

## البحث الخامس

# Comparison of pulmonary functions in 4- and 8-h dialysis sessions in thrice weekly hemodialysis

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## ABSTRACT

A total of 31 patients on chronic regular hemodialysis from Fayoum University hospital Kidney Center, all patients were end stage renal disease of various etiologies. Regular conventional hemodialysis was initiated since 2 years for all patients. The study continued for 6 months. They were all older than 18 years old. None of the patients was a current or recent smoker, and none of them had a history of respiratory diseases, current or recent respiratory infections, musculoskeletal disorders or tuberculosis. All of the patients underwent Spirometry Test pre and post conventional dialysis session (3×4 hours/week), all these patients were subjected to 3 month long dialysis (3×8 hours/week). Thereafter, pulmonary functions were repeated pre and post hemodialysis session for each patient after the end of the 3 month duration. The forced expiratory volume in the first second (FEV1), forced vital capacity (FVC), FEV1/FVC ratio and peak expiratory flow (PEF) were measured.

### **Results:**

FVC is significantly different when compared pre conventional and pre long dialysis. Also, FVC was significantly different when compared post conventional and post long dialysis.

### **Conclusion:**

Eight-hour thrice-weekly in-centre long dialysis has a better effect on the outcome of pulmonary functions than conventional dialysis especially in the FVC.

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