



Intravenöse Eisensubstitution

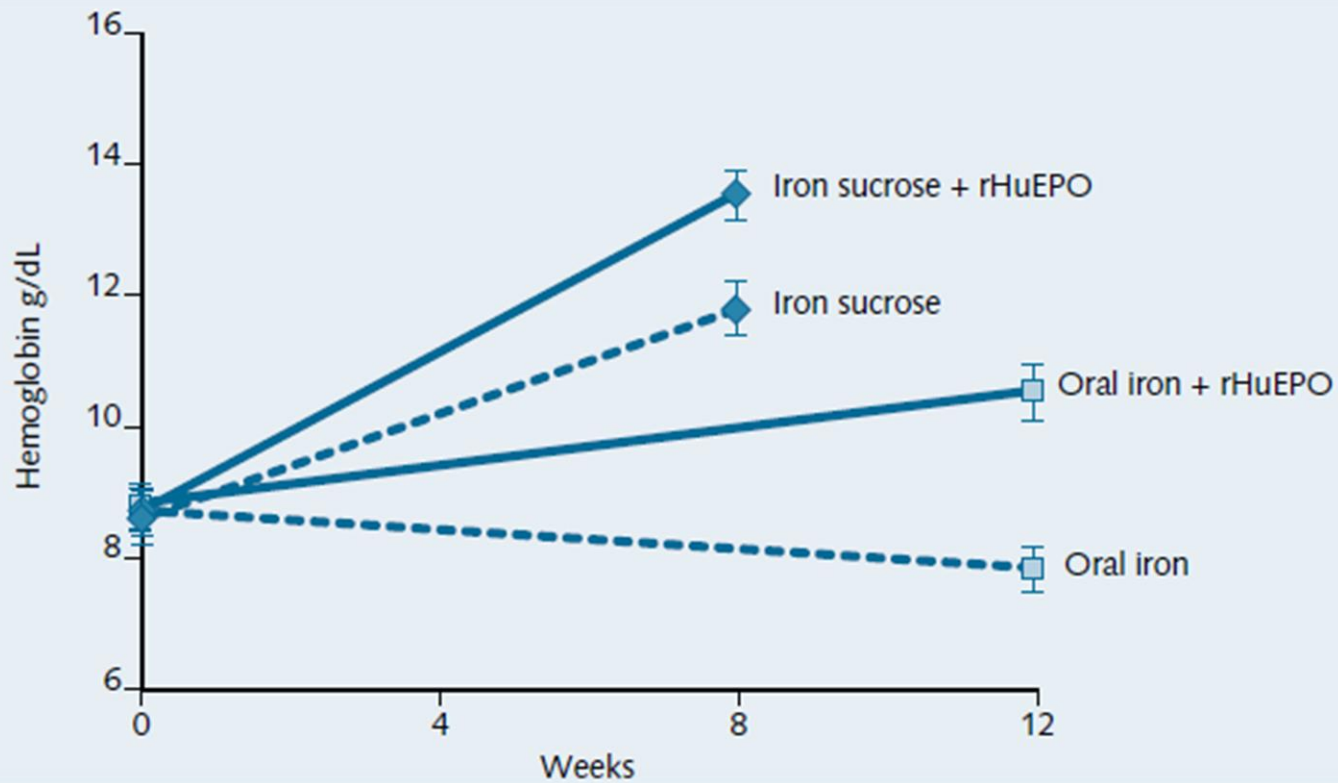
Loha for Life, Med. Kompetenzzentrum Eisenmangel

IV Indikationen

- Unverträglichkeit per os (GI Nebenwirkungen)
- Unwirksamkeit per os (durch Resorptionsstörung oder laufenden Blutverlust)
- Erythropoetin Therapie (Nephrologie/Onkologie)
- Chronisch entzündliche Darmerkrankungen

- Schwere Eisenmangel (Hb <10g/dl)
- Patient Blood Management
- Hospitalisierte Patienten

Negative Eisenbilanz: PO versus IV.



