

Iron Therapy For Chronic Heart Failure



According to the Ferric CarboxymaltOse evaluatioN on perFormance in patients with IRon deficiency in coMbination with chronic heart failure (CONFIRM) study, presented at the recent European Society of Cardiology (ESC) Congress in Barcelona, treating symptomatic heart failure in patients with iron deficiency using intravenous ferric carboxymaltose resulted in sustained improvements in functional capacity, symptoms and quality of life.

Piotr Ponikowski from the Department of Heart Diseases at Medical University and the Department of Cardiology at Clinical Military Hospital in Wroclaw explains, "Iron deficiency has recently been reported as a frequent co-morbidity in heart failure and has been associated with impaired functional capacity, poor quality of life, and increased mortality, irrespective of the presence of anaemia." He points out that the correction of iron deficiency is an attractive therapeutic target since it affects approximately 50 percent of patients with heart failure.

304 patients from 41 centres in nine countries were randomised to receive ferric carboxymaltose or a saline placebo for a total period of 52 weeks. For the purpose of this study, patients' iron deficiency was defined as a serum ferritin level of less than 100ng/mL, or between 100 and 300ng/mL, if transferring saturation was less than 20 percent. Approximately 75 percent of the patients included in the study required a maximum of two injections of ferric carboxymaltose to correct or maintain their iron parameters.

The primary outcome of the study was change in six-minute walk distance between baseline and 24 weeks. Secondary endpoints included changes in NYHA functional class, Patient Global Assessment, the effect of iron on the rate of hospitalisation and health-related quality of life and fatigue scores at 6, 12, 24, 36 and 52 weeks.

The findings of the study showed that at week 24, patients who were randomised to ferric carboxymaltose improved their six-minute walk tests by 18 meters as compared to 16 meters in patients who were on placebo. The secondary endpoints of changes in patient global assessment scores and in New York Association functional class also improved in patients on ferric carboxymaltose. The treatment effect of iron was sustained at 52 weeks and was consistent across all evaluated subgroups. In total, 10 patients in the ferric carboxymaltose group were hospitalised for worsening heart failure as compared to 32 patients in the placebo group.

"If you ask whether the magnitude of the effect is robust and clinically meaningful I can only say that similar effects regarding the improvement in exercise capacity have only been seen before in cardiac resynchronisation therapy," said Ponikowski.

Source: European Society of Cardiology Image Credit: Wikipedia

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