The aim of the study was to evaluate the effects of menopause and metabolic risk factors on periodontal parameters and saliva total antioxidant status (TAS) and total oxidant status (TOS) levels.

One hundred seventy six women between 30-70 years old were categorized according to the menopausal status as premenopause (PreM, n=86) or postmenopause (PostM, n=90). The number of the metabolic risk factors that defined as the US National Cholesterol Education Programme Adult Treatment Panel III criteria was calculated. Sociodemographics, biochemical and periodontal parameters were assessed. TAS and TOS levels in saliva were determined.

In the study population, the more metabolic risk factors, the higher periodontal parameter values, TOS level and lower saliva volume were observed. When analysed under the equal risk factor, periodontal parameters were significantly higher in group PostM than group PreM but higher TOS levels in group PostM than group PreM did not exhibit statistically difference, except having 3 risk factors. Significant correlations determined with canonical correlation analysis were found between the periodontal and systemic parameters.

In conclusion, increased oxidative stress depending on menopause and multiple risk factors may play a role in worsening of the periodontal health.

Keywords: Menopause; Metabolic risk factors; Periodontal parameters; Saliva; Oxidative stress

References