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Current models of iron supplementation in iron deficiency anemia and iron deficiency

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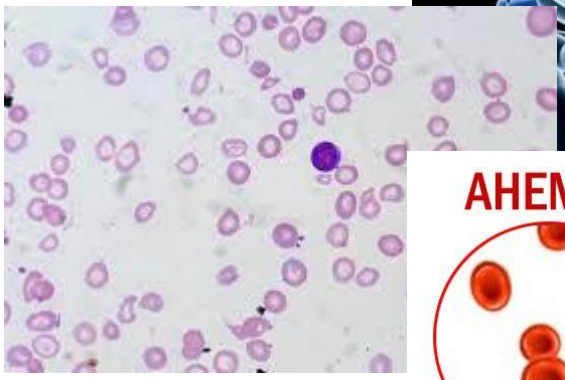
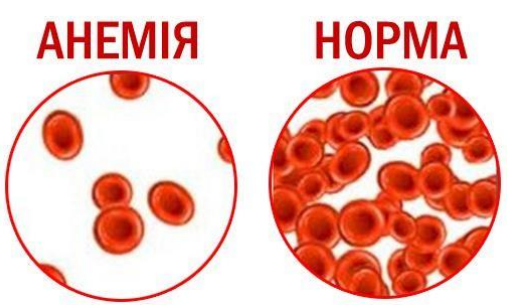
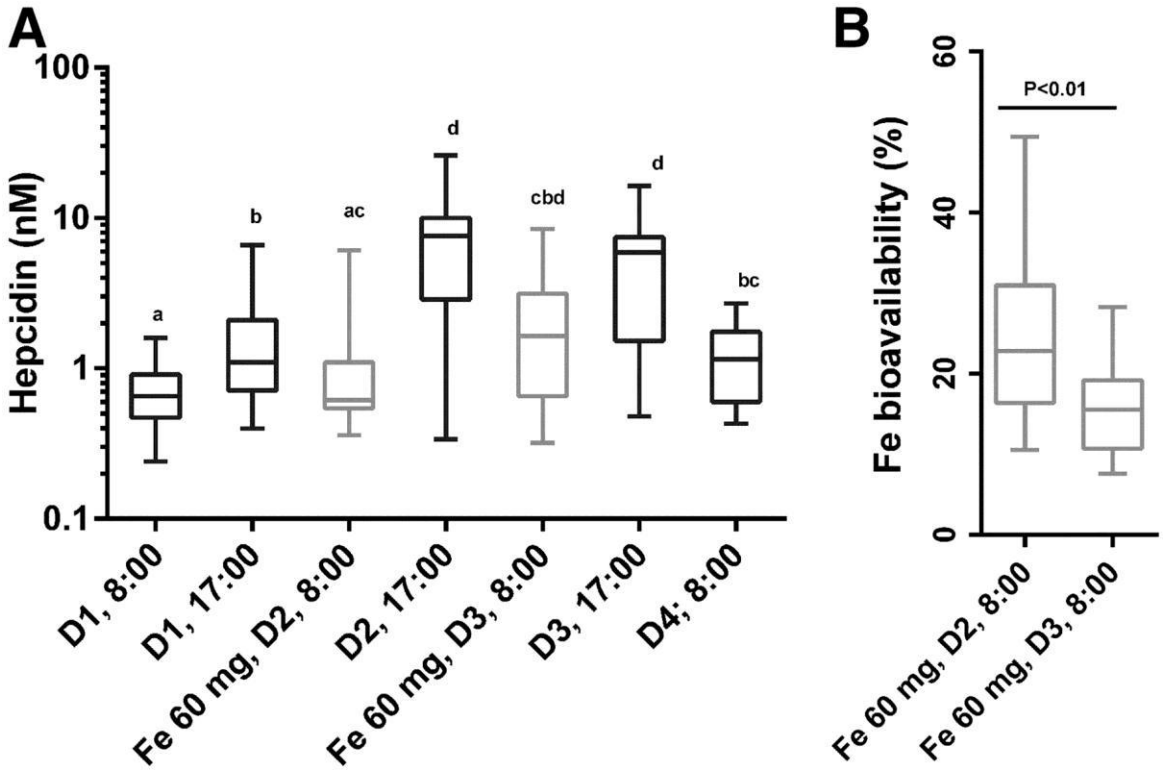




