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EFFECT OF MODERATELY CONTROLLED AEROBIC EXERCISE AND LIFESTYLE CHANGES WITH COGNITIVE BEHAVIORAL PSYCHOTHERAPY ON THE EXPRESSION OF ATHEROGENESIS-RELATED GENES IN CHILDREN WITH OVERWEIGHT AND OBESITY

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The obesity epidemic in our country stems from concern and interest to fight this disease since childhood, considering markers that are potentially predictive of cardiovascular complications present at later ages. Interventions such as aerobic exercise controls and cognitive behavioural therapy are the mainstay of treatment for this condition, agreements to current paediatric clinical guidelines changes that lead these interventions at the molecular level in the expression of genes involved in endothelial dysfunction as PRMT1, DDAH1 are now the starting point.

Objective: This study evaluated the effect of moderate aerobic exercise (MAE) and controlled behaviour modification with cognitive-behavioural psychotherapy (CBP) on anthropometric, biochemical and gene expression associated with atherogenesis in children aged 6-12 years are overweight and obesity exogenous variables.

Methods: 26 patients with overweight and obesity diagnosed according to the CDC tables 6-12 years, of which the peripheral blood was obtained obesity were recruited. A CBP intervention group (n = 13), and a group MAE + CBM intervention (13), both groups were treated for 12 weeks. Anthropometric and biochemical parameters were measured; gene expression was quantified by PCR in real time.

ASSOCIATION BETWEEN THE TIME OF LENGTH SINCE SMOKING CESSATION AND INSULIN RESISTANCE IN ASYMPTOMATIC KOREAN MALE EX-SMOKERS

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Aim: Smoking is a major risk factor for diabetes mellitus, mainly due to decreased insulin secretion and increased insulin resistance. However, there has been little research on the effects of smoking cessation period on changes in insulin resistance. In this study, we investigated the relationships between the length of time since smoking cessation period and insulin resistance in asymptomatic Korean male ex-smokers.

Methods: A total of 851 male adults were included in this study. We considered several factors that can affect insulin resistance and, through multiple linear regression analysis, we assessed the effect the length of time since smoking cessation on insulin resistance in ex-smokers. Insulin resistance was represented as the insulin resistance index estimated by homeostasis model assessment (HOMA-IR).

Results: HOMA-IR values showed a statistically significant negative correlation with the length of time since smoking cessation ($p=0.009$) and high-density lipoprotein cholesterol ($p=0.003$). After performing multiple linear regression analysis using factors that could potentially influence insulin resistance, we found that waist circumference ($p=0.026$) and the length of time since smoking cessation ($p=0.039$) were independent predictors of HOMA-IR.

Conclusion: The longer the smoking cessation period, the more the insulin resistance tended to decrease in asymptomatic Korean male ex-smokers.