OBJECTIVE: The risk for cardiovascular diseases increases after the onset of menopause. Recent data have indicated that menopausal hot flushes may be a determinant for cardiovascular health. We studied the impact of hot flushes on insulin resistance, which is one of the most powerful markers of cardiovascular health in menopausal women. METHODS: The study involved menopausal women, without previous hormone replacement therapy with estroprogestogens use, divided into two groups: 24 women, average age 51.83 ± 4.48 years, average BMI 26.16 ± 3.42 kg/m² and mean time since menopause 2.12±2.29 years in the group of women with hot flushes and 12 in the control group average age 57.17 ±2.66 years, average BMI 26.82 ±3.89 kg/m² and mean time since menopause 3.58±2.49 years. Venous blood samples were collected for analyses of fasting blood glucose and insulin. Insulin resistance was assessed from fasting blood levels of glucose and insulin with homeostasis model assessment. RESULTS: The levels of glucose (4.90 ± 0.73 vs. 5.49 ± 1.10; p=0.064), insulin (13.30 ± 6.61 vs. 11.80 ± 3.49; p=0.53) and HOMA (2.89 ± 1.53 vs. 2.71 ± 0.94; p=0.75) showed no differences between groups.

CONCLUSION: Hot flushes showed no relation to insulin resistance, due to short menopausal period and normal BMI. However, these findings should be interpreted with caution, because of the small sample size.