

1. Abstract Title:

Clinical Impact of Hemodialysis on Short-term Prognosis in Acute Heart Failure:  
Multi-center Registry from Tokyo Cardiovascular Care Unit Network

2. Abstract Category (from attached list):

Heart Failure and Cardiomyopathies: Clinical

3. Keywords (between 1 and 3 from attached list):

Heart failure, Hemodialysis

4. Abstract Body (maximum 1900 characters, not including spaces):

**Background:**

Heart failure (HF) is a highly prevalent cardiovascular complication among patients receiving chronic hemodialysis (HD). The aim of this study was to determine the prevalence, clinical profiles and short-term mortality of HF patients with or without HD in Japan.

**Methods:**

We used the Tokyo Cardiovascular Care Unit (CCU) network cohort data, which represents the largest citywide, most well-organized cardiac care network for a metropolitan area in Japan.

**Results:**

Of total 10138 urgent-hospitalized patients due to acute HF at 72 Tokyo CCUs between 2015 and 2016, 414 HD patients were included. The background characteristics showed many differences between HD and non-HD arm. The 30 days mortality was significantly higher in HD arm than non-HD arm (10.9% vs. 6.2%,  $p < 0.001$ ). Multivariate analysis revealed that the presence of HD was an independent predictor of 30 days mortality (OR 1.97, 95%CI: 1.26-3.08). By using Cox proportional hazard regressions analysis, HF patients with HD had a higher risk of all-cause death during 30 days compared to those without HD (adjusted HR 2.26, 95%CI: 1.49-3.42). In subgroup analysis, HD had more impact on the risk increase of 30 days mortality in HF patients with reduced EF (EF < 40%), but not significant in preserved EF (EF  $\geq$  40%) (Figure).

**Conclusion:**

HD was dominant predictor of short-term mortality in the patients developed acute HF, especially with reduced EF.

**\*\*If you have an image or table to include, your abstract body cannot be more than 1300 characters, not including spaces\*\***

**Background:**

**Methods:**

**Results:**

**Conclusion:**

5. Clinical Implications (complete the following sentence):  
My study will help enable cardiovascular clinicians to predict short-term prognosis of acute heart failure patients receiving chronic hemodialysis according to his or her cardiac function.

**\*My study will help enable cardiovascular clinicians to...**

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