EFFECTIVENESS OF CARBOXIMALTOSE IRON IN PREOPERATIVE ANAEMIA TREATMENT
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BACKGROUND AND IMPORTANCE

Carboxymaltose intravenous iron (CII) for correction of perioperative anemia and reduction of red blood cell transfusion (RBCT).

AIM AND OBJECTIVES

Effectiveness of CII for surgical patients and to describe the transfusional requirements.

MATERIAL AND METHODS

Observational retrospective unicentric study including surgical patients who received CII between January 2017 and December 2018 in a third level hospital.

Variables collected: sex, age, CII dose, baseline and perioperative haemoglobin (HB), time passed between the CII administration and the surgical procedure.

Effectiveness: percentage of patients with an increase in HB in preoperative stage compared to baseline HB (bHB) > 1 g/dL and the difference and number of transfusion after the surgical procedure.

Data were expressed: average ± standard deviation and the analysis test used was chi-square.

RESULTS

68.8% women
Age = 58.3 ± 15.0 years
N=70

CII Dose = 1274.3 g ± 352.5
bHB= 9.8 ± 1.2; perioperative HB = 11.0 ± 1.4
time between CII and the surgery: 37.7 ± 41.2 days.

EFFECTIVENESS

78.6% (n=55) had an increase in HB in preoperative stage compared to bHB
50.0% (n=35) of patients had an increase in HB > 1 g/dL.

RBCT

35.7% (n=25) patients were transfused
patients who reached HB in perioperative stage compared to bHB > 1 g/dL were transfused less than patients who did not reach this difference (72.0 vs 28.0%) (p=0.006)

CONCLUSIONS AND RELEVANCE

CII has demonstrated clinical effectiveness due to an increase of HB in most of patients. In addition, CII administration has reduced RCBT of the included patients however, is necessary the design of a comparative study with a cohort of surgical patients without CII administration.