Clinical Capsules

TB in Thai Immigrants

Tuberculosis is the most frequently diagnosed illness in immigrants who apply for permanent U.S. residence, but enhanced screening may reduce the number of cases, according to the Centers for Disease Control and Prevention.

From June 2004 to January 2005, 37 TB cases—including 4 multidrug-resistant cases—were identified among 9,459 Thai refugees. Standard screening had included history, physical exam, and a chest radiograph for those aged 15 years or older; in May 2004, mycobacterial culture and drug-susceptibility testing were added. In January 2005, the cases prompted a 1-month travel suspension and further enhancement of the screening and control process. As of February 2005, those aged at least 6 months underwent chest radiographs and those aged 6 months to 10 years underwent skin testing (MMWR 2005;54:741-4).

None of the approximately 3,500 refugees who arrived after implementation of the new algorithm, was diagnosed with TB after arrival.

The Iraq Infection

An outbreak of *Acinetobacter* infection that appears to have originated in Iraq has affected nearly 300 people, mostly returning soldiers, according to the International Society for Infectious Diseases.

Many of the soldiers contracted the potentially deadly drug-resistant illness while in the hospital with others who were infected or who had *Acinetobacter* on their skin, the society reported on its disease-outbreak–report Web site (ProMED-mail.org/pls/pm/pm?an=20050803.2248).

In an effort to contain the outbreak, hospitals are assuming that patients from the battlefield are infected until proven otherwise. A Navy hospital reported that 10% of 396 patients treated there were infected, and another 20% were carriers—that is, they had the bacteria on their skin but were not infected. Army hospitals have reported another 240 infections and 500 carriers.

HAART Outcomes

Highly active antiretroviral therapy works.

That is the finding of the first randomized, placebo-controlled trial evaluating the long-term effectiveness of HAART. Most trials have used surrogate end points over short periods to estimate treatment effects. Jonathan A.C. Sterne, Ph.D., of the University of Bristol, England, and his colleagues used a novel methodology that eliminated some of the biases in earlier trials. They found that the use of HAART reduced the rate of progression to AIDS or death by 86% over a median of 54 months (Lancet 2005;366:378-84).

Compared with no treatment, the overall hazard ratio (HR) for HAART in the study of 3,245 patients from the Swiss HIV Cohort Study was 0.14; compared with dual therapy, it was 0.49. Over time, treatment became more beneficial, but this was less true in those thought to have contracted HIV through IV drug use (HR 0.27) than for those with other modes of transmission (HR 0.08).

West Nile Virus in Blood

Nucleic acid–amplification minipool testing of donated blood has been successful for preventing transfusion-transmitted West Nile virus, but targeted testing of individual donations in regions with a high disease prevalence is warranted, based on two recent studies involving testing of about 7 million blood units.

In one study, 183 viremic donations were detected in 677,603 donations screened by minipool testing of 16 units per pool. Retrospective individual testing of 23,088 of the initially negative donations, which came from high-prevalence regions, yielded 30 more positive units. Another 17 viremic units were detected using prospective screening of individual donations later in that 2003 season, Michael P. Busch, M.D., of the Blood Systems Research Institute in San Francisco and his colleagues reported. In 2004, prospective testing of individual donations in high-prevalence regions resulted in a 32% incremental yield of units that would have been missed by minipool testing (N. Engl. J. Med. 2005;353:460-7).

In another study during the same time periods, routine screening identified 540 WNV-positive donations, of which 362 were most likely infectious. Of the 362, 148 were detectable only by individual donation testing, and 10% of the 148 were most likely infectious, Susan L. Stramer, Ph.D., of the American Red Cross, Gaithersburg, Md., and her colleagues reported (N. Engl. J. Med. 2005;353:451-9).

No known cases of transfusion-transmitted infection occurred among recipients of tested blood during the study period. That success is attributable to rapid implementation of the nucleic acid–amplification testing method in 2003, the investigators said, noting that the testing identified 519 donors positive for WNV RNA, and led to removal of more than 1,000 potentially infectious blood components from the blood supply.

—Sharon Worcester