



The GeriJournal

Volume 7, Number 12

December 2012

A publication of GeriatRx Pharmacy

CV Risk Reduction

We were treated to an evening of food and food for thought a few weeks ago. Dr. Harpreet Singh Bajaj focused on two areas that are critical in both the community and in our senior care facilities; reducing CV events such as MI or stroke and safely reducing blood sugar in diabetics with minimal hypoglycemic risk.

There is a tremendous amount of information supporting cholesterol reduction as a means of lowering CV risk. The *Canadian Cardiovascular Society* guidelines indicate that anyone with a 20% event risk (e.g. history of coronary artery disease, peripheral vascular disease or past stroke) should have their LDL cholesterol reduced to 2.0 or less. Studies such as *CARDS* (Lipitor® vs. placebo in a diabetic population), show that lowering LDL from 3 to 2, lowers the risk of a CV event by 37%.

Even if we don't reach the target of 2.0, each 1% reduction in LDL reduces event risk by 1%. Benefits are seen after just one year of

treatment and seniors benefit more than their younger counterparts. LDL levels below 2.0 can be difficult to achieve with a statin alone, since high doses are only slightly more effective than moderate doses. Ezetimibe (Ezetrol®) can be added to a statin to produce a much greater LDL reduction.

On the topic of diabetes, Dr. Bajaj indicated that many oral agents (e.g. Diamicon® and glyburide) lower sugar and A1C effectively, but can often cause hypoglycemia. Newer *DPP4* inhibitors (e.g. Januvia®) yield similar A1C reductions, but hypoglycemia risk is reduced considerably. Januvia® + metformin carries a 5% risk of hypoglycemia vs. a 32% risk when Diamicon® is combined with metformin.

Atrial Fib News

Atrial fibrillation (AF) and other significant arrhythmias are known to occur in people with elevated thyroid hormone levels. Now, an observational study of over half a million people published in *BMJ* indicates that even subclinical hyperthyroidism increases the risk of AF significantly.

Individuals with subclinical hyperthyroidism have low TSH levels suggestive of hyperthyroidism, but their free T3 and T4 levels are in the normal range. These patients are 30% more likely to

develop new-onset AF than those with normal TSH. Interestingly, hypothyroidism & subclinical hypothyroidism protected against the development of AF.

In another AF development, an analysis of the AFFIRM trial published in the *European Heart Journal* showed that digoxin likely increases all-cause mortality. Patients with heart failure benefitted from digoxin, as they had fewer hospitalizations, but those being treated for AF only were 61% more likely to die. Unless alternatives, such as β -blockers or calcium channel blockers cannot be used safely, digoxin should be avoided in isolated AF. Patients with both heart failure and AF may still be treated with digoxin, but the dose should be low and the patient monitored closely.

K-Citrate for Bones

A study released in the *Journal of Clinical Endocrinology and Metabolism* has shown us a new option in fracture prevention. Potassium citrate, 60 mEq daily (the same amount of potassium as 7 or 8 Slow K tabs) increased bone density in elderly men and women. Less calcium was lost in the urine of these subjects and it was concluded that K-citrate reduced acid load in the body and leeching of calcium from bone. K-citrate may be a new low cost, non-prescription option for fracture prevention.