Prescribing Update

NHS Lancashire and South Cumbria Integrated Care Board

Medicines Matters

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Treatment of iron deficiency anaemia

Prescribing iron for the treatment of iron deficiency anaemia (IDA) is recommended at ONCE daily dosing or ONCE daily on ALTERNATE days.

Treatment of adults:

- In 2023 the BNF changed its recommendation for the treatment of iron deficiency anaemia in adults from **three** times a day to **once** daily.
- Oral iron supplements cause an increase of hepcidin levels. Hepcidin is an important inhibitor of iron absorption and impairs absorption of subsequent iron supplementation. Higher doses of iron supplementation, suppress the body's ability to absorb more iron through this protective mechanism.
- Therefore, dosage regimens have changed from two-three times daily dosing to **once daily or alternate days.**
- NICE CKS guidelines state that a once-daily dose of 65mg elemental iron (e.g. ferrous sulphate 200mg daily) is sufficient for treating IDA.

Treatment of children:

- In April 2025 the BNFC updated its guidelines in line with the adult treatment guidelines.
- BNFC states for IDA - once-daily or alternate-day dose regimen of oral iron salts (depending on preparation used) is recommended. These doses are just as effective as multiple daily dose regimens (such as two or three times a day dosing), with a lower incidence of side-effects and better compliance.
- Weight based dose calculations were also removed and doses rounded for ease of administration.

Individualised patient approach

- Bioavailability of iron preparations can vary significantly between individuals, but there are minimal differences in efficacy and iron absorption between the different ferrous salts.
- Food and caffeinated drinks can significantly decrease the bioavailability of iron with absorption reported to vary from 2–28%. BNF Patient and carer advice for all iron
- Patients should be counselled on the side effects of oral iron therapy, which include abdominal pain, nausea and vomiting (usually dose related), constipation, diarrhoea and a metallic taste.
- To minimise the side effects of oral iron therapy:
    - Iron is best absorbed on an empty stomach but can be taken with meals to minimise GI disturbances
    - Reduce the frequency of dosing to alternate days

Monitoring

- Haemoglobin (Hb) concentration is expected to rise by about 20g/L over 3–4 weeks; therefore, it is recommended to recheck the full blood count (FBC) within 4 weeks of starting therapy.
- If there is an adequate response, a FBC should be repeated at 2–4 months to ensure Hb has returned to normal.
- Once normalised, therapy should then be continued for a further 3 months to replenish iron stores. Further monitoring is required periodically.
- Certain patient groups would benefit from oral iron at preventative doses (e.g. ferrous sulphate 200mg daily), such as in reoccurring anaemia, poor diet, malabsorption, menorrhagia, in pregnancy, cancer and after a gastrectomy.

Prescribing of iron supplements for iron deficiency anaemia should now be ONCE daily or ONCE daily on ALTERNATE days for adults and children.

1. **Search for patients receiving more than 28 tablets of iron supplementation a month – review and reduce.**
2. **Review the need for repeat prescriptions of iron therapy in courses that have exceeded 4-6 months.**

Additional information for healthcare professionals:

- Modified release preparations, available as once-daily doses, are usually more expensive and release iron past the optimal site of absorption; therefore, they are not recommended by NICE.
- Combination preparations are not recommended (except with folic acid for pregnant women)
- Iron tablets are readily available OTC – purchasing may be more economical for patients who pay for prescriptions.
- Interview with Surrey Heartlands GP about his experience of reducing dose of iron supplements (video - 22 mins) Iron Optimisation in Primary Care (March 2023)

Ref: Anaemia — iron deficiency. National Institute for Health and Care Excellence CKS (accessed June 2025)