

BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

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IRON

Is it better to take oral iron supplements every OTHER day?

Not really.

Some recent evidence suggests giving doses every OTHER day increases the amount of oral iron absorbed by up to 50%. Unabsorbed iron is thought to be the culprit for GI side effects.

It's no surprise that DIVIDING the daily iron dose every other day seems to cause less nausea. But giving the same TOTAL dose every other day does NOT seem to limit GI side effects.

And it turns out that increased iron absorption does NOT mean patients can take less iron. Expect it to still take up to twice as long to correct iron deficiency when doses are divided every other day.

Plus an irregular dosing schedule may negatively impact adherence.

In general, don't suggest alternate-day oral iron dosing.

Continue to recommend starting with ferrous sulfate one tab daily for most patients. Most products have 65 mg elemental iron/tab... which is often enough for iron deficiency or mild anemia.

Advise checking a CBC and iron studies in a couple of months. If once-daily iron isn't making headway, suggest increasing to BID.

Educate that iron is best absorbed on an empty stomach...but it's okay to take with food if nausea occurs.

Clarify that 200 mg of vitamin C, or 8 oz of orange juice, only increases absorption about 10%.

Advise limiting PPIs or H2-blockers and spacing antacids several hours from iron doses...these may decrease iron absorption.

Find out when to consider a different form of iron in our chart, *Oral Iron Supplements: Comparison and Practical Considerations for Use*.

(For more on this topic, see Clinical Resource #360907 at [PharmacistsLetter.com](https://www.pharmacistsletter.com).)

Kaundal R, Bhatia P, Jain A, et al. Randomized controlled trial of twice-daily versus alternate-day oral iron therapy in the treatment of iron-deficiency anemia. *Ann Hematol* 2020;99:57-63.

See LEADER NOTES for answers to discussion questions.

DISCUSSION QUESTIONS

OVERVIEW OF CURRENT THERAPY

1. What is known about the absorption of oral iron?

ANALYSIS OF NEW GUIDELINE

2. What type of study was this? How were the patients selected for inclusion?

3. How were the study groups defined?

4. How were the outcomes evaluated?

5. What were the outcomes of this trial?

See [LEADER NOTES](#) for answers to discussion questions.

6. What were the strengths and weaknesses of this trial?

7. Were the results expressed in terms we care about and can use?

HOW SHOULD THE NEW FINDINGS CHANGE CURRENT THERAPY?

8. Do the results change your practice? How?

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

SP is a 30-year-old female with hypothyroidism, GERD, and menorrhagia who is seeing you for symptoms of fatigue that she's had the past month. Her medications include levothyroxine and as-needed famotidine. Initial laboratory results show a hemoglobin of 8.8 g/dL and hematocrit of 31%. Further iron studies confirm the diagnosis of iron deficiency anemia. Your work-up of the cause of the anemia points to menorrhagia as the cause.

9. What guidance do you provide SP regarding dietary measures to improve iron deficiency?

See [LEADER NOTES](#) for answers to discussion questions.

You advise SP to try to increase the amount of iron she gets in her diet and educate her about the types of foods that are rich in iron.

Knowing that patients with iron deficiency anemia should be treated regardless of symptoms, you also decide to start SP on oral iron.

10. How do you counsel SP regarding iron therapy? What education should you provide regarding dosing, administration, and interactions?

You start SP on 1 tablet of ferrous sulfate daily and plan to recheck a CBC and iron studies in 8 weeks. You counsel SP regarding how to limit interactions with food and her other medications.

Two weeks later, SP calls your office stating she is having a difficult time taking iron due to nausea.

11. What guidance can you provide SP regarding management of side effects from iron replacement?

You advise SP to take the iron supplement with food, and this improves tolerability. On her 3-month follow-up, SP reports improvement in symptoms and you notice improvement in her CBC and iron stores.

See [LEADER NOTES](#) for answers to discussion questions.

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Additional Pharmacist's Letter Resources available at [PharmacistsLetter.com](https://www.pharmacistsletter.com)

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See [LEADER NOTES](#) for answers to discussion questions.