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Post-MI Statins

Statins are one of the primary drug groups that have been targeted for deprescribing. They can promote diabetes, muscle weakness/falls and liver abnormalities, while benefits are less clear in the elderly than in younger populations.

With these concerns in mind, it was surprising to see the results of a sub-analysis of the IMPROVE-IT cardiovascular trial, published in *JAMA Cardiology*. The trial compared simvastatin 40mg alone, vs. simvastatin with another lipid lowering drug, ezetimibe 10mg, in preventing the primary endpoint; CV death, MI, stroke, unstable angina hospitalization or revascularization more than 30 days after hospitalization for ACS (acute coronary syndrome - severe chest pain/MI). The original results from the trial showed no significant benefit with the addition of ezetimibe.

The latest analysis of patients over 75 years of age showed they had a robust response. The number needed to treat (NNT) to prevent the primary outcome was just 11, through

seven years of treatment. The combo was also safer than high dose statin used alone. Don't pour your lipid lowering meds down the drain, especially after a coronary event.

Easy on the Thyroid

Hypothyroidism is a very common disorder. It is easily treated by supplementation with thyroid hormone, levothyroxine (T4), except where complex autoimmune processes or rare subtypes are involved. More than 20% of our residents take one of the two forms of synthetic T4, Eltroxin® or Synthroid®.

The main parameter used to track thyroid function is thyroid stimulating hormone (TSH). TSH is released into the bloodstream by the pituitary gland in response to low levels of T4 and T3 (the other thyroid hormone). When the thyroid gland is faltering, more TSH is released to bolster T3/T4 release from the thyroid. Moderately elevated TSH levels (4.5 - 10) suggest hypothyroidism, but in many cases the thyroid gland releases normal amounts of T4 into the bloodstream. T4 therapy is usually not warranted in this condition, called subclinical hypothyroidism.

In our later years, natural production of T4 and T3 decreases, with TSH usually increasing in response. BMI and metabolic rate decrease, so

thyroid requirements diminish. With increased TSH, there may be a temptation to increase T4 dosage. Too much thyroid hormone can cause muscle weakness, falls, osteoporotic fractures and life-threatening arrhythmias, so we want to use this hormone very judiciously.

A retrospective study combining ODB data with data from Ontario hospitals sought to quantify fracture risk. The study examined over 200,000 seniors from 70 to 105 years old taking levothyroxine. Over 3.8 years (ending March 2008), 10.4% of patients experienced osteoporotic fractures. Moderate (44 - 93mcg daily) and high (greater than 93mcg daily) doses were associated with a significantly higher fracture risk than low doses. Hip fracture risk was especially problematic. It was 2.5 times greater with moderate doses and 3.4 times greater with high doses of T4. As our residents age, reducing T4 doses, rather than maintaining or increasing them may be necessary to prevent fractures and other potential adverse effects.

GeriatRx Videos

We've added some videos to www.geriatrx.com. Our digital Drug Record Book is highlighted in the first animated clip, then we have a longer, more comprehensive recording. Have a look. You may even recognize some of your favourite staff members!

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