

Abstract Type : Poster

Abstract Submission No. : 1147

Effect of Intravenous Iron Supplementation on Hospitalization for Heart Failure in Hemodialysis Patients

Ye Na Kim, Jihyun Jung, Boyoung Park, Hwayoung Seo, Kyungmi Kim, Byung Hwa Park, Ho Sik Shin, Yeonsoon Jung, Hark Rim
Department of Internal Medicine-Nephrology, Kosin University Gospel Hospital, Korea, Republic of

Objectives: Recently, treatment with intravenous iron supplement was recommended in heart failure (HF) patients with iron deficiency to reduce the risk of hospitalization. However, there is a lack of such evidence in patients on hemodialysis (HD). We investigated the effect of intravenous (IV) iron supplement on hospitalization for HF in HD patients.

Methods: We retrospectively reviewed the patients receiving HD at Kosin University Gospel Hospital. The patients were divided into two groups, an IV iron supplementation group and a non-IV iron supplement group. We compared the events of hospitalization for HF, red blood cell transfusion (RBC) over two years.

Results: Of the 188 end-stage renal disease patients on HD, finally 101 patients were analyzed (mean age 64.5 years, 52.5% male). A total of 64 patients was treated with IV iron supplement and 37 patients were not. There was no difference in left ventricular ejection fraction or N-terminal pro-BNP level between groups. When we analyzed the events of hospitalization for HF, two groups showed similar event rate (28.1% in IV-iron group and 27.0% in non-IV iron group) ($p=0.816$). The patients treated with an IV iron supplement had a lower prevalence of RBC transfusion (45.3% vs. 78.4%, $p=0.002$) than patients without IV iron supplement.

Conclusions: In this retrospective study, there was no significant difference in hospitalization for HF in patients undergoing HD with or without IV iron supplementation over two years. However, patients with IV iron supplementation were associated with fewer RBC transfusions.

Table 1