Infective Endocarditis Prevention Guidelines

Questions to Ask / Necessary Information

Risk: Bacterial infection of heart/heart valves secondary to invasive dental treatment

Identification of Population at Risk:
Current guidelines recommend that only individuals who are at the highest risk of an adverse outcome of endocarditis receive antibiotic prophylaxis. Individuals who should be identified through careful review of the health history are those with:

1. Prosthetic cardiac valves
2. Previous infective endocarditis (IE)
3. Congenital heart disease (CHD) with findings as below
   a. Unrepaired cyanotic CHD, including palliative shunts and conduits
   b. Completely repaired CHD defect with prosthetic material or device for first 6 months after procedure
   c. Repaired CHD with residual defects at the site or adjacent to site of prosthetic patch/device which inhibit endothelialization
4. Cardiac transplantation recipients who develop cardiac valvulopathy

Diagnostic Tests:
N/A

Management During Dental Treatment:

Dental Procedures for Which IE Prophylaxis is Recommended
All dental procedures that involve “manipulation of gingival tissue or periapical region (root end) of teeth or perforation of the oral mucosa.”

Dental Procedures for Which IE Prophylaxis is NOT Recommended:

a. routine anesthetic injection through non-infected tissue
b. placement of removable appliances
c. placement of orthodontic brackets
d. bleeding from trauma to lips/mucosa
e. taking dental radiographs
f. adjustment of orthodontic appliances
g. shedding of deciduous teeth

Prophylaxis Regimens for Dental Procedures

<table>
<thead>
<tr>
<th>Situation</th>
<th>Agent</th>
<th>Single Dose 30 to 60 min before procedure</th>
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<tbody>
<tr>
<td>Oral</td>
<td>Amoxicillin</td>
<td>Adults: 2 g, Children: 50 mg/kg</td>
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<tr>
<td>Unable to take oral medication</td>
<td>Ampicillin</td>
<td>2 g IM or IV</td>
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<tr>
<td>OR</td>
<td>Cefazolin or ceftriaxone</td>
<td>1 g IM or IV</td>
</tr>
<tr>
<td>Allergic to penicillins or ampicillin—oral</td>
<td>Cephalexin*</td>
<td>2 g</td>
</tr>
<tr>
<td>OR</td>
<td>Clindamycin</td>
<td>600 mg</td>
</tr>
<tr>
<td>OR</td>
<td>Azithromycin or clarithromycin</td>
<td>500 mg</td>
</tr>
<tr>
<td>Allergic to penicillins or ampicillin and unable to take oral medication</td>
<td>Cefazolin or ceftriaxone@</td>
<td>1 g IM or IV</td>
</tr>
<tr>
<td>OR</td>
<td>Clindamycin</td>
<td>600 mg IM or IV</td>
</tr>
</tbody>
</table>

* Or other first- or second-generation oral cephalosporin in equivalent adult or pediatric dosage. @@ Cephalosporins should not be used in an individuals with history of immediate-type hypersensitivity to penicillin (i.e., anaphylaxis, angioedema of the airway).

References:
The complete America Heart Association article can be downloaded from: http://circ.ahajournals.org/cgi/reprint/CIRCULATIONAHA.106.183095