

Comorbidities and Health-Related Quality of Life After Lung Transplantation

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Abstract

Purpose: This dissertation examines the impact of comorbidities (osteopenia/osteoporosis, diabetes, overweight status/obesity) pre-lung transplantation and their effect on health-related quality of life after lung transplantation. Lung transplantation has moved from a rare, life saving procedure to a life enhancing option for patients with end stage lung disease. Pre-transplant comorbidities worsened after lung transplantation may impact post-transplant health-related quality of life (HRQOL). Yet, the effects of existing comorbidities pre-transplant on post-transplant HRQOL is not known.

Methods: Ninety – two lung transplant patients were asked to complete SF-36 HRQOL instruments at various times after transplant. The clinical data were extracted from their medical record corresponding with the survey time frame. Blockwise multiple regression was performed with: 1) time since transplant, 2) evidence of chronic rejection, 3) and underlying disease controlled for in the first block and: 4) osteopenia/osteoporosis, 5) diabetes, and 6) overweight status/obesity comprising the second block.

Results: Body mass index (BMI) was found to predict the physical function aspect of HRQOL in lung transplant patients. Moreover, overweight status (BMI \geq

25) had an independent predictive value for physical function as measured by the physical function scale of the SF-36. Physical and mental component summaries were not affected by these comorbidity predictors.

Discussion: Re-evaluation of elevated BMI as a relative risk for lung transplantation should be considered based on this study. Overweight status should be carefully considered when evaluating patients prior to listing and while on the waiting list for lung transplant. Future researchers may want to consider domain specific predictor and outcome variables when studying HRQOL in the lung transplant population.