Gasche C. et al *Ann Intern Med* 1997
Schreiber S. et al. *NEJM* 1996

Internationaler Konsensus bei Chronisch Entzündlichen Darmerkrankungen

CLINICAL GUIDELINES

Guidelines on the Diagnosis and Management of Iron Deficiency and Anemia in Inflammatory Bowel Diseases

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4. Treatment of Anemia

Iron Supplementation

Statement 4A: The preferred route of iron supplementation in IBD is intravenous, even though many patients will respond to oral iron. Intravenous iron is more effective, better tolerated, and improves the quality of life to a greater extent than oral iron supplements (Grade A). Absolute indications

SECTION III. Treatment of renal anaemia

Guideline III.2: Treatment of anaemia with iron

Recommendation

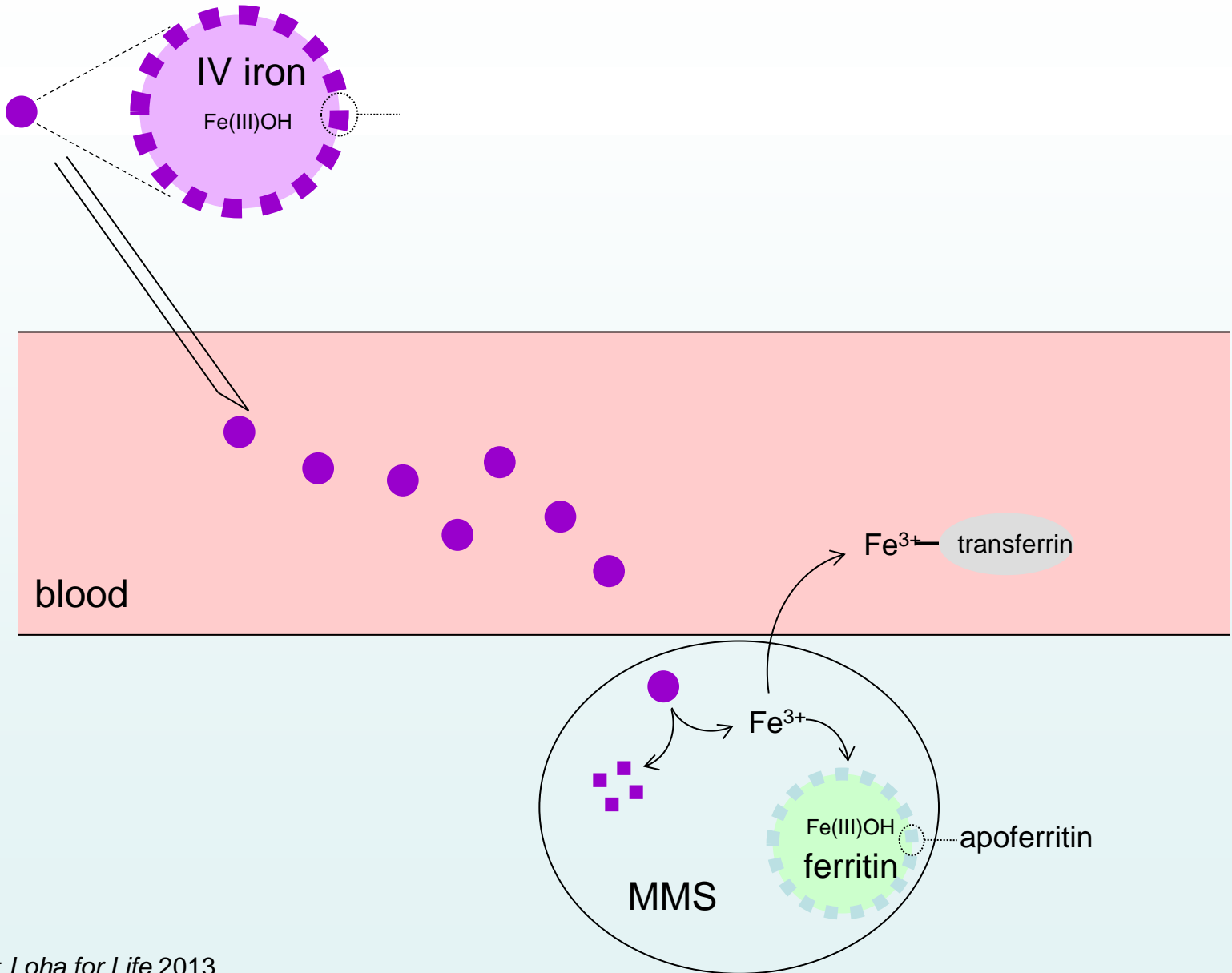
I. All chronic kidney disease (CKD) patients with renal anaemia undergoing treatment with an erythropoiesis-stimulating agent (ESA) should be given supplementary iron to maintain (or reach) the targets set in Guideline II.1, regardless of dialysis status. Patients undergoing haemodialysis (HD) usually have greater iron requirements than those not undergoing HD.

