CHOLESTEROL DRUGS

Doctors and scientists have known that high cholesterol was associated with getting heart disease since the 1940s. But just like with blood pressure, we did not know if lowering cholesterol would prevent heart disease. In fact, when scientists first studied the effect of lowering cholesterol with drugs, some of the drugs seemed to INCREASE risk of death (even though they lowered cholesterol). But by the 1980s several drugs had been found that lowered bad cholesterol—or raised good cholesterol—AND prevented heart attacks. We have been using these drugs, and their close cousins, ever since.

Far and away the most common cholesterol lowering drugs are the ones called **statins.** All statins work by preventing your body from making cholesterol. Therefore, they are especially effective if you don't eat much cholesterol. **It's important, therefore, to keep up your dietary changes even if you are put on a drug.**

Because they have been around for a long time, several statins have become available as generic drugs—lovastatin (brand name Mevacor), simvastatin (Zocor) and pravastatin (Pravachol). Other statins are Lipitor (the best selling drug in America), Crestor, and Lescol. If you take a statin, or if your doctor thinks you should take a statin, you should know the following facts.

STATIN FACTS:

1) All statins lower LDL (bad) cholesterol very well. They don't do much to HDL (good) cholesterol or triglycerides, but any change they do cause tends to be in the healthy direction.
2) Statins have been proven to prevent heart disease and stroke, as well as death from these illnesses. By this I mean when they take a group of people at risk for heart attack and give them either a statin or a placebo (sugar pill), the people getting the statin have fewer heart attacks than those who get the placebo. Almost all mainstream scientists believe this, and it seems to apply to all of the statins that are on the market. It also seems to apply to almost anyone who is at high risk of a heart attack, even if their cholesterol level is not all that bad. So even people who have low levels of bad cholesterol—for example, 90 mg/dl—might benefit from a statin if they have diabetes or have had a heart attack or stroke.
3) When different doses have been compared, the people who get the higher dose of statin usually come out ahead.
4) The main side effects of statins are on the muscles. Very rarely—perhaps in 1 of 10,000 people taking statins—muscles are seriously damaged and release chemicals

that can cause kidney damage. A more common side effect is muscle aching and easy muscle fatigue, which happens to about 1 in 100 people taking these drugs. Because people not taking statins also can get these symptoms, it is often hard to tell if they are from the drug. In this situation, it is very important that the doctor and patient understand one another. f the side effects are mild—for example, muscle aches—a doctor might ask the patient to try a lower dose or switch to a statin that is less likely to cause this side effect. It seems that pravastatin is least likely to do this. But if you are at high risk of heart attack and stroke, your doctor is likely to want to find a statin that you can take, even if your first one makes your muscles ache. If you are one of the rare people who have the kind of muscle damage that injures your kidneys, most doctors won't want to take a chance on trying a different statin.

5) Although some people talk about using a dietary supplement, **CoEnzyme Q10**, to decrease the risk of side effects from statins, these have not been well studied. I don't routinely recommend CoEnzyme Q10, but I don't try to talk my patients out of it if they want to use it.

The other drugs for cholesterol are less well established. However, most doctors agree that **niacin** and a group of medicines called the **bile acid sequestrants** do reduce the risk of heart disease by lowering bad cholesterol. Another drug, **gemfibrozil,** seems to reduce the risk of heart disease as well, although it is probably because it raises good cholesterol. These drugs have all been used for many years and are available as generics.

Fish oil does not have much effect on cholesterol, but it does improve triglycerides, another fat in your blood that is associated with heart disease. There is some evidence that people who have a heart attack can reduce their risk of a second heart attack if they take fish oil. A new drug, **ezetemibe (brand name Zetia),** also lowers bad cholesterol, but it is not clear that it prevents heart attacks, so it is generally the last one used. It is the ingredient in **Vytorin** that got all the bad newspaper coverage in early 2008. On the positive side, it seems that the concern that it causes cancer turned out to be a false alarm.

The decision whether a person should take a drug to lower bad cholesterol can be a hard one. The scientific evidence really does suggest that these drugs, especially the statins, lower heart disease risk for many people who take them. This is particularly true if the person takes the medicine regularly and also pays attention to diet and exercise. On the other hand, all drugs have side effects and if someone is not very likely to have a heart attack in the first place, the benefit may not be worth the risk. This is a great example of a situation where the doctor and the patient really need to talk. The doctor probably knows more about your risk of a heart attack with and without the drug and may also be able to give you his impression of which drug would work best for you. But only you can say how much it bothers you to be taking a pill—or another pill—every day.