ABSTRACT

COMPARATIVE STUDY OF INTRAVENOUS FERRIC CARBOXYMALTOSE AND IRON SUCROSE IN THE MANAGEMENT OF POSTNATAL IRON DEFICIENCY ANAEMIA

OBJECTIVE:

The objective of this study is to compare the efficacy of ferric carboxymaltose and iron sucrose in the management of postnatal iron deficiency anaemia.

MATERIALS AND METHODS:

100 postnatal women with haemoglobin level between 8-10gm were randomly selected and allocated into two groups. One group received iron sucrose and another group received FCM. For iron sucrose 200mg is administered as a single dose and repeated on alternate days as required. In FCM 1000mg can be administered as a single dose. The haemoglobin, blood indices, and serum ferritin is measured before and after 2nd and 4th week.

RESULTS:

The improvement in haemoglobin level, serum ferritin level, patient's quality of life is seen with both iron sucrose and FCM. The mean improvement in haemoglobin level with iron sucrose is about 2.35g at four weeks whereas in ferric carboxymaltose the increment is about 2.83g. The mean improvement in MCV is about 85.44 from baseline 80.12(fl) in iron sucrose whereas in FCM it increases about 88.18 from 78.94. Serum ferritin increases about 199.98 from 37.2 in iron sucrose. In FCM serum ferritin increases to about 266.02 from 31.5. The side effects in FCM are lower than iron sucrose.

CONCLUSION:

The improvement in Haemoglobin, serum ferritin FCM are greater and faster than iron sucrose. Large single dose can be given with FCM when compared with iron sucrose. So FCM appears to be significant than iron sucrose in the management of postnatal iron deficiency anaemia.

KEY WORDS

Iron sucrose, FCM (Ferric carboxymaltose), Haemoglobin, serum ferritin, Iron deficiency anaemia, and Blood indices.