BASIC AND TRANSLATIONAL UROLOGY

Erectile dysfunction might be associated with chronic periodontal disease: two ends of the cardiovascular spectrum

Zadik Y, Bechor R, Galor S, Justo D, Heruti RJ
Center for Health Promotion and Preventive Medicine, Medical Corps, Israel Defense Forces, Zrifin, Israel
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Introduction: Both chronic periodontal disease (CPD) and erectile dysfunction (ED) are associated with cardiovascular disease and its risk factors, including smoking and diabetes mellitus. However, the association between ED and CPD has never been studied.
Aim: To study the association between ED and CPD.
Main Outcome Measures: Prevalence of ED, prevalence of CPD, ED severity.
Methods: The study population consisted of 305 men who filled the Sexual Health Inventory for Men (SHIM) questionnaire in order to detect ED and assess its severity, and underwent a pair of standardized posterior dental bitewing radiographs in order to detect CPD. SHIM questionnaire scores 21 or less represented ED. Alveolar bone loss of >or=6 mm represented CPD.
Results: The mean age of included men was 39.5 +/- 6.7 years. Overall, 70 (22.9%) men had ED and 13 (4.3%) had CPD. CPD was significantly more prevalent among men with mild ED (P = 0.004) and moderate to severe ED (P = 0.007) in comparison to men without ED.
Conclusions: ED might be associated with CPD. These preliminary findings are consistent with theories that associate these conditions with systemic inflammation, endothelial dysfunction, and atherosclerosis.

Editorial Comment

This is a very interesting study associating erectile dysfunction with systemic inflammation disease.

The authors found that 15.8% of men with moderate and severe erectile dysfunction (ED) presented advanced periodontal disease, while 9.8% with mild and only 2.1% without ED presented periodontal disease. This association might be explained on findings of DNA of periodontal pathogenic bacteria in atheromatous plaques and the epidemiological association between periodontal disease and coronary heart morbidity.

The authors proposed that since ED was proven to be an early sign of coronary heart disease, it is reasonable to believe that extra-oral inflammation induced by periodontal bacteria might be associated with atherosclerosis and dysfunction of vessels, first in the small vessels, such as the penile vasculature.

Dr. Francisco J. B. Sampaio
Full-Professor and Chair, Urogenital Research Unit
State University of Rio de Janeiro
Rio de Janeiro, RJ, Brazil
E-mail: sampaio@urogenitalresearch.org