



ETHNICITY AND PERIODONTAL HEALTH

Race plays a role in periodontal health

Not everyone is equally susceptible to periodontal disease. For example, men have higher rates of periodontal disease than women. In addition, people of different races and ethnicities also differ in terms of their oral health.

A study published in the *Journal of Periodontology* reports that while 25 percent of non-Hispanic whites age 30 to 54 in the United States have periodontitis, 35 percent of Mexican Americans and 42 percent of African Americans in this same age group have the disease. The trend continues as the groups age, with 47 percent of whites age 55 to 90 having periodontitis, compared with 59 percent of Mexican Americans and 70 percent of blacks.

The reasons for the significant differences between racial groups

remain a mystery. It may be a compilation of reasons, such as less use of dental services and different inflammatory responses. For example, 53 percent of Hispanics report having annual dental visits, compared with 68



percent of non-Hispanic whites.

The Human Genome Project, a major initiative to map the genetic components of humans, has declared that genetic factors contribute to virtually every human disease, increasing susceptibility or

resistance or influencing the interaction with the environment. The project has also determined that racial/ethnic groups are more alike than different. However, clusters of the population may have a greater prevalence of certain diseases. In addition to higher rates of periodontal disease, Mexican Americans and blacks have higher rates of diabetes. Diabetics are at a higher risk of developing periodontal disease, likely due to an increased susceptibility to contracting infection.

No matter how susceptible you may be to periodontal disease, if the bacteria responsible for the disease are kept under control with good oral hygiene and frequent dental visits, you are not sentenced to a life with periodontal disease. Recognizing your risk factors may help you control for them, so talk to your periodontist about them. ❁

Genetic markers differ in some populations

A genetic marker strongly associated with periodontal disease does not play a role in the high prevalence of periodontal disease in people of Chinese heritage, according to a study in the *Journal of Periodontology*.

The Interleukin-1 (IL-1) genotype that puts more than 30 percent of people of European heritage at increased risk for periodontal disease is barely existent in Chinese populations. The study tested 300 people of Chinese heritage, and only about 2 percent carried the IL-1 genotype. Periodontal disease is a multifactorial disease, and it is still unclear whether oral hygiene, genetics or any other risk factor is most important in explaining why peri-

odontal disease is widespread in Chinese populations.

A separate study confirmed that people of Northern European origin who have the IL-1 genotype are more than five times as likely to develop periodontal disease, making oral hygiene habits, smoking and genetics among the top risk factors for periodontal disease.

The study concluded that giving dental patients a genetic test, which can be performed through a saliva sample, before they even show signs of periodontal disease and getting them into early interventive treatment might help them keep their teeth for a lifetime.

The test may be most useful for specific cases, such as for patients with advanced periodontal disease who seem to lack other major risk factors, for adults considering orthodontic treatment that could make them more susceptible to bone loss around the teeth, and for patients considering extensive treatment to save teeth jeopardized by periodontal disease.

However, the study questions the usefulness of genetic testing for Chinese patients until further research is done. Future studies may determine if other gene candidates contribute to periodontal disease in Asians. ❁

The American Academy of Periodontology Patient Page is a public service of the AAP and should not be used as a substitute for the care and advice of your personal periodontist. There may be variations in treatment that your periodontist will recommend based on individual facts and circumstances. Call 1-800-FLOSS-EM for a free brochure on periodontal disease.

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