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Editor's Note

Statin Associated Symptoms

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In January 2006, I had an opportunity to interview Dr. Robert Vogel from the University of Maryland on a very clinically relevant topic: statin associated symptoms.[1] I believe this topic is timely because many patients are aware of the side effects of statins because of what they read in the newspaper or on the Internet. Patients are concerned that every possible symptom one can imagine may be related to the ingestion of a statin to lower lipids. Obviously, statins are important medications that should not be discontinued unless they are harming the patient. Every randomized study that has been done shows a decrease in mortality in patients taking statins because they reduce cardiovascular disease significantly. Several studies have shown by intracoronary ultrasound that statins reduce the progression of atherosclerosis in the coronary circulation. Thus, it is important to separate common symptoms, such as aches and pains that we all have, from symptoms related directly to statin use.

It is difficult to estimate how many prescriptions for statins have been written in the United States, but I suspect that if stacked end to end they might reach the moon.

If statins are so commonly prescribed for our patients, it seems to me that we should have seen a huge amount of undesirable side effects if this class of agents was detrimental to their health, for example, liver dysfunction, myalgias, myositis, and the extremely rare but potentially deadly rhabdomyolysis. In my experience, liver function abnormalities, which we all test for occasionally, rarely produce symptoms.

In randomized trials, approximately 5% of individuals on statins get "myalgias." However, among patients receiving placebo, almost the same percentage of patients report myalgias. The vast majority of patients taking statins will report some symptoms, for instance, muscle aches and joint aches, hair loss, forgetfulness, dry skin, etc. In the same randomized controlled trials, the number of patients on placebo complaining of these symptoms is almost the same.

Dr. Vogel had some very important advice for those of us who prescribe statins for our patients, and also for the patients themselves. He makes it a point of asking the patients, prior to even discussing statins, whether they are experiencing aches and pains, such as muscle or joint pains. That information is included in the patient's record and then statins are discussed. If aches and pains do occur, we as physicians can then refer to their medical intake chart and indicate to the patient that they reported these symptoms before they started the statins.

All of us have had the experience of patients returning for outpatient visits and indicating that they stopped their statin a month or so prior to the visit because of concerns about statins causing their muscle aches. Unfortunately, measuring the creatine kinase (CK) at that point in time is more or less useless, since nothing will be shown. So, it makes good sense that when starting a statin for the first time, the patient be given some sort of prescription slip to have a creatine kinase measured at the time they are having symptoms, before they stop the statin. The two main questions here are (i) was the CK elevated? (ii) was the CK obtained while they were having the symptoms?

Another point to be made is that aches and pains due to statins generally occur in large muscles. The aches and pains are generally symmetric, for example, including soreness, tenderness, and often weakness. However, if the CK is normal, then it is highly unlikely that the

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symptoms are related to myositis secondary to statin ingestion.

In clinical practice, symptoms occur most commonly in older females who are on multiple medications. Therein lies another problem, the one of drug interaction. In fact, I cannot think of a patient of mine who is taking only a statin; they are always prescribed another medication in addition. It is quite important for the physician to review the patient's medications and find out which of them interacts with the statin that they are prescribing.

The next point is, what do you do about an elevated CK in a patient who is having symptoms while taking a statin? Quite frankly, I worry about it. If it is only slightly elevated, my practice is observation and repeat measurement. If the CK remains elevated, for example, twice the normal value, I generally reduce the dose or switch to another statin and repeat CK measurement. On the other hand, if it is ten times the normal value, then I think it is important to discontinue the drug. In such a patient, the use of ezitimide can be considered, since the compound is a lipid-lowering agent that should not result in aches and pains and might be quite useful to manage the patient's hyperlipidemia.

Several years ago, I took informal polls at two continuing medical education (CME) cardiovascular meetings, one at Disney World and the other in Hawaii. The poll was centered around the number of people who are taking a statin. It was interesting to see the results.

The number of program participants (including faculty) taking a statin with one or more of the usual risk factors, such as treated hypertension, hyperlipidemia, old myocardial infarction, treated diabetes, symptomatic coronary artery disease, was 56 of 83 (67.4%). The number of participants taking a statin without any of the usual risk factors was 27 of 83 (32.5%). Thus, a significant number of individuals responding to this survey had none of the risk factors, yet were trying to lower their cholesterol by taking a statin.

This data paints a picture that although many cardiovascular specialists are adhering to guidelines, many are also ignoring them and aggressively lowering their lipids, most commonly with a statin, despite the absence of risk factors. Should this be a message for the general population?

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Editor-in-Chief

Reference

1. CARDIOSOURCE: ACCEL: How to Manage Statin-Associated Myalgias. Interviewee: Robert A. Vogel, M.D., F.A.C.C., Interviewer: C. Richard Conti, M.D., M.A.C.C. ACCEL. . .Posted Date: 4/1/2006