

Periodontal disease in association with Myocardial Infarction With Non-obstructive Coronary Arteries (MINOCA)

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BACKGROUND

The relationship between periodontitis and myocardial infarction with non-obstructive coronary arteries (MINOCA) and microvascular angina has not been previously investigated. Hence, the present study aimed to elucidate the association between periodontitis and MINOCA. In addition, we compared the prevalence of periodontitis in the age-matched general population with no CVD or CVD risk factors.

METHODS

This study included patients diagnosed with MINOCA by screening electronic records of all the ACS patients (n=103,955) from January 2018 to December 2021. All patients diagnosed with MINOCA were enrolled as group 1 and age-matched controls with no CAD were labelled as group 2. Those with recent periodontal treatment and endocarditis prophylaxis were excluded. Univariate and multivariate regression analyses were performed to determine independent predictors of MINOCA and severe periodontitis.

RESULTS

The study population comprised 6,237 patients with MINOCA (group 1) and 6,000 age-matched healthy adults (group 2) who had no major cardiovascular events. Female gender (odds ratio [OR]: 1.04, 95% confidence interval [CI]: [0.93 – 1.59], p=0.004), diabetes mellitus (OR: 0.25, [0.05 – 0.63], p=0.02), peripheral arterial disease (OR: 0.78, [0.63 – 0.91], p=0.001), dyslipidemia (OR: 1.45, [0.47 – 2.93], p=0.015), smoking, moderate (OR: 5.42, [1.91 – 22.69], p=0.04) and severe periodontitis (OR: 2.58, [1.72 – 3.26], p=0.027) were independent predictors of MINOCA.

CONCLUSION

The present study, for the first time, demonstrated an independent association between moderate to severe periodontitis and the increased incidence of MINOCA among the general population.

Moderate and Severe Periodontitis was independently associated with Myocardial Infarction With Non-obstructive Coronary Arteries (MINOCA)



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Figure 1

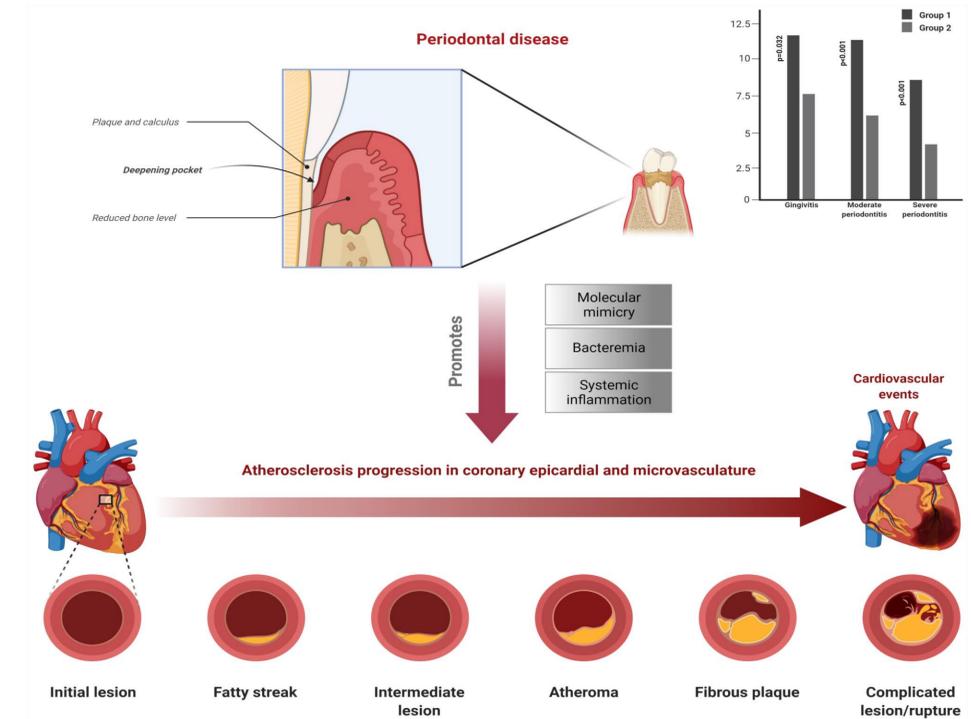
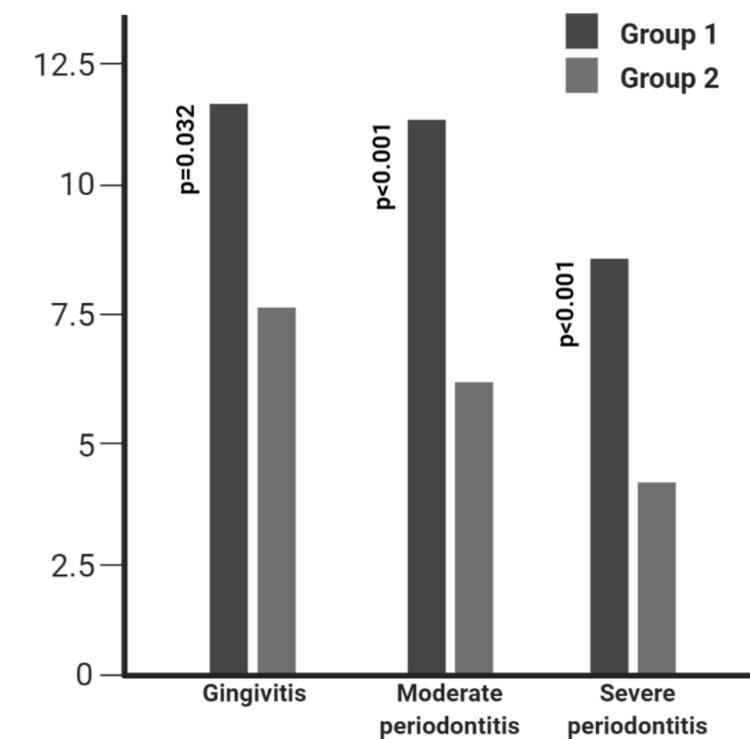


Figure 2



DISCLOSURE INFORMATION

Nothing to disclose.