

# The Link Between Oral and Overall Health

Regular dental visits are important to keeping your smile healthy, but did you know that more than 120 signs and symptoms of nondental disease can be detected in a routine oral exam?<sup>1</sup> During routine checkups, dentists not only look for cavities and gum disease, but also monitor symptoms that may point to overall health concerns. If certain signs are detected, dentists can urge patients to seek medical attention to better manage their oral and overall health.



**BRAIN**—People with severe gum disease have 4.3 times higher risk for cerebral ischemia stroke than those with mild or no gum disease.<sup>2</sup>



**MOUTH**—Many everyday medications can affect your oral health. A common side effect is dry mouth, which could increase your risk for tooth decay. Those who use inhalers are also at risk for a fungal infection called oral candidiasis (thrush). This appears as white spots in your mouth and can be painful.<sup>3</sup>



**HEART**—Gum disease and heart disease have similar underlying causes, including the buildup of dental plaque over time. When left untreated, plaque can spread below the gum line, allowing bacteria to enter the bloodstream and increase the risk for systemic diseases such as heart disease.<sup>4</sup> It's important for those with high-risk medical conditions to keep bacteria in their mouths as low as possible to prevent infections in the heart.



**PANCREAS**—Research shows a strong connection between periodontal (gum) disease and diabetes. People with diabetes not only are more likely to have gum disease, but can have a more advanced stage of the condition compared to those without diabetes.<sup>5</sup> Gum disease can also make it more difficult to control blood sugar, making the body more resistant to the insulin produced by the pancreas.



**BONES**—Those with osteoporosis often take drugs called bisphosphonates for treatment and reduced risk of bone fractures. However, the drug can cause a rare but serious side effect called bisphosphonate related osteonecrosis of the jaw (BONJ). Gum disease can increase the risk of BONJ, as well as certain dental procedures, like extractions.<sup>6</sup>



**REPRODUCTIVE TRACT**—Oral health is especially important for women who are pregnant. Hormone changes during pregnancy can affect oral health, and as many as 40 percent of pregnant women experience gum disease.<sup>7</sup> By delaying important dental treatment, expectant mothers may put themselves and their baby at risk. In fact, high maternal levels of the bacteria that cause cavities may contribute to low infant birth weight.<sup>8</sup>



1 James W. Little et al., *Dental Management of the Medically Compromised Patient* (St. Louis: Mosby, 2012) 2 Armin J. Grau et al., "Periodontal Disease as a Risk Factor for Ischemic Stroke," *Stroke* 35, no. 2 (2004): 496-501. 3 American Dental Association, "Medications and Oral Health," web. 4 TE Van Dyke and AJ van Winkelhof, "Infection and Inflammatory Mechanisms," *Journal of Clinical Periodontology* 40, suppl. 14 (2013): S1-S7 5 Delta Dental Plans Association, "Research Review September 2009. Oral and General Health—Exploring the Connection. Associations Between Periodontal Disease and Diabetes Mellitus," web. 6 V Thumbigere-Math, et al., "Periodontal disease as a risk factor for bisphosphonate-related osteonecrosis of the jaw," *Journal of Periodontology* 85, no. 2 (2014): 226-33. 7 American College of Obstetricians and Gynecologists, "Oral Health Care During Pregnancy and Through the Lifespan—Committee Opinion No. 569," *Obstetrics & Gynecology* 122, no. 2, part 1 (2013): 417-22. 8 Li, Y et al., "Mode of Delivery and Other Maternal Factors Influence the Acquisition of Streptococcus Mutans in Infants," *Journal of Dental Research* 84, no. 9 (2005): 806-11.