




Prevalence of excessive body weight in patients with acute coronary syndrome

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Introduction: Excessive body weight is defined as a condition in which a person has a body mass that exceeds normal values, which can increase the risk of health problems. As a measure of determining excessive body weight, the body mass index (BMI) is commonly used. BMI is calculated by dividing body weight in kilograms by the square of height in meters. The desired values of the body mass index, according to the World Health Organization, are from 18.5 to 24.9 kg/m². A BMI of 25 to 29.9 defines overweight.¹ The accumulation of body fat is harmful to health, or rather, excessive body weight in developed countries occurs at epidemic proportions. Atherosclerosis is the basis of all cardiovascular diseases, and its development accelerates the accumulation of fat tissue that promotes inflammatory processes. Cardiovascular disease mortality can be prevented by optimizing body weight. The main goal was to examine the impact of excess body weight on patients with acute coronary syndrome.

Patients and Methods: Data was collected from the hospital information system, and patients were admitted to Merkur University Hospital with a diagnosis of acute coronary syndrome, during the period from January 1, 2020, to April 30, 2021.

Results: The study included 99 subjects with excess body weight and 32 subjects with normal body weight. The difference in the number of significant coronary lesions was not proven. Patients with a higher body mass index statistically significantly more often have dyslipidemia. Dyslipidemia and lifestyle are associated with a statistically significantly higher frequency of multiple coronary lesions.

Conclusion: Of the total number of hospitalized patients due to acute coronary syndrome in the observed period, there was a statistically significant increase in patients with excess body weight, but they did not have a greater number of significant coronary stenoses. However, they statistically significantly more often have dyslipidemia. For the prevention of acute coronary syndrome, it is necessary to prevent excessive body weight.

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LITERATURE

1. Niedziela J, Hudzik B, Niedziela N, Gąsior M, Gierlotka M, Wasilewski J, et al. The obesity paradox in acute coronary syndrome: a meta-analysis. *Eur J Epidemiol.* 2014 Nov;29(11):801-12. <https://doi.org/10.1007/s10654-014-9961-9>