Drug Information Table

Iron preparations – ferrous sulfate (Feosol), iron dextran (INFeD)

Therapeutic Use	Administration	Administration
• Iron-deficiency anemia • Prevention of iron-deficiency anemia for patients at risk (infants, children, pregnancy, ongoing blood loss)	ferrous sulfate (Feosol) • Liquid preparations ◦dilute in another compatible liquid ◦give through a straw ◦rinse with water • Spread doses evenly across waking hours to maximize the production of RBCs • Give the drug on an empty stomach for best absorption • Make sure patients do not crush or chew the sustained-release forms • Expect to discontinue the drug when anemia resolves (usually 1 to 2 months) • Recommend foods high in iron (liver, egg, yolks, muscle meats, whole grain cereals, leafy green vegetables) • Ensure dose of selected preparation is adequate in regard to providing needed amount of elemental iron • Monitor Hgb, Hct, and reticulocyte count	iron dextran (INFeD) • Give test dose first – follow with prescribed dose 1 hour later due to possibility of anaphylaxis • Have epinephrine available for hypersensitivity reaction • Administer using 2-3 inch long needle using Z-track technique • Give prescribed doses no faster than 12.4 mg/min. or dilute in 250-500 mL and infuse no faster than 50mg/min • Monitor blood pressure closely due to risk for hypotension • Don't take oral form of iron when receiving iron dextran • Monitor Hgb, Hct, and reticulocyte count
Side/Adverse Effects	**Interventions**	**Patient Instructions**
• Nausea, constipation, heartburn, diarrhea • Metallic taste in mouth (iron dextran)	• Recommend taking it with food for severe symptoms (but doing so reduces absorption). • Consider recommending a lower dosage. • Monitor bowel patterns. • Give patient hard candy to suck on or gum to chew for metallic taste in mouth	• Take it with food to minimize gastrointestinal effects, but understand that this reduces absorption. • Be patient; these effects diminish as drug therapy continues. • Report persistent gastric irritation. • Expect dark green or black stools (harmless discoloration). • For constipation, increase exercise and fluid and fiber intake. • Recommend patient suck on hard candy or chew gum for metallic taste in mouth
• Staining of teeth (liquid form)	• Monitor for staining.	• Dilute liquid forms with water and drink it through a straw; use a dropper to give it to infants. • Check the label; some liquid forms are compatible with milk and juice; some are not. • Rinse the mouth after taking it.
• Fatal iron toxicity (overdose in children)	• Do not give children more than 2 to 20 g. • Monitor for toxicity: severe gastrointestinal symptoms, shock, acidosis, and liver and heart failure. • For toxicity, administer a chelating agent, deferoxamine (Desferal), parenterally.	• Store iron preparations in childproof containers and away from children's reach. Use a locked cabinet if necessary.
Contraindications	**Precautions**	**Interactions**
• Hemolytic anemia • Severe liver disease • Peptic ulcer disease, ulcerative colitis, regional enteritis	• Liver disease • Gastrointestinal disorders	• Antacids and tetracyclines reduce absorption. • Iron also reduces absorption of tetracycline. • Vitamin C increases absorption, but also increases the risk of gastrointestinal effects. • Absorption of penicillamine (Cuprimine), a chelating agent, decreases.