Elevated Systemic Inflammatory Burden and Cardiovascular Risk in Young Adults with Endodontic Apical Lesions



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Introduction: The aim of this study was to assess whether apical lesions are associated with inflammatory serum markers of cardiovascular risk, especially high-sensitivity C-reactive protein (hsCRP), in young adults. Methods: In this cross-sectional study, otherwise healthy individuals with apical lesions of endodontic origin (ALEOs) and a clinical diagnosis of asymptomatic apical periodontitis and controls aged between 18 and 40 years were included. Patients? sociodemographic characteristics, medical history, and classic cardiovascular risk factors were recorded, and the pathobiological determinants of atherosclerosis in youth score was calculated. Oral clinical and radiographic examinations were performed. Blood samples were collected to determine the lipid profile, glycated hemoglobin, hsCRP, immunoglobulin G, interleukin (IL)-6, IL-10, IL-12p70, matrix metalloproteinase 8, soluble vascular cellular adhesion molecule-1, soluble intercellula