Intake of 60 mg of Fe2 + leads to an increase in hepcidin after 24 hours and to a decrease of iron absorption from a sequential dose



Change of hepcidin response when taking iron consistently 2 times per day supports iron supplementation every other day: long-term effects are to be assessed in further studies.

Diego Moretti et al. Blood 2015;126:1981-1989

blood

Moretti D1, Goede JS2, Zeder C1, et al. Oral iron supplements increase hepcidin and decrease iron absorption from daily or twice-daily doses in iron-depleted young women//Blood. 2015 Oct 22;126(17):1981-9

Current models of iron supplementation in iron deficiency anemia and iron deficiency

- Understanding of hepcidin role in iron metabolism
- The emergence of modern IV iron products, primarily, of iron carboxymaltose (ICM) devoid of risk of anaphylactic/ anaphylactoid reactions when used in outpatient settings - justifies the search for new supplementation models

Intake of Fe2+ in the morning (50 or 100 mg) every other day for 3-6 months with possible subsequent correction of the ID by a single injection of ICM.

Used for the treatment in a period from 11.2017 to 12.2018 in more than 250 patients

S.A. Volkova, D.D. Tolbuzova. Modern models of iron supplementation in iron deficiency anemia and iron deficiency. Abstracts

Material and methods:

In out-patient hematologist database out of more than 250 patients with IDA and ID who were prescribed Iron product to be taken in the morning every other day, **50 cases with the follow-up results were identified**:

F - 49, 4 of them were on a second trimester of pregnancy, M-1,

Age - 18 to 75 years, median - 35 years,

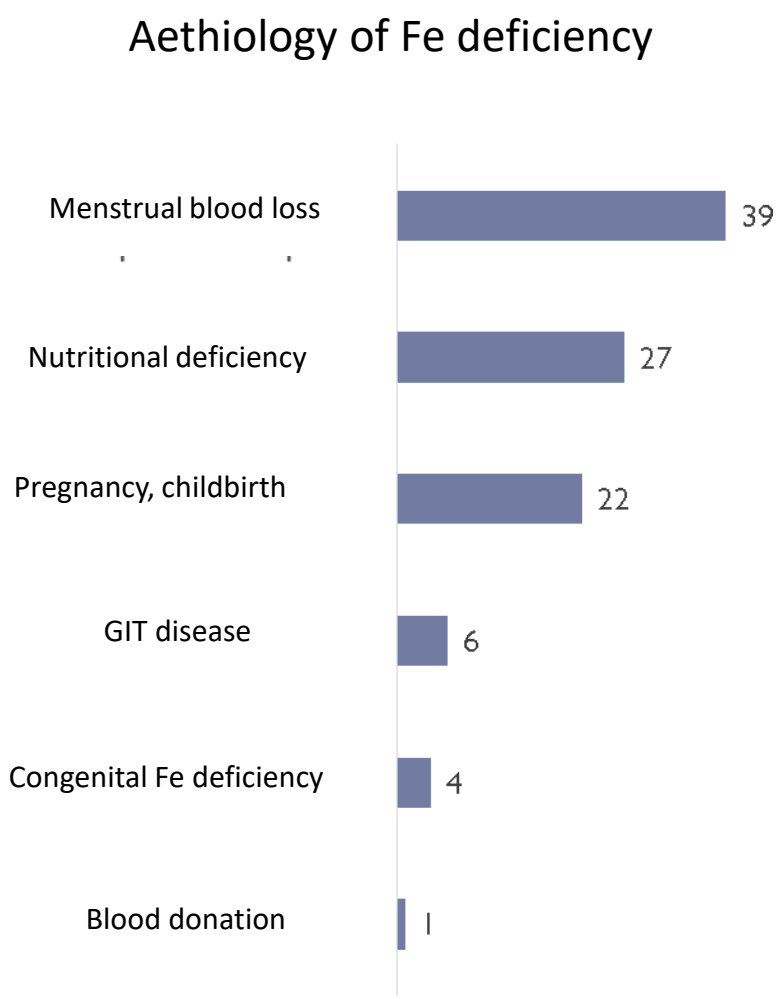
The following was performed:

