# Iron Sucrose Protocol

## Obstetric Care for Women who Decline Transfusions (Jehovah's Witnesses and others)

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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. Occasionally, patients (5-10%) may have a transient metallic taste and hot flashes. [1, 2]

**Indications**

Selected patients with the following:

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 erythropoietin (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 administered over three (3) hours; repeat in 3-7 days to reach 1 gm.

**Option 2:**

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

**Calculate Fe (Iron sucrose) need:**

**Fe need = wt (kg) x 0.24 x △Hgb (gm/L) + 500mg**

**= target - current**

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

**=** 70 kg **x** 0.24 **x** (target: 110 gm/L **—** actual: 70 gm/L) **+** 500 mg

Remember: 7 gm/dL = 70 gm/L
Remember: Use **pre-pregnancy** weight (kg)

**=** 672 mg **+** 500 mg **=** 1172 mg (This is usually rounded off to 100 or 200 mg increments)

## References

1. 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(4):662-7.
2. Al R, Unlubilgin E, Kandemir O, Yalvac S, Cakir L, Haberal A. Intravenous versus oral iron for treatment of anemia in pregnancy: a randomized trial. Obstet Gynecol 2005 Dec;106(6):1335-40.