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whose culture-proven CA-MRSA skin and soft-tissue abscesses were drained, there was no difference in outcome on the basis of whether they received an antibiotic (Pediatr. Infect. Dis. J. 2004;23:123-7).

Although treatment with "ineffective" antibiotics may not give a worse outcome, there are some new data that give us "an inkling that appropriate antibiotic coverage is important," Dr. Pride said. An evaluation of a CA-MRSA outbreak in 13 high school football players on a western Pennsylvania football team showed that individuals whose initial skin infections were not treated with an antibiotic guided by bacterial sensitivities were 33 times more likely to develop a recurrent infection, compared with those who received appropriate antibiotic coverage. "Although the infections treated with only β-lactam antibiotics did not have a different outcome per se, they were at a high risk for recurrence," Dr. Pride noted (Pediatr. Infect. Dis. J. 2005;24:841-3).

Finally, another news maker in the infectious disease realm has been the reports of increasing clindamycin resistance, Dr. Pride said. In one study comparing *S. aureus* cultures from pediatric patients at 57 military hospitals and clinics, clindamycin resistance increased from 0.48% from 2001 to 2002, to 4% from 2003 to 2004. While most CA-MRSA are still susceptible to clindamycin, the possibility of inducible clindamycin resistance should lead to cautious use of the agent and to the consideration of treatment alternatives, Dr. Pride concluded (Pediatr. Infect. Dis. J. 2005;24:622-6).

Dr. Pride reported no conflicts of interest with respect to the medication agents discussed in his presentation. ■

Hep B Vaccine, Immunoglobulin Protect Neonates

Hepatitis B vaccines, hepatitis B immunoglobulin, and a combination of the two all prevent the infection from developing in newborns of mothers who are positive for hepatitis B surface antigen, reported Chuanfang Lee, a clinical pharmacist at Copenhagen University Hospital, and associates.

The researchers conducted a meta-analysis of 26 randomized trials that evaluated vaccine or immunoglobulin effectiveness and included newborns. The average duration of follow-up was 19 months, with a range of 6-60 months.

Compared with placebo or no intervention, hepatitis B vaccination significantly decreased the risk of transmission of the infection from mother to newborn. There was no difference between plasma-derived and recombinant vaccines. "However, more infants who received recombinant vaccine achieved antibody levels to hepatitis surface antigen," the investigators said (BMJ 2006 Jan. 27 [E-pub doi:10.1136/bmj.38719.435833.7C]).

There was no difference in effectiveness between high-dose and low-dose vaccine, or among different vaccination schedules. "Furthermore, our subgroup analyses did not show a strong association between timing of injection (within 12, 24, or 48 hours [of birth]) and magnitude of effects," they said.

However, because the number of infants in these trials was small, larger trials are needed to confirm that all doses, schedules, and forms of vaccine are equivalent, the investigators cautioned.

Hepatitis B immunoglobulin also lowered the risk of infection, compared with placebo or no intervention. The vaccine plus immunoglobulin combination was superior to vaccine alone. Few of the trials reported adverse events, so a metaanalysis of adverse events could not be carried out.

—Mary Ann Moon