SELF-RATED SLEEP QUALITY, FUNCTIONAL CAPACITY,
AND PHYSICAL ACTIVITY STATUS
THREE MONTHS AFTER
CORONARY ARTERY BYPASS GRAFT SURGERY

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(ABSTRACT)

It is widely accepted that sleep disturbances occur in patients recovering from coronary artery bypass graft (CABG) surgery. This sleep disturbance, at least in theory, might retard or limit the return of functionality and exacerbate psychological states known to increase use of health care services and adversely affect prognosis. This study explored possible relations between sleep, self-rated aerobic physical capacity and physical activity in a sample of patients who underwent CABG surgery. Secondary analysis investigated the possible concurrent influences of post-CABG health complaints and depression on sleep function. Measures included the Pittsburgh Sleep Quality Questionnaire; the Veterans Specific Activity Questionnaire; the Paffenbarger Physical Activity Questionnaire; the Health Complaint Scale and the Beck Depression Inventory, Version II. The physical measure of body composition was also used. Fifty-five subjects completed baseline questionnaires for all measures just prior to surgery, excluding the Paffenbarger Physical Activity Questionnaire. Follow-up evaluations were repeated at 3 mo post-CABG for the same measures and the patients were also asked to report their patterns of post-surgical physical activity involvement. Correlation coefficients were calculated to determine whether a correlation existed between the measures. Significant correlation’s were found between pre-surgical and post-surgical sleep score, sleep subscales, functional capacity, depression and health complaints (p < 0.05). Post-CABG sleep and physical activity did not exhibit a significant correlation. A number of secondary analyses were performed in an effort to isolate possible influences of confounding factors, such as depression, body mass index > 27, and a ventricular ejection fraction (EF) ≤ 30. In the low EF subgroup, overall sleep score and self-rated functional capacity were strongly correlated before surgery was performed (r = -0.85; p < 0.01). Stepwise regression equations were constructed to predict sleep outcome before and after surgery. Somatic health