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Iron for Heart Failure

Most of the iron we see in our facilities is employed in the treatment of anemia. It is also an important part of chronic heart failure (HF) treatment when iron deficiency is present. This makes sense, because hemoglobin requires iron for oxygen transport and delivery to the heart muscle and other tissues.

In the *CONFIRM HF* trial, i.v. iron supplementation yielded impressive results. Those in the treatment group improved their six-minute walk distance by 33 meters when compared to placebo treated patients. Trial patients had moderate to severe HF (NYHA class 2-3) with coincident iron deficiency. Surprisingly, iron was considered to be deficient when ferritin levels fell below 225 pmol/L. This is well above the typical lower limit of normal, which is in the 20 – 25 pmol/L range. It appears we should reconsider when iron should be initiated.

Of course, evaluation of iron status is not so straight forward. Ferritin is the principle protein bound storage form of iron in the body. Its levels can be markedly elevated in the presence of inflammation, however, masking iron deficiency. Transferrin (the iron-protein complex that transfers iron to hemoglobin) saturation can also be used to assess iron stores. When transferrin saturation is below 20%, iron is considered to be deficient and should be supplemented. Unfortunately, transferrin saturation is tricky to gauge, as it fluctuates throughout the day. It also can be falsely elevated in the poorly nourished elderly, leading to unrecognized deficiencies.

The *FAIR HF* trial showed similar benefits to *CONFIRM*. Iron should be employed more frequently as it can improve functional capacity, symptoms and quality of life in our CHF residents.

Sleep Tight with Doxepin

Doxepin is an older tricyclic antidepressant drug that is rarely used nowadays. It has very strong antihistaminic properties and is occasionally used for pruritic rashes. Unfortunately, it can cause sedation, dizziness, confusion, constipation, etc. and is listed in the Beer's List of potentially inappropriate drugs.

In recent years, two lower strength forms of doxepin, 3mg and 6mg have become available. At these low doses, the side effect profile is similar to that of placebo and renewed interest has developed in using this drug to treat insomnia.

In three key trials of low dose doxepin (Silenor®) in the elderly, total sleep was extended by 25-30 minutes, with both strengths having very similar effects. Sleep quality and efficiency were also improved, compared to placebo. The dropout rate was very low with no carryover sedative effects the next day and no increase in confusion. It seems that only anti-histaminic (sedative) effects are present at this dose, while anticholinergic responses are triggered with higher antidepressant doses.

Silenor® should be considered as a safer alternative to benzodiazepines for insomnia. Since it is not a Targeted Drug, storage and documentation obligations are diminished. Unfortunately, ODB coverage is not yet available and the medications cost is nearly $30 per month.

No More Drips

You may notice that special bottle tips have been inserted into most of your low volume liquids in recent weeks. These are compatible with our oral dosing syringes, are spill proof and allow more precise measurement of phenytoin and liquid narcotics. Enjoy!

GeriatRx PHARMACY

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