Talking with Patients

Heart Diseases and Oral Health

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WHAT IS IT?

The term "heart disease" encompasses a number of conditions that include cardiac arrhythmias, infective endocarditis, rheumatic heart disease, heart murmur, ischemic heart disease, and congestive heart failure.¹ Heart diseases can be congenital (present from birth) or acquired, and affect individuals of all ages. Although each condition has its distinct etiology and characteristics, and requires conditionspecific treatment, heart diseases compromise normal heart function and can affect your overall health.

Diabetes, obesity, high blood cholesterol, high blood pressure, smoking, and lack of exercise can substantially increase your risk of developing acquired heart disease. As it is virtually impossible to discuss every type of heart disease in this space, the interested reader can refer to the American Heart Association website for more information on heart diseases in general, their etiologies, treatments, and prevention strategies.²

HOW DO THEY AFFECT YOUR ORAL HEALTH?

Although heart diseases do not directly affect oral health, recent

studies suggest that periodontal (gum) disease may be associated with heart disease, among other general health conditions.³ Therefore, maintaining good oral health should be part of the overall preventive regimen and treatment for patients with or at risk of having heart diseases.

The prime concern with patients who have or are at risk of having heart disease is the prevention of heart infection by bacteria that might be present in the oral cavity. This infection, called infective bacterial endocarditis (IBE), can be triggered by oral bacteria reaching the heart through the blood stream. The risk of developing a heart infection following a dental infection or an invasive dental procedure is relatively small, but increases in patients with certain heart problems and with invasive dental procedures.

A recent revision of the American Heart Association 1997 guidelines for prevention of infective endocarditis now only recommends prophylaxis for those cardiac conditions with the highest risk of adverse outcomes. Patients with the following heart conditions are currently advised to take antibiotics prior to a dental appointment to prevent a heart infection³:

- 1. artificial heart valves
- 2. previous history of infective endocarditis
- 3. certain specific, congenital heart conditions, including
 - unrepaired or incompletely repaired cyanotic congenital heart disease, including those with palliative shunts and conduits
 - a completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by catheter intervention, during the first 6 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
- 4. cardiac transplant that develops a problem in a heart valve

In addition to preventing IBE, it is imperative that the dental team has a complete health history on these patients that includes a thorough medical history with complete list of medications and allergies. Many

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patients with cardiovascular disease may be taking anticoagulants or blood thinners that may result in excessive bleeding. A physician consultation may be required to determine how to properly manage the patient's medications prior to invasive procedures.

Finally, the dental team should make an effort to minimize stress and anxiety levels typically associated with the dental visit. Stress and anxiety can trigger cardiac pain and arrhythmias in susceptible patients.

CONCLUSIONS

Patients who have well-controlled heart disease typically present no

complications for the dental practitioner. However, some patients whose history is not well documented and the disease not well controlled might require special precautions or interventions to be taken prior to or during a dental appointment, including antibiotic prophylaxis.

DISCLOSURE

The authors do not have any financial interest in the manufacturers whose materials are discussed in this article.

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