**Título:** A FERRIC CARBOXYMALTOSE PROTOCOL IN ANAEMIC PATIENTS FOR POSTBARIATRIC SURGERY: A RETROSPECTIVE COHORT ANALYSIS

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**Área Terapêutica/Tema:** Prática baseada na evidência e melhoria da qualidade (Evidence-based Practice and Quality Improvement)

**Resumo:**

Introduction: Bariatric surgery is currently the most effective treatment for obesity [1] and an increasing number of patients are presented for postbariatric plastic surgery (PPS) after major weight loss. Anaemia is common in this patients and patient blood management is crucial to reduce the risks of blood transfusion (BT) and the associated costs. Intravenous (IV) iron is an effective and recommended treatment where rapid replenishment of iron stores is required. The aim of this study was to analyse the dose optimisation protocol of a day-care unit for patients presented for PPS and establish is noninferiority compared with the calculated doses by the simplified method (SM).

Methods: This retrospective cohort study included 88 patients with confirmed anaemia who received IV iron in a day-care unit from May 2013 to October 2019 and were proposed to PPS. The clinically meaningful haemoglobin (Hb) for this population is Hb ≥ 11 g/dL and the response rate (Hb increase) ≥ 2 g/dL. The results of a single 1000 mg ferric carboxymaltose (FCM) dose was examined relative to individually calculated doses by the SM. Patients were grouped in two cohorts, depending if the administered IV iron dose do not meet (Cohort A, n = 63) or meet (Cohort B, n = 25) the dose calculated by the SM.

Results: No significantly statistical differences (p = 0,06) occurred in Hb normalization between the two cohorts, demonstrating the noninferiority of the adopted protocol. The mean Hb improved from 9,3 ± 1,0 to 11,5 ± 0,8 g/dL in Cohort A and from 10,6 ± 0,4 to 12,0 ± 1,0 g/dL in Cohort B. At the follow-up visit an Hb increase of at least 2 g/dL was achieved by 54% (n = 34) and by 20% (n = 5) patients in Cohort A and B (p = 0,75), respectively. For those the mean increase in Hb was 3,03 g/dL in Cohort A and 2,9 g/dL in Cohort B. By that time, 78% (n = 49) patients in Cohort A and 96% (n = 24) in Cohort B had reached a Hb ≥ 11 g/dL. Deviations from the scheduled dose were observed in both cohorts, being less frequent in Cohort B (4% vs 8%). BT was needed in just 5% of the patients already submitted to PPS (n = 65, p = 1), with no differences between both cohorts.

Conclusions: Our data suggest that for anaemia optimization the same results can be obtained, in terms of morbi-mortality and transfusion rate, using a protocol of a single 1000 mg FCM dose, when compared with the calculated doses by the simplified method.

References

[1] Rev Soc Port Anestesiol. 2017; 24(4):148-153.

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