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Title: Prevalence of pulmonary hypertension in patients undergo hemodialysis

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**Body:** Introduction Pulmonary hypertension (PH) is one of most important untoward effects of hemodialysis in end stage renal disease (ESRD) patients. Prevelance of hemodialysis-induced pulmonary hypertension is still a subject of debate. The goal of the present work was to determine prevalence of PH in patients who undergo hemodialysis. Methods This study was done in hemodialysis ward of Tehran Labbafi Nejad hospital. During 2010, 400 ESRD patients who underwent hemodialysis for at least six months were studied. The exclusion criteria were as follows: cardiac disease with effect on pulmonary artery pressure, pulmonary disease (e.g. COPD), smoking and using calcium channel blockers. Baseline and clinical characteristics of subjects were recorded. Pulmonary pressure was measured by cardiologist using echo cardiography. Pulmonary artery pressure (PAP) higher than 35 mmHg was considered pulmonary hypertension. Results Results are presented in mean ± SD. 53% of patients were male and mean was 59 ± 18 yr. The most common cause of ESRD was diabetes mellitus (35%). Duration of hemodialysis was 24 ± 17 months. None of the patients had previous history of kidney transplantation. Mean of Ejection fraction and PAP were 57  $\pm$  5% (44-73) and 39  $\pm$  9 (25-70) mmHg, respectively. 66% patients had pulmonary hypertension. All of them had long duration of dialysis and low EF (56 ± 5%) (P<0.008). They were older than other subjects (63 ± 16). No significant difference was observed about causes of renal diseases, gender and drugs. Conclusion: Our findings show that PAP is associated with duration of dialysis, age and EF. Due to high prevalence of pulmonary hypertension, it is necessary to screen this disorder and diminish its untoward effects.