

BP OP 4-1**Efficacy of ferric carboxymaltose (Ferinject®) in anemic patients anticipating pancreatoduodenectomy**

Jangho PARK, Sung-Sik HAN, Sang-Jae PARK*

Center for Liver Cancer, National Cancer Center, Korea

Introduction : Pancreaticoduodenectomy (PD) for periampullary carcinoma accompanies much bleeding and transfusion. Perioperative transfusion can be the independent poor risk factor for postoperative complication and early recurrence in periampullary carcinoma after PD. Ferric carboxymaltose (Ferinject®) is believed to have the potential for a more rapid correction of anemia. The purpose of this study is to evaluate the efficacy of Ferinject® in reducing perioperative transfusion in iron deficiency anemia patients anticipating PD.

Methods : According to the data of 125 patients who had PD between Jan. 2012 to Sep. 2013, the perioperative transfusion rate of the patients with 7g/dl < preoperative Hb <12g/dl was 44% (23/52). We hypothesized that the transfusion rate of patients would be decreased around 20% with Ferinject® injection. A sample size of 43 achieves 90% power to detect a 21% decrease (44.0% to 23.0%) in transfusion rate using a one-sided binomial test at significant level 5%. Considering 10% drop out, a total of 48 samples were enrolled. Patients with male (7g/dl ≤ preoperative Hb <13) and female (7g/dl ≤ preoperative Hb <12g/dl) were administered with Ferinject® 1-3 weeks before PD.

Results : Of 48 enrolled patients, 8 patients dropped out and then 40 patients were included in the final analysis. The transfusion rate of the patients was 22.5% (9/40) within 7 days after surgery. The decrease of transfusion rate was statistically significant. (p=0.0031)

Conclusions : Ferinject® injection prior to PD can reduce blood transfusion within 7 days following the operation.

Corresponding Author. : **Sang-Jae PARK** (spark@ncc.re.kr)