Effectiveness of Screening for Lifestyle-related Diseases in the Maintenance Phase of Periodontal Treatment

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Abstract: To prevent lifestyle-related diseases, it is recommended that people undergo more regular screening for them, receive relevant information, and be given appropriate medical referrals. We consider that these activities performed in the field of clinical dentistry would provide benefits from the perspective of public health. The aim of this study was to survey the prevalence of subclinical lifestyle-related diseases using a simple blood test for patients in the maintenance phase of periodontal treatment. The possible contribution of such an activity is discussed. A total of 63 patients (22 men, 41 women, mean age: 63.9 ± 6.7 years old) in the maintenance phase of periodontal treatment were monitored at the Department of Preventive Dentistry, Okayama University Hospital from January to July 2014. All subjects completed a self-administered questionnaire. Blood samples were obtained from the fingertip to judge the presence of subclinical liver disease, hyperlipidemia (dyslipidemia), renal disease, gout, pre-diabetes, and diabetes. Some patients reported an extensive medical history, including liver disease (3 patients), hyperlipidemia (14 patients), renal disease (2 patients), gout (1 patient), and diabetes (3 patients), and they were excluded from analysis related to each lifestyle disease. As a result, the prevalence of subclinical liver disease, hyperlipidemia, renal disease, gout, pre-diabetes, and diabetes were 16.7, 34.7, 16.4, 1.6, 46.7, and 6.7%, respectively. Thus, the field of clinical dentistry could contribute to the prevention of lifestyle-related diseases through screening examination and subsequent processes, including suggestions to visit appropriate medical institutions.


Key words: Maintenance phase of periodontal treatment, Lifestyle-related diseases, Screening, Blood test, Cross-sectional study

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