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Title: Evaluation of preoperative and postoperative exercise capacity by using six-minute walk test

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Body: The aim of this study was to evaluate preoperative and postoperative exercise capacity of the patients by using six-minute walk test (6MWT) in patients electively undergone coronary artery bypass surgery. Twenty-nine patients whose mean age was 60.89 enrolled to the study. 6MWT was done at two time set (before operation and at discharge from hospital). Heart rate, blood pressure and oxygen saturation levels was noted, level of dyspnea and fatigue determined by Borg scale before and after test and walking distances recorded after six minutes. Walking distance was 349 meters (66% of predicted values) before operation and 284 meters (54% of predicted values) after operation. Decrease of walking distance after operation was statistically significant (among measured and predicted values, $p<0.0001$). Heart rate ($p=0.0002$), systolic blood pressure ($p=0.0002$), level of fatigue ($p=0.008$) was significantly increased before and after operation and also diastolic blood pressure ($p=0.01$) was significantly increased after operation after 6MWT. Decrease of oxygen saturation was significant both the tests before and after operations ($p=0.02$, $p=0.01$). Although heart rate, blood pressure, level of fatique changes before and after 6MWT was not significant before and after CABG, decrease of oxygen saturation after CABG was significant ($p=0.004$). Conclusion of this study, CABG significantly reduces exercise capacity in the early postoperative course and although this reduce, similar increase of cardiopulmonary parameters and decrease level of oxygen saturation at the end of 6MWT emphasize that exercise induce cardiopulmonary overload in the post operative course.