- Analysis of the of iron deficiency causes
- Efficacy of treatment with Fe2 + administered in the morning every other day was evaluated at 1st and 3rd months of therapy using blood analysis results (HGB, RBC, MCV, MCH,) and determining the concentration of serum ferritin (SF)

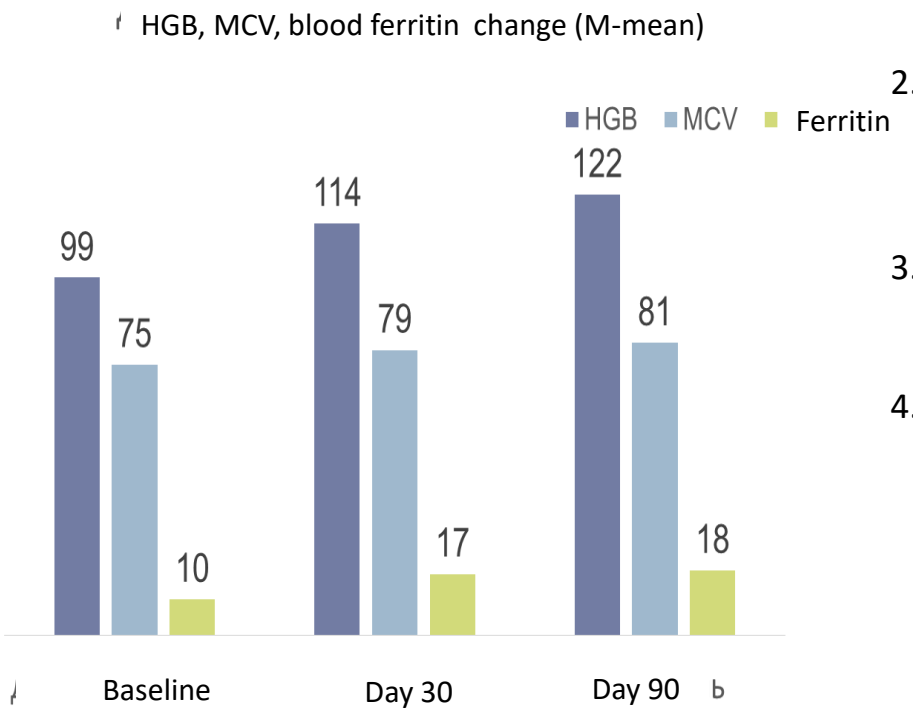
Author's own data

Treatment of IDA and ID

- 33 patients: totema (1 or 2 amp in 100 ml of water orally in the morning every other day),
- 10 patients: sorbifer durules (1 tablet in the morning every other day),
- 7 patients: Ferretab (1 or 2 capsules) in the morning every other day



The results and conclusions after administration of iron Fe2 + once in the morning (50 or 100 mg) every other day in a population of 50 IDA and ID patients



1. Intermittent intake of Fe2 + gave an increase in HGB of more than 10 g/l on the 30th day of treatment and normalization of HGB on the 90th day of treatment.
2. After 3 months of Fe2 + supplementation in the intermittent regimen, a positive incremental change of SF was achieved, but without correcting ID.
3. Intermittent intake of Fe2 + was not accompanied by treatment cessation due to gastrointestinal side effects.
4. In case of persistent ID on the 90th day of therapy, the patient was recommended to either continue the supplementation program in the same regimen until month 6 or even 12, or to administer ICM at a dose of 500 mg, taking into account actual prescribing information.