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Title: The comparison study on the effects of high versus low flux membrane on pulmonary function tests in hemodialysis patients

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Body: Background: Several studies have been carried out to evaluate the effects of dialysis on pulmonary function tests (PFT). Dialysis procedure may reduce volumes and capacities of the lung or cause hypoxia; however, based on our knowledge, there was no previous study on evaluation of effects of membrane type (high flux vs. low flux) on PFT in these patients. The aim of this study was the evaluation of this relationship. Materials and methods: In a cross-sectional study, 43 hemodialysis patients without pulmonary disease were enrolled. In these patients dialysis were conducted by low and high flux membranes and before and after of procedure, spirometry were done and the results were evaluated by t-test and chi square. Results: Mean age of the patients was 56.34 years. Twenty three women (53.5%) and 20 men (46.5%) were enrolled. Patients' body weight after dialysis were decreased significantly compared to before dialysis. Type of membrane (high flux vs. low flux) had not significant effect in PFT results of the patients ($P>0.05$). Conclusion: Since high flux membranes are more expensive than low flux membranes and there was no significant difference in the results of spirometry of patients, it could not be offered the use of high flux membrane for this purpose. Key words: Hemodialysis, High flux membrane, Pulmonary function tests.