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Editorial

New Guidelines for Prevention of Infective Endocarditis

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A recent consensus publication in *Circulation* by the American Heart Association, the American Dental Association, the Infectious Diseases Society of America, and the Pediatric Infectious Diseases Society provides updated recommendations for antibiotic prophylaxis for the prevention of infective endocarditis (IE) (1). The recommendations were produced by a writing group composed of members of each of the endorsing organizations, using recommendations from experts and a review of relevant literature and practice guidelines. The updated recommendations do not recommend IE prophylaxis for gastrointestinal (GI) or genitourinary (GU) tract procedures. IE prophylaxis was recommended only for patients with prosthetic cardiac valves, those with a history of IE or significant congenital heart disease, or cardiac transplant recipients who develop cardiac valvulopathy who undergo dental procedures involving manipulation of gingival tissue or the periapical region of teeth or perforation of the oral mucosa. Prophylaxis is also not indicated for other common procedures such as ear and body piercing, tattooing, vaginal delivery, and hysterectomy. These recommendations have also been endorsed by the American Society of Colon and Rectal Surgeons and adopted by the Ochsner Departments of Colon and Rectal Surgery and Gastroenterology.

Reasons for revision of the IE prophylaxis guidelines include that: 1) IE is much more likely to result from frequent exposure to random bacteremias associated with daily activities rather than from bacteremia caused by a dental, GI, or GU tract procedure; 2) prophylaxis may prevent an exceedingly small number of cases of IE, if any, in individuals who undergo a dental, GI or GU tract procedure; 3) the risk of antibiotic-associated adverse events exceeds the benefit, if any, of prophylactic antibiotic therapy; and 4) maintenance of optimal oral health and hygiene may reduce the incidence of bacteremia from daily activities and is more important than prophylactic antibiotics for a dental procedure to reduce the risk of IE.

Several aspects of these recommendations merit additional comment. Using evidence-based evaluations, these recommendations strongly support the antidotal experience of many clinicians, which should foster acceptance. Widespread adoption of these recommendations will reduce the costs and inconvenience of prophylactic antibiotic administration while diminishing progression of antibiotic resistance and antibiotic-associated colitis, which are clinically relevant issues and need further education and application of antibiotic stewardship from the physician community. Education of both referral physicians and patients will be critical to a smooth transition in implementing these new guidelines. We hope that this editorial will assist in spreading the word.

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