

Update on Antibiotic Prophylaxis in the Dental Office

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INTRODUCTION

Though not as widespread a practice as it once was, antibiotic prophylaxis prior to dental procedures is still necessary in patients with certain risk factors for bacterial infection.

PATIENTS WITH CARDIAC CONDITIONS

- When it comes to cardiac conditions, the use of antibiotic prophylaxis is cut and dry.
- There are 5 patient presentations where antibiotic prophylaxis should be prescribed prior to any *invasive* procedure to prevent infective endocarditis:
 - Artificial heart valves
 - History of endocarditis
 - Congenital heart defects that have been repaired recently or incompletely
 - Patients who have work done on their Chordae Tendineae
 - Full heart transplant patients who develop heart valve problems
- What is an *invasive* procedure?
 - Manipulating gingiva
 - Manipulating the periapical portion of the tooth.
 - Manipulating or penetrating the mucosa.
Note: if just delivering local anesthesia through healthy tissue, antibiotic prophylaxis is not required. But if the procedure is going through *infective* mucosa or manipulating the mucosa beyond just putting a needle through, then antibiotic prophylaxis is required.

PATIENTS WITH PROSTHETIC JOINT REPLACEMENTS

- Latest recommendations (2016) are very straightforward: patients with prosthetic joints do not need to be given antibiotic prophylaxis.
- Sometimes a patient's orthopedic surgeon or family doctor may advise that the patient needs antibiotic prophylaxis. There are 2 reasons why they may do this:
 1. They are not up to date on the new guidelines
 2. The patient has a serious underlying health condition that puts them at much greater risk of a bacteremia
- In this case a follow up is required with the family physician or orthopedic surgeon to establish whether they are up to date with the guidelines or if there is an underlying health condition. If, in the dentist's clinical judgement, the patient does not need antibiotic prophylaxis, but the family physician or orthopedic surgeon insists, then the family physician or orthopedic surgeon can manage that prescription independently.

TROUBLESHOOTING

PATIENT DOES NOT TAKE THE ANTIBIOTIC AT THE CORRECT TIME BEFORE THE PROCEDURE

- There is no compromise in this case. The patient must take the antibiotic prophylaxis 30-60 mins before the appointment.
- It is necessary to either reschedule the appointment or for the patient to go to the waiting room, take the antibiotic prophylaxis, and wait 30 mins.
- Going ahead and working on the patient and giving the antibiotic prophylaxis after the fact opens the possibility of a lawsuit if there ends up being a bacteremia that leads to infective endocarditis or some other systemic issue.

PATIENT IS ALREADY TAKING AN ANTIBIOTIC FOR ANOTHER PROCEDURE

- There are two choices:
 1. Postpone the appointment. Wait ten days for the patient's normal bio flora to regenerate before doing the procedure requiring antibiotic prophylaxis.
 2. Prescribe a different antibiotic from a different drug class.

- If the patient is on IV antibiotics for some other infection, it is not necessary to re-prescribe the antibiotics. Can proceed so long as the patient is brought in within 30-60 mins of their last IV dose.