Alternate-Day Statin Dosing May be as Effective, and Cheaper

By ACSH Staff — February 14, 2013

Here is some good news [1] for those of you among the millions taking statins you may not need to take them daily. Statins may have the same cholesterol lowering effects when given every other day, supported by the fact that it takes several weeks for cholesterol levels to return to baseline after treatment with statins is stopped. Further supporting this concept is the fact that total cholesterol levels and LDL-C (bad cholesterol) levels decrease gradually and do not reach a steady state until about 6 to 8 weeks after beginning statin therapy.

In a 1999 study of 69 patients randomized to two groups, one given 10 mg of simvastatin every day and the other group given the same dose every other day, no difference was found in the LDL-C value between the two groups at the 6 month follow-up. In another study involving the randomizing of participants into three groups, one taking 10 mg of atorvastatin (Lipitor) every other day, one taking 10 mg every day and the last taking 20 mg every other day over a period of six weeks, it was found that the reduction of LDL-C was lowest in patients taking 20 mg every other day, but this was complicated by the fact that those patients receiving 10 mg every other day had higher levels of LDL-C at the start. And Metz and Lucas, in a 2001 study, cautioned that it is difficult to predict which patients will benefit most from alternate-day therapy.

A shift in the routine prescribing of statin therapy to every-other-day would have important implications. Alternate day treatment will be less expensive, and non-daily dose of certain statins may reduce the already-low but concerning incidence of musculoskeletal pain and weakness that can be a side effect of statin use. But ultimately, in order to make definitive conclusions, more large-scale studies with longer follow-up periods are needed.

ACSH’s Dr. Josh Bloom adds, This makes sense, since not only are the half-lives of statins fairly long, but as a secondary effect to inhibiting cholesterol biosynthesis, the liver expressed more LDL receptors, which help clear LDL (bad cholesterol). This effect will certainly not go away in the day during which a pill is skipped.