Definition:
Cardiovascular disease involves the heart and/or blood vessels. More than 50 million Americans experience cardiovascular problems and cardiovascular disease is the number one cause of death and disability in the United States. By the time heart problems are detected, the underlying cause (atherosclerosis) is usually quite advanced. Therefore, prevention through the modification of risk factors, such as healthy eating, exercise, and not smoking, is key.

Recent research indicates that periodontitis may be associated with the development of cardiovascular disease. One theory is that the inflammatory proteins and the bacteria in the periodontal tissue enter the blood stream and cause various effects on the cardiovascular system. A recent study examined the presence of bacteria known to cause periodontitis and the thickening of the blood vessel wall commonly seen in heart disease. After examining samples from more than 650 subjects, the investigators concluded that an increased level of blood vessel thickening was associated with the presence of the same bacteria found in dental plaque known to cause periodontitis.

Assessment:
Many aspects of a patient’s health should be considered when assessing his/her periodontal status and developing comprehensive treatment plans. For patients at risk for developing or those with pre-existing cardiovascular disease, critical factors to consider include the severity of the disease; the duration of their disease; the presence of other medical conditions, such as diabetes, that may affect the cardiovascular disease; and the presence of concurrent risk factors for periodontal diseases. In addition, communicating with patients and their physicians to determine their level of care, treatment for the condition, and their general well-being is important.

Treatment:
Reducing bacteria and eliminating biofilm, both supragingivally and subgingivally are integral to oral and systemic health. This can be accomplished with traditional scaling and root planing in addition to excellent home care. Oral hygiene instructions are an important part of the treatment plan for all patients, particularly for high risk patients, like those with cardiovascular disease. Treatment should focus on the prevention of periodontal disease and oral inflammation, which is essential in controlling the oral complications associated with cardiovascular disease. And because we know that bacterial challenge is a risk factor for gingivitis among even healthy patients, patients should be encouraged to floss regularly and brush twice daily with a dentifrice that offers antibacterial protection and anti-inflammatory benefits.

Online Resources:
www.colgateprofessional.com — For a white paper on oral inflammation and cardiovascular diseases, go to the Colgate Professional Website>Professional Education>Colgate White Papers
www.cdc.gov/dhhs — Centers for Disease Control and Prevention
www.americanheart.org — American Heart Association
www.ada.org/ada/prd/corporate/oralsystemic — American Dental Association