



Roth spots seen in bacterial endocarditis

PIC QUESTION OF THE WEEK: 4/30/07

Q: What are the current recommendations for prophylaxis of infective endocarditis?

A: The American Heart Association (AHA) has just provided new guidelines regarding the prevention of infective endocarditis. These guidelines were also approved by the Council on Scientific Affairs of the American Dental Association, the Infectious Diseases Society of America, and the Pediatric Infectious Diseases Society. Among the most important new recommendations is the discontinued requirement for prophylactic treatment in those undergoing gastrointestinal or genitourinary procedures. There is also consensus that only a small number of infective endocarditis cases are actually prevented using prophylaxis. The following chart lists dosing recommendations for antimicrobial prophylaxis prior to dental procedures. Please refer to the full guideline for specific details and a broader review of the topic.

AHA Guidelines for Infective Endocarditis Prophylaxis in Dental Procedures[#]

| <u>Situation</u> | <u>Agent</u> | <u>Adults</u> | <u>Children</u> |
|--|--------------------------------------|---------------|-----------------|
| Oral | Amoxicillin | 2 g | 50 mg/kg |
| Unable to take oral medication | Ampicillin | 2 g IM/IV | 50 mg/kg IM/IV |
| | OR Cefazolin or ceftriaxone | 1 g IM/IV | 50 mg/kg IM/IV |
| Allergic to penicillins or ampicillin - oral | Cephalexin*† | 2 g | 50 mg/kg |
| | OR Clindamycin | 600 mg | 20 mg/kg |
| | OR Azithromycin or clarithromycin | 500 mg | 15 mg/kg |
| Allergic to penicillins or ampicillin and unable to take oral medication | Cefazolin or ceftriaxone† | 1 g IM/IV | 50 mg/kg IM/IV |
| | OR Clindamycin | 600 mg IM/IV | 20 mg/kg IM/IV |

IM = intramuscular; IV = intravenous

[#]Adapted from AHA guidelines for prevention of infective endocarditis; Circulation 2007; accessed April 24, 2007

• Single dose 30 to 60 minutes before procedure

*Or other first- or second-generation oral cephalosporin in equivalent adult or pediatric dosage

†Cephalosporins should not be used in an individual with a history of anaphylaxis, angioedema, or urticaria with penicillins or ampicillin

References:

- American Heart Association. Prevention of infective endocarditis. <http://circ.ahajournals.org>. (accessed 2007, April 24).
- 2007 AHA guidelines for infective endocarditis (IE) prophylaxis. Pharmacist's Letter/Prescriber's Letter 2007;23(5):230514.

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