IMPLEMENTATION AND MONITORING OF A PROTOCOL FOR THE USE OF INTRAVENOUS IRON

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BACKGROUND

The Pharmacy and Therapeutics Committee approved in May 2017 a protocol for the prescription of intravenous iron in order to achieve a correct use of it in the hospital, and establishing iron sucrose complex as first choice in admitted patients.

PURPOSE

✓ The objective of this study was to assess the degree of adaptation of the prescriptions to the protocol.

MATERIAL AND METHODS

Retrospective observational study
May 2017 - July 2018

In order to assess the degree of adaptation of the prescriptions it was checked if the requests were received correctly completed:

- Type of patient (inpatient or outpatient)
- Medical service
- Diagnosis and cause
- Patient’s body weight
- Iron metabolism data (transferrin saturation, serum ferritin and iron)
- Pharmaceutical product prescribed (ferric carboxymaltose or sucrose)

Review if administered doses were correct taking into account the theoretical deficiency calculated according to Ganzoni formula.

Dose was considered correct if the difference between the administered dose and the theoretical deficiency was not exceeding ±500 mg in ferric carboxymaltose and ±200 mg in sucrose.

RESULTS

A total of 271 prescriptions were analyzed

Type of patient
- Outpatients: 57%
- Inpatients: 43%

Medical service
- Internal medicine: 47%
- Gastroenterology: 22%
- Others: 31%

Principal medical diagnosis → anemia (the cause was unknown in 35.5%)

Main reasons for prescription
- Need for fast iron replenishment: 57%
- Iron deficiency or intestinal malabsorption syndromes: 16%
- Iron intolerance to oral iron or impossibility to an oral regimen: 15%
- Others: 11%
- Unknown: 4%

Data of iron metabolism is not available in 34.7% of requests.

Ferric carboxymaltose was the pharmaceutical product chosen in most of patients

- Inpatients: 45%
- Outpatients: 55%
- Ferric sucrose: 62%
- Ferric carboxymaltose: 38%

The total dose administered did not match the theoretical deficiency calculated in 41.3% of cases.

CONCLUSIONS

✓ The lack of data in many orders received in the Pharmacy Department makes it difficult to verify the appropriateness of the prescription to the protocol in many cases. Therefore highlights the protocolization is a dynamic process that requires a continuous assessment to ensure its utility.

✓ Ferric carboxymaltose was used more frequently in the iron replenishment in outpatients and iron sucrose in hospitalized patients.