

PROTOCOL: IRON SUCROSE

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Iron Sucrose (Venofer[®]) is a safe intravenous preparation of iron for those who need iron and do not respond or cannot take oral iron.

Side Effects

Iron sucrose has not been associated with anaphylaxis which makes it the preferred drug for parenteral iron supplementation. No serious adverse effects have been seen including no hypotension. Occasional patients (5-10%) may have a transient metallic taste and hot flashes.

Indications

Selected patients with:

1. Severe antepartum iron deficient anemia non-responsive (or intolerant) to oral iron replacement
2. Anemia in a high-risk setting requiring quick replacement of iron stores:
 - a) placenta previa/accreta
 - b) Jehovah's Witness or other decliners of blood transfusions
3. Severe anemia from obstetric hemorrhage
4. Post autologous donation with need for rapid replenishment

In indications 2-4, there is additional consideration for recombinant human EPO (300 units/kg SQ, once) which combined with iron sucrose gives the most rapid response.

Administration

Option 1:

500 mg Iron Sucrose in NS 250 ml administer over three (3) hours; repeat in 3-7 days to reach 1 gm.

Option 2:

200 mg in NS 100 ml administer over 20-30 minutes, may repeat every other day to reach target **Fe need**; see below.

Calculate Fe (Iron sucrose) need:

$$\text{Fe need} = \text{wt (kg)} \times 0.24 \times \Delta\text{Hgb (gm/L)} + 500\text{mg}$$

↑
= target - current

Example: 70 kg woman with Hgb of 7.0 gm/dL and a target of 11 gm/L

$$= 70 \text{ kg} \times 0.24 \times (\text{target: } 110 \text{ gm/L} - \text{actual: } 70 \text{ gm/L}) + 500 \text{ mg}$$

Remember: 7 gm/dL = 70 gm/L)

Remember: Use **pre-pregnancy**

weight (kg)

$$= 672 \text{ mg} + 500 \text{ mg} = 1172 \text{ mg}$$

increments)

(This is usually rounded off to 100 or 200 mg

References:

Breymann C, Visca E, Huch R, Huch A. Efficacy and safety of intravenously administered iron sucrose with and without adjuvant recombinant human erythropoietin for the treatment of resistant iron-deficiency anemia during pregnancy. *Am J Obstet Gynecol* 2001;184: 662-7.

Ragip A, Unlubilgin E, Kandemir O, Yalvac S, Cakir L, Haberal A. Intravenous Versus Oral Iron for Treatment of Anemia in Pregnancy. *Obstet Gynecol* 2005;106:1335-40.