FACIAL SURGERY INSTITUTE
MARQUETTE, MICHIGAN
Dental Implant Center

Antibiotic Prophylaxis Prior to Dental Procedures

MDA
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Infective Endocarditis: Who Needed it Before But Doesn't Need it Anymore?

- Mitral valve prolapse
- Rheumatic heart disease
- Bicuspid valve disease
- Calcified aortic stenosis
- Congenital heart conditions such as ventricular septal defect, atrial septal defect, and hypertrophic cardiomyopathy.

Ticking time bomb

- In United States, at least 2 million people become infected with bacteria that are resistant to antibiotics.
- At least 23,000 people die each year as a direct result of these infections.
- Many more people die from other conditions that were complicated by an antibiotic-resistant infection.

- Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333, USA,
- USA.GOV

Infective Endocarditis: Who Needed it Before But Doesn't Need it Anymore?

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  - Ventricular septal defect
  - Atrial septal defect
  - Hypertrophic cardiomyopathy.

Infective Endocarditis: Who Needs Antibiotic Prophylaxis?

- Patients with:
  - 1. Artificial heart valves
    - (this includes animal tissue derived valves)
    - Prosthetic valves
  - 2. A history of infective endocarditis
  - 3. Cardiac transplant that develops a heart valve problem

Infective Endocarditis: Who Needs Antibiotic Prophylaxis?

- Certain congenital heart conditions:
  - Unrepaired or incompletely repaired cyanotic congenital heart disease, including patients with palliative shunts.
  - Completely repaired congenital heart defect with prosthetic material or device, whether placed by surgical or catheter intervention, during the first six months after the procedure.
    - Endothelialization of prosthetic material occurs within the first six months after the procedure.
  - Any repaired congenital heart defect with residual defect
    - at the site or adjacent to the site of a **prosthetic patch** or a **prosthetic device**.
  - *YES you have to learn to communicate with the Cardiologist/ Thoracic surgeon NOT JUST THE PCP.*

Infective Endocarditis: Dental Procedures Requiring Antibiotic Prophylaxis

- Antibiotic prophylaxis is recommended for
- All dental procedures that involve:
  - Manipulation of the gingival tissue
  - Manipulation of the periapical region of the teeth
  - Perforation of the oral mucosa.

Infective Endocarditis: Dental Procedures Requiring Antibiotic Prophylaxis

- Scaling and root planing of teeth
- Periodontal procedures
  - Curetting tissue
  - Periodontal probing
  - Periodontal surgery
  - Subgingival placement of antibiotic fibers and strips
- Tooth extraction
- Biopsies
- Prophylactic cleaning of teeth or implants where bleeding is anticipated
- Dental implant placement
- Replantation of avulsed teeth
- Endodontic instrumentation including apex
- Surgery
- Placement of orthodontic bands
- Intraligamentary and intraosseous local anaesthetic injections

Infective Endocarditis: Dental Procedures That DO NOT Require Antibiotic Prophylaxis

- Routine anesthetic injections
  - Through **non-infected** tissue (Non-intraosseous and non-intraligamentary)
- Restorative and prosthodontic procedures with and without retraction cord
- Taking dental radiographs
- Intracanal endodontic treatment (not extending past apex), post placement, and core buildup.
- Placement of rubber dams

Infective Endocarditis: Dental Procedures That DO NOT Require Antibiotic Prophylaxis

- Post-op Suture removal
- Placement of removable prosthodontic or orthodontic appliances
- Adjustment of orthodontic appliances
- Placement of orthodontic brackets
- Shedding of deciduous teeth
- Bleeding from trauma to the lips or oral mucosa
- Impressions
- Fluoride treatments

Total Joint Replacement: Guidelines for Prophylaxis

- Ultimately, it is recommended that physicians, dentists, and patients work together to formulate an ideal treatment plan based on evidence, clinical judgment and patient preferences.
- So basically, the decision on whether to give antibiotic prophylaxis is based on whether the patient's physician and orthopedic surgeon recommend that the patient have antibiotic prophylaxis, your clinical judgment, and the wishes of the patient.
  - Document your discussion !!!!!!!!!!!!!!!
- It would be medico-legally prudent to communicate **in writing** with
- Patient's orthopedic surgeon and primary care provider to ascertain whether or not they recommend antibiotic prophylaxis.
- Document !!!!!

Example: Medical clearance Correspondence

- Dear Dr. Bones,

I am writing regarding a mutual patient, George Pelvis, who is a patient of record in our dental practice. In reviewing George's medical history, it was noted that he underwent a right total hip replacement in December of 2013. George will be undergoing ongoing dental care in our dental practice. Based on the most recent clinical practice guidelines of the AAOS/ADA in preventing orthopedic implant infection, George does not require antibiotic prophylaxis prior to dental treatment. However, I would like to obtain your advice and recommendations for George specifically. Please let us know if, in your professional opinion and based on his specific medical history, George requires antibiotic prophylaxis prior to dental treatment and we will gladly comply. Thank you for your kind assistance in this matter.

Sincerely,

Dr. Jack D. Molar

Prophylaxis: Considerations

Situation	Agent	Regimen – Single Dose 30-60 minutes before procedure Adults	Children
Oral	Amoxicillin	2 g	50mg/kg
Unable to take oral medication	Ampicillin OR	2g IM or IV	50mg/kg IM or IV
	Cefazolin or Ceftriaxone	1g IM or IV	50mg/kg IM or IV
Allergic to penicillins or ampicillin – oral regimen	Cephalexin **	2g	50mg/kg
	Or		
	Clindamycin	600mg	20mg/kg
	OR		
	Azithromycin or clarithromycin	500mg	15mg/kg
Allergic to penicillins or ampicillin and unable to take oral medication	Cefazolin or Ceftriaxone**	1g IM or IV	50mg/kg IM or IV
	OR Clindamycin	600mg IM or IV	20mg/kg IM or IV

**Cephalosporins – do not use in pts with hx of anaphylaxis, angioedema, or urticaria with pcn or ampicillin.