P 43 IRON INFUSION THERAPY WITH FERRIC CARBOXYMALTOSE (FCM) IN CHILDREN LESS THAN 14 YEARS OLD

Paul-M. Windscheif, Edward Gaynor, Sapthagiri Gantasala, Rhoda Welsh, Lucy Howarth. *Oxford University Hospitals*

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Aim To prospectively assess iron infusion therapy with ferric carboxymaltose (FCM) in children less than 14 years old.

Methods All children with confirmed iron-deficiency less than fourteen years old who received an FCM-infusion at a dose of 15 mg/kg (max 20 mg/kg) were included in the study. The use of FMC is licensed for use in adults and children older than 14 years. Data was taken from a database system registered as a service evaluation tool with the local hospital.

Data on forty two children (from Jul 2011 to Mar 2014) younger than 14 years was recorded out of which 36 had an underlying condition of inflammatory bowel disease (IBD), two patients with short-bowel syndrome started on parenteral nutrition, and four patients with anaemia due to other clinical causes. One these patients had Down's syndrome.

All patients (19 girls, 23 boys) aged between 1–13 years of age at the time of the first dose, (mean 9 years of age; 8 children were less than 5 years old) received the infusion in an outpatient clinic setting. Mean weight was 30.5 kg (range 7 kg to 50 kg). Ten patients received at least one more course of FCM half to one year later, during the reported period.

The result for haemoglobin, serum ferritin and iron of the first treatment course was documented from routine blood samples at one to six months following the infusion.

Results There was an improvement in blood indices: mean haemoglobin rise of 3 g/L (range pre 3.7–12.8, post 9.3–14.7 g/L), mean serum ferritin rise 72 microgram/L (range pre 0.5–106, post 4.6–273 microgram/L) and mean serum iron rise of 6.7 micromol/L (range pre: 1.1–11.5, post: 2.1–22.8

micromol/L). No early or late adverse reactions have been reported on any of the patients.

Conclusion The results suggest that the use of intravenous iron in its formulation as FCM seems to be a safe treatment in young children with iron-deficiency. A clinical trial may be needed to evaluate an efficient dosing regimen of FCM in children less than 14 years of age with different medical backgrounds.