(Evidence level B)

Recommendation

II. i.v. administration is the optimum route for the delivery of iron to patients with CKD, as oral iron is poorly absorbed in uraemic individuals.

(Evidence level A)



Intravenöse Eisenpräparate

	Fe ⁺⁺⁺ / Amp	Max. Einzeldosis	Test- dosis	Infusionsdauer	Vertrieb
Eisen-Gluconat*					
Ferrlecit [®]	62,5mg	62,5-125mg/100 NaCl	-	mind. 20min	Sanofi
Eisen-Dextran					
CosmoFer [®]	100mg	1000mg/500ml NaCl	+	4 – 6 Stunden	Pharmacosmos
Eisen-Saccharose					
Venofer [®]	100mg	200mg/100ml NaCl	+	mind. 30min	Vifor
Fermed [®]	100mg	200mg/200ml NaCl	+	mind. 30min	Medice
Eisen-Carboxymaltose					
Ferinject [®]	500mg	500mg/100NaCl 1000mg/250ml NaCl	-	mind. 6 min mind. 15 min	Vifor
Eisen-Isomaltosid					
Monofer [®]	500mg	500mg/250 NaCl 1000mg/500ml NaCl	-	mind. 30 min mind. 60 min	Pharmacosmos
Ferumoxytol					
Rienso [®]	510mg	510mg	-	iv Push	Takeda

Chemical entity

	Ferumoxytol	High MW Iron dextran	Low MW Iron dex- tran	Iron isomalto- side 1000	Iron gluconate	Iron su- crose	Ferric carboxy- maltose
Trade names (US, Europe)	Feraheme®	Dexferrum®	Infed®, Cosmofer®	Monofer®	Ferrlecit®	Venofer®	Ferinject®
Manufacturer	AMAG Pharmaceu- ticals	Luitpold Pharmaceu- ticals	Pharma- cosmos	Pharma- cosmos	Sanofi- Aventis	Vifor Int.	Vifor Int.
Chemical Properties							
MW [kD]	750	265	165	50-100	<50	30-100	>100
Complex stability	High	High	High	High	Low	Moderate	High
Acute toxicity	Low	Low	Low	Low	High	Medium	Low
Dosing							
Test dose required	No	Yes	Yes	No	No	Yes*/No	No
Maximal dose	-	20 mg/kg	20 mg/kg	20 mg/kg [#]	62.5-125 mg	200-500 mg	20 mg/kg [#]
Infusion time	-	360 min	360 min	60 min	60 min	30-210 min	5-15 min ⁺
Max. injectable single dose	510 mg	100 mg	100 mg	200 mg	125 mg	200 mg	15 mg/kg [#]
Min. injection time	2 min	2 min	2 min	Bolus push ⁺	10 min	10 min	Bolus push ⁺
Safety profile							
Risk of anaphylaxis	No	Yes	Yes	No	No	No	No
Relative risk of serious adverse events	Moderate	High	Moderate	Low	Low	Low	Low

Table 3.2: Intravenous iron compounds (adapted from 8, 17, 19 and the prescribing information of marketed iron products). MW: molecular weight; n.a.: not available; * only in Europe. [#] Maximal dose 1,000 mg. ⁺ dose-dependent. **Note:** Labels/Summary of Product Characteristics often vary from region to region.

IV Eisenpräparate / International