

Physicians Mull Boosting Teen Vaccine Compliance

BY DAMIAN McNAMARA
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AMELIA ISLAND, FLA. — Recent approval of the first vaccine to prevent human papillomavirus infection underlines the need for physicians to improve immunization of adolescents, Dr. Kenneth Alexander said at a meeting on pediatrics for the primary care physician sponsored by Nemours.

The good news is there are strategies that can optimize rou-



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tine vaccination of teenagers for human papillomavirus (HPV), meningitis, and pertussis. Vaccine promotion, reminder calls, and mass mailings are among some "tried and true" tactics that office-based physicians can employ. Another idea is to enlist emergency physicians to immunize all adolescent patients. School-based vaccinations are another option, although somewhat controversial with human papillomavirus, said Dr. Alexander, a pediatric infectious disease specialist at the University of Chicago.

The American Academy of Pediatrics is advocating a routine 11- to 12-year-old visit to foster immunization for meningitis, pertussis, and the first of three injections against HPV. Getting adolescents to return for the second and third HPV vaccinations will be a challenge, plus "no one is more needle-phobic than an 11-year-old," Dr. Alexander said.

"In terms of importance, HPV is probably the most important vaccine to hit us since the measles vaccines," he said. "We are very good at immunizing infants, and I give adult doctors about a C+ for adults. Immunizing teenagers is not something we are particularly good at."

Endorse the HPV vaccine in your office from the front door to the exit, Dr. Alexander suggested.

"This is something your whole office should be promoting. Remind your staff to ask the kid who comes in for another reason. Contraindications to immunization are very limited."

Contacting the parents of every teenager in your practice is another effective approach. However, going through the charts is time consuming and can be very expensive, Dr. Alexander said.

Send a mass mailing to inform parents that a new vaccine is available and how insurance companies are providing reimbursement. Also, schedule all three visits for the HPV vaccine regimen up front, Dr. Alexander said, and follow up with telephone reminders. "This could also be done with e-mail—a smart way to go."

Cook County Hospital in Chicago uses its emergency department to immunize adults, Dr. Alexander said. This tactic could be extrapolated to pediatric patients. "If a kid shows up with a sprained ankle in the ER, can we treat it as an opportunity to immunize them? Darn tootin'. Should we look at school-based vaccinations? It will be controversial with HPV vaccine, as you can imagine," he said.

Some fear that a vaccine against HPV will increase sexual activity among teenagers. The vaccine does not obviate the need for a safe sex talk with a teenager, he said. In addition, "it is important to talk about abstinence—I have two teenage daughters. You have to trust and verify, and then immunize them anyway."

Parents want to hear the vaccine is effective, safe, and recommended by their child's health care provider, Dr. Alexander said. "But they don't want to hear about their child being sexually active. You can say the vaccine is for preventing infection in women who are or ever will become sexually active."

Future endeavors related to HPV prevention include longer-term follow-up studies of vaccines, approval of the second HPV vaccine expected later this year, studies in males, and forthcoming recommendations from the American Academy of Pediatrics, American Academy of Family Physicians, and American College of Obstetricians and Gynecologists.

Physicians will need to provide education about HPV because "parents will line up when you say meningitis, but they don't know what HPV is," Dr. Alexander said. ■

CLINICAL GUIDELINES FOR FAMILY PHYSICIANS

Asymptomatic Bacteriuria in Adults

BY NEIL S. SKOLNIK, M.D., AND KELLY A. O'DRISCOLL, M.D.

The Infectious Diseases Society of America, in agreement with the American Society of Nephrology and the American Geriatrics Society, developed the following recommendations for the diagnosis and treatment of asymptomatic bacteriuria in adult populations.

Diagnosis

Asymptomatic bacteriuria is diagnosed through the microbiologic examination of a urine specimen that was collected in a manner to reduce the risk of contamination and limit bacterial growth. For asymptomatic women, a diagnosis requires two consecutive voided urine specimens with isolation of at least 10^5 colony-forming units per milliliter of the same bacterial strain. In men, it requires a single clean-catch voided urine specimen with isolation of one bacterial species in a quantitative count of at least 10^5 CFU/mL. A single catheterized urine specimen containing a quantitative count of at least 10^2 CFU/mL of a single bacterial species identifies bacteriuria in either men or women.

Prevalence and Microbiology

Prevalence increases in healthy women as they age, but is also strongly associated with sexual activity. Diabetic women have higher rates of asymptomatic bacteriuria; the condition is rare in healthy young men. The prevalence increases in men as they age, secondary to obstructive uropathy and voiding dysfunction associated with prostatic hypertrophy. Patients with chronic disabilities who are suffering from impaired voiding or living with indwelling catheters have high rates of asymptomatic bacteriuria, irrespective of gender. *Escherichia coli* is the most common species associated with asymptomatic bacteriuria, followed by *Klebsiella*, coagulase-negative *staphylococci*, *Enterococcus*, and gram-negative bacilli. Less commonly found bacteria are *Proteus* and *Pseudomonas*.

Management

Recommendations for screening and treatment of asymptomatic bacteria are categorized by population:

- ▶ There is no indication for screening or treatment of asymptomatic bacteriuria in non-pregnant women.
- ▶ Pregnant women with asymptomatic bacteriuria have a higher likelihood of developing pyelonephritis, experiencing premature delivery, or having infants of low birth weight. Studies show that antimicrobial therapy significantly decreases these outcomes. Therefore, pregnant women should be screened for bacteriuria by urine culture at least once in early pregnancy, and treated appropriately. Treatment should last 3-7 days, and periodic testing for recurrent bacteriuria should occur after treatment. There is no recommendation for repeat screening in culture-negative women.
- ▶ In diabetic women, studies do not show a difference in rates of poor outcomes, nor does antimicrobial therapy decrease such outcomes;

hence, there is no indication for screening for or treatment of asymptomatic bacteriuria in diabetic women.

▶ In elderly, community-dwelling individuals, there are no reported cases of excess adverse outcomes related to asymptomatic bacteriuria, nor does treatment decrease the number of symptomatic episodes. Routine screening for and treatment of asymptomatic bacteriuria in older persons residing in the community are not recommended.

▶ In elderly, institutionalized individuals, treatment of asymptomatic bacteriuria was associated only with significantly increased rates of adverse drug effects, and was not associated with benefits. Screening and treatment are not recommended.

▶ There is a high prevalence of asymptomatic bacteriuria in patients with spinal cord injury; recurrence after treatment is extremely high, as is subsequent antimicrobial resistance. Studies are limited, but suggest treatment only of symptomatic urinary infections, with a recommendation against screening for or treatment of asymptomatic bacteriuria in these patients.

▶ Patients with long-term, indwelling catheters should not be screened or treated for asymptomatic bacteriuria. However, if bacteriuria persists 48 hours after catheter removal in asymptomatic women, antimicrobial therapy may be considered.

▶ Screening for and treatment of asymptomatic bacteriuria is recommended before transurethral resection of the prostate or any urologic procedure in which mucosal bleeding is expected. If bacteriuria is present, antimicrobial therapy should be initiated before the procedure. Therapy should not continue beyond the procedure unless an indwelling catheter is required.

▶ No recommendations can be made for screening for or treating asymptomatic bacteriuria in immunocompromised or older persons.

The Bottom Line

Asymptomatic bacteriuria is common. Screening for and treatment of bacteriuria is recommended only in pregnant women and patients undergoing traumatic urologic interventions. It should be discouraged in all other populations.



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Guidelines are most useful when they are available at the point of care. A concise yet complete handheld computer version of this guideline is available for download, compliments of Family Practice News, at www.redi-reference.com.