Clinical analysis of related factor influencing the increase in body mass index after kidney transplantation

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Background: Increased bodyweight after kidney transplantation lowers the quality of life and significantly reduces the survival rate of transplanted kidneys. The aim of the study was to evaluate factors related on body mass index (BMI) increase after kidney transplantation.

Methods: From 2014 to 2017, among the 110 patients who underwent kidney transplantation was selected. BMI was compared at 6 months, 1 year, and 2 years after surgery according to the postoperative period; 6 months, 1 year, and 2 years. Multivariate analysis was performed to identify factors related to changes in BMI after surgery.

Results: According to the elapsed time after surgery, the BMI increased to 22.5 kg/m² after 6 months, 22.8 kg/m² after 1 year, 23.1 kg/m² after 2 years ($P<0.001$). The factor influencing the increase in BMI were female sex, level of low-density lipoprotein cholesterol, steroid use, and medication of statin.

Conclusions: To prevent an increase in BMI after kidney transplant, appropriate exercise and diet, medication for hyperlipidemia, and steroid tapering as soon as possible are required.

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