Intravenous ferric carboxymaltose (FCM) in the treatment of iron deficiency anaemia (IDA) in pregnancy: short-term effects on maternal and foetal wellbeing

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Objective. IDA is the most common anaemia in pregnancy and if untreated can lead to adverse maternal and foetal outcomes. Actually, FCM is the intravenous iron preparation proposed for women who cannot tolerate or do not respond to oral iron or have severe or symptomatic IDA later in pregnancy. This study aims to evaluate short-term maternal adverse effects and foetal wellbeing during FCM administration in a cohort of pregnant women with IDA.

Materials and Methods. It is a multicentric retrospective study conducted on 472 patients at Careggi University Hospital in Florence and Vittore Buzzi Children's Hospital in Milan (2019-2024). Foetal wellbeing was evaluated through computerized cardiotocography (cCTG) or ultrasound. Maternal adverse effects were assessed by clinical examination during the infusion.

Results. cCTG was performed in 377/472 (80%) cases. The mean short term variability value was 10.2 ms and the analysis was fullmet in 371/377 (98.4%) patients, except for 6 cases of a lack of high variability episodes, resolved by intrauterine resuscitation interventions. Ultrasound examination was assessed in 95/472 (20%) patients and no cases of heart rate abnormalities were observed. Maternal short adverse effects were primarily nausea, vomiting and hypotension recorded only in 4/472 (0.8%) patients. Patients obtained an average improvement in Hb levels of 1.6 g/dL in approximately 5 weeks.

Conclusions. No major side effects on the mother or foetus were observed, therefore FCM is a safe and effective therapy that should be used as a first-line treatment for intravenous management of IDA.