Dentists can identify undiagnosed diabetes

In a recent study, “identification of unrecognized diabetes and pre-diabetes in a dental setting,” in the Journal of Dental Research, researchers at Columbia University College of Dental Medicine found that dental visits represented a chance to intervene in the diabetes epidemic by identifying individuals with diabetes or pre-diabetes who are unaware of their condition. The study sought to develop and evaluate an identification protocol for high blood sugar levels in dental patients and was supported by a research grant from Colgate-Palmolive. The authors report no potential financial or other conflicts.

“Periodontal disease is an early complication of diabetes, and about 70 percent of U.S. adults see a dentist at least once a year,” said Dr. Ira Lamster, dean of the College of Dental Medicine, and senior author on the paper. “Prior research focused on medical settings. Oral health-care settings have not been evaluated before, nor have the contributions of oral findings ever been tested prospectively.”

For this study, researchers recruited approximately 600 individuals visiting a dental clinic in Northern Manhattan who were 40 years old or older (if Hispanic or non-Hispanic white) and 50 years old or older (if non-Hispanic white), and had never been told they have diabetes or pre-diabetes.

Approximately 530 patients with at least one additional self-reported diabetes risk factor (family history of diabetes, high cholesterol, hypertension or overweight/obesity) received a periodontal examination and a finger stick, point-of-care hemoglobin A1c test. In order for the investigators to assess and compare the performance of several potential identification protocols, patients returned for a fasting plasma glucose test, which indicates whether an individual has diabetes or pre-diabetes.

Researchers found that in this at-risk dental population, a simple algorithm composed of only two dental parameters (number of missing teeth and percentage of deep periodontal pockets) was effective in identifying patients with unrecognized pre-diabetes or diabetes. The addition of the point-of-care A1c test was of significant value, further improving the performance of this algorithm.

“Early recognition of diabetes has been the focus of efforts from medical and public health colleagues for years, as early treatment of affected individuals can limit the development of many serious complications,” said Dr. Evanthia Lalla, an associate professor at the College of Dental Medicine, and the lead author on the paper. “Relatively simple lifestyle changes in pre-diabetic individuals can prevent progression to frank diabetes, so identifying this group of individuals is also important. Our research sought to develop a referral protocol before performing a maxillary sinus lift.”


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Researchers at the New York University College of Dentistry (NYUCD) recently surveyed otolaryngologists from New York State to help establish a referral protocol before performing a maxillary sinus lift.

Results showed that the majority (58.7 percent) of ENT specialists recommended a CT scan be done before sinus elevation surgery, even in the absence of symptoms. The greatest concerns of the ENT specialist that would warrant a referral were prior sinus surgery, severe sinus inflammation, or a history of sleep apnea.

To consult an ear, nose and throat (ENT) specialist in the pretreatment work-up.
Domestic violence survivors

According to the American Psychological Association, nearly one in three adult women experience at least one domestic assault by a partner during adulthood, which translates into approximately 4 million American women who experience domestic violence during a 12-month period.

As a dentist in Kalamazoo, Mich., Brett Magnuson, DDS, performs a spectrum of procedures designed to give his patients a fresh start in life. In cooperation with the American Academy of Cosmetic Dentistry (AACD), Magnuson dedicates his time and cosmetic dentistry expertise to the Give Back a Smile (GBAS) program, which provides free consultations and dental treatments for survivors of domestic violence.

The need is great for those affected by domestic violence who have suffered dental injuries and require dental treatments for survivors of domestic violence. According to the American Psychological Association, domestic violence must make an appointment with a counselor, domestic violence advocate, social worker, or therapist to complete the advocate section of the GBAS application.

GBAS then reviews the applications and turns it over to the dentists. If eligible, the AACD connects the survivor with a local GBAS volunteer who provides treatment at no charge to the recipient.

Victims of domestic violence who have suffered dental injuries can contact GRAS toll-free at (800) 775-GBAS (4227), or visit www.givebackasmile.com for more information. Survivors of domestic violence must make an appointment with a counselor, domestic violence advocate, social worker, or therapist to complete the advocate section of the GBAS application.