the CDC’s Morbidity/Mortality Weekly Report (61(45) dated November 16, provides numbers for the first 45 weeks of 2012. These numbers are likely to change very little in the last 7 weeks of reporting for 2012.

Following patterns established early in the season, babesiosis cases fell from 1128 in 2011 to 498 thus far in 2012.

Ehrlichia Chaffeensis has been slightly more common this year than last with 839 cases in 2012 and 754 in 2011. Anaplasma phagocytophilum is down significantly from 2332 cases in 2011 to 665 in 2012.

South Carolina reported only one case of Ehrlichiosis in 2012 and no cases of Anaplasmosis. Neighboring North Carolina reported one third more cases of Ehrlichiosis (almost 100), but no change in Anaplasmosis (19 cases in 2012 versus 20 in 2011). Georgia had 1/3 fewer cases of Ehrlichiosis in 2012 (14) and 80% fewer cases of Anaplasmosis (2).

Lyme disease cases in the US fell from 30,422 in 2011 to 23,200 in 2012,

Rocky Mountain Spotted Fever cases totaled 164 in 2012 compared to 211 in 2011.

So, the bottom line: unless there is a very unusual surge in tick-borne disease cases in the last seven weeks of the year, the warm winter of 2011-12 and reported large tick populations noted over large portions of normal tick distribution resulted in no significant increase in tick-borne disease — and likely a significant overall decrease.
The question that remains unanswered—WHY?

FROM THE LITERATURE

Record Heat May Have Contributed to a Banner Year for West Nile Virus

Dr. Lyle Peterson, Director of the CDC’s Division of Vector-Borne Diseases, was interviewed for JAMA regarding the nearly 4000 West Nile Virus cases in 2012 compared to less than 800 in 2011. He describes arboviral outbreaks as sporadic, so this sort of large increase from one year to the next is not unusual. Big outbreaks appear to occur only in more temperate climates, as opposed to the tropics. Why more cases this year? A complex interaction between the number of susceptible birds, number of vector mosquitoes, the rate of viral replication in mosquitoes, to average survival of mosquitoes and the interaction of birds and mosquitoes—all of which are influenced by weather. The first eight months of 2012 were the hottest on record in the US. This likely influenced the factors above to increase West Nile transmission risk. Interestingly, large swaths of the country had increased temperatures, but some areas also had had severe droughts. These areas were less likely to have increases in West Nile presumably due of lack of mosquito breeding grounds.

Differentiation of Re-infection from Relapse in Recurrent Lyme Disease

Researchers at the NY Medical College and the University of PA report on 17 patients who received the diagnosis of Lyme disease between 1991 and 2011 and who had 22 paired episodes of erythema migrans during this time period. The genotype of the Borrelia burgdorferi (isolated from skin or blood) was found to be different at each initial and second episode. Identical genotypes were found in only one patient at the first and third episodes, five years apart. Different genotypes were identified at the second and fourth episodes in this patient.

Their conclusion statement: “Our data show that repeat episodes of erythema migrans in appropriately treated patients were due to re-infection and not relapse.”

Dr. Alan Steere (one of the fathers of Lyme disease research) comments in an accompanying editorial: “This observation adds further weight to previous clinical observations that recurrent erythema migrans after antibiotic treatment is caused by reinfection rather than relapse of the original infection.”

He goes on to write: “The issue of relapse versus reinfection has a broader context because of patient-advocacy groups that promote months or years of antibiotic therapy for ‘chronic Lyme disease.’

As concluded by the Infectious Disease Society of America, there is no evidence of persistent B. burgdorferi infection in human patients after recommended courses of antibiotic therapy. Although B. burgdorferi infection may persist for years in untreated patients, the weight of evidence is strongly against persistent infection as the explanation for persistent symptoms in antibiotic-treated patients with Lyme disease.”

--Kuehn BM. Medical News and Perspectives. JAMA 308(18):1846-7


Happy Thanksgiving

Best Wishes to You and Yours for the upcoming holiday season!!

WMS