Iron Supplements for Restless Legs During Sleep

Children who have restless, “wiggly” legs during sleep are sometimes found to have low blood iron levels. As part of your child’s sleep assessment, we’d like to do a blood test to check their iron stores in the body.

**Ferritin and iron profile**

The tests we use to check your child’s iron levels are called the ferritin and iron profile tests. Ferritin is a protein in the blood that binds to iron. The iron profile includes total iron level, and two other proteins that indicate the percent of iron stored in your child’s body. Since most of the iron stored in the body is bound to ferritin, if the ferritin is low, the amount of stored iron in the body is low. But, because ferritin can be affected by many things, we need to check the iron profile as well.

**Test results**

If your child’s ferritin level is low or even low normal (below 50 ng/dl), we will likely prescribe an iron supplement. Having a low ferritin level is not the same as being anemic. If the ferritin is low, this is a reflection on the level of iron stored in the body in the liver, spleen, muscles and bone marrow. We want to build up these iron stores.

**Iron supplements – read the label**

We often recommend supplements with iron called ferrous sulfate. This is sold over the counter at many drug stores and pharmacies and comes in tablets, capsules or liquids. However, there are many different forms of iron available (not just ferrous sulfate). See our example list below.

You may notice two different amounts of iron listed on the same package. The higher number is the total amount of iron in the supplement. The smaller number is the amount of elemental iron. Elemental iron is the amount of iron in the supplement that your body can absorb. The provider’s prescription is based on the amount of elemental iron.

**Examples of over-the-counter iron and their elemental dose**

Here are examples of iron supplements. The elemental iron dose may be listed on the bottle but can be hard to find. It is usually listed in the Supplement Facts panel.

Some insurance companies may cover the cost of the iron. Your pharmacist can either dispense it as a prescription for you, or assist you in finding the correct over-the-counter form that matches the prescribed amount.

**Liquid**
- Ferrous sulfate, typically 15 mg elemental iron per 1 mL
- Polysaccharide iron complex (e.g., “Nova Ferrum”), typically 15mg elemental iron per 1 mL

**Tablets**
- Ferrous sulfate, 325 mg = 65 mg elemental iron
- Ferrous sulfate (e.g., “Slow Fe”), 142 mg = 45 mg elemental iron
- Polysaccharide iron complex (e.g., “Niferex” or “Poly-Iron”), 150 mg elemental iron per capsule

**Chewables**
- Ferric pyrophosphate (e.g., “Natural Factors Easy Iron”), 20 mg elemental iron per tab
- Iron glycinate (e.g., “VegLife Vegan Iron Chewable”), 18 mg elemental iron per tab

**To Learn More**
- Sleep Disorders Clinic
  206-987-5072
- Ask your child’s healthcare provider
- seattlechildrens.org

**Free Interpreter Services**
- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.
**Tips for taking iron**

- Liquid iron does not taste very good, but this may be the only choice for young children who cannot swallow a tablet. There are some better-tasting options typically found online; or ask your pharmacist.
- Iron is most easily absorbed by the body on an empty stomach, but all forms can be given with food (except milk or other dairy products) to mask taste or help with stomach upset. It won’t affect the iron.
- Give iron with orange juice or a vitamin C supplement. Iron is more easily absorbed when it is taken with vitamin C.
- Do not give your child milk or dairy products or antacids/reflux medicines within one hour of giving an iron supplement. Iron absorption is reduced when taken with these products.
- Too much iron can be dangerous. It is very important to make sure your child’s iron supplements are kept out of reach of young children and given only as directed by your healthcare provider.
- Check with your pharmacist or provider before taking other medicines.

**Ways to help with the side effects of taking iron**

Common side effects of iron supplements are constipation, stomach pain, darkened stools, and staining of the teeth.

- To prevent constipation, make sure your child is getting several glasses of liquid and lots of fiber in their daily diet. Cooked dried beans, nuts, whole grains, fruits and vegetables are all great sources of fiber.
- If the iron causes stomach upset, you may split the total daily amount into two doses – one in the morning, one in the evening. Iron can turn stools dark (black). This is normal and not a concern.
- Liquid iron is more likely to cause staining of the teeth than pill form. Have your child rinse their mouth out each time after taking the iron.

**How long will my child take iron?**

It can take 3 months or more to adequately increase ferritin levels. Blood tests need to be done during this time to ensure that iron levels have not gotten too high. Watch to see if your child’s restless legs have improved (settled down) while on iron therapy. Talk to your primary healthcare provider about when to repeat blood work and when to stop or continue iron therapy.

Check with your healthcare provider first before giving other medicines with iron supplements and before giving any medicine or supplement to your child.