The effectiveness of Monofer in the treatment of maternal iron deficiency anemia (IDA) – Hospital Seberang Jaya experiences

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**ABSTRACT**

**Introduction:** Maternal IDA is associated with depleted iron stores and deficient iron intake. Parenteral iron replenishes iron stores, leading to a rapid increase in haemoglobin. We aimed to determine the efficacy and safety of Monofer among pregnant women with IDA. **Methods:** Retrospective data of pregnant patients with IDA who received Monofer at Hospital Seberang Jaya in the year 2022-2023, were collected. The findings were compared to women who received Venofer and Cosmofer in 2017/2018. **Results:** A total of twenty women received Monofer. An adverse event was reported in three patients (15%). All of them experienced difficulty in breathing or shortness of breath. Similar event and percentage were reported in Cosmofer group. Monofer infusion was discontinued in two patients. A mean Monofer dose of 715 ± 33 mg was administered (n=18). Hb increment within 2 weeks of infusion was 1.01 ± 0.19 g/dL (from 9.12 ± 0.13 g/dL to 10.14 ± 0.23 g/dL). The rate of haemoglobin increment was 0.07 ± 0.01 g/dL per day, which was lower than the other types of parenteral iron. During admission for delivery, the Monofer recorded mean haemoglobin of 11.67 ± 0.25 g/dL or an increment of 2.24 ± 0.22 g/dL from the baseline. **Conclusion:** Despite the convenience of a single-dose treatment and outpatient drug administration, Monofer showed a similar number of adverse events as Cosmofer. When compared to Venofer and Cosmofer, Monofer has lesser haemoglobin increment within two weeks of infusion. However, a bigger sample size is required for future studies.