

Understanding your risks for Heart attack and Stroke

When it comes to cardiovascular disease (CVD) most of us know that high blood pressure and cholesterol are important risk factors to control. However a recent study, called JUPITER (Justification for the Use of statins in Primary prevention: an Intervention Trial Evaluating Rosuvastatin), found that more emphasis should be placed on CRP levels. CRP is a marker of cardiovascular inflammation. In the study, researchers looked at people with low or normal levels of cholesterol, no traditional risk for CVD, and high CRP levels. Normally we would think these people would have a relatively low risk of CVD and treatment is not necessary. However, in this study one group was treated with 20 mg of Crestor and the other with placebo. The active group had 44% less incidence of strokes and heart attacks as compared to the placebo group. So while the study aimed to justify use of statins therapy in subjects with normal cholesterol, it also proved cholesterol and blood pressure are not the only risks to look at.

The research from the JUPITER study suggests that traditional risk factors like cholesterol and blood pressure provide only a fraction of the answer to cardiovascular risk. We know that CRP can be thought of like a marker for arterial inflammation, what we did not know is the dramatic effect it can have to prevent heart attacks and strokes. In theory, higher CRP levels reflect a higher level of inflammation within the artery. The higher inflammation within the artery creates instability within plaques (atherosclerotic). An unstable plaque leads to greater incidence of heart attack and stroke. The JUPITER study definitely adds validity to this theory. In addition, it tells us is that CRP levels need to be higher on the list of risk stratification. Moreover, CRP may be just as important as blood pressure and cholesterol. We will have to wait to see if the research bears that out. What is important from here is how to implement this into clinical practice. Beyond statin drugs, are there other ways to lower CRP levels?

There are as many ways to lower CRP levels as there are causes for elevated CRP levels. Therefore, to lower the levels we must find and treat the cause. Things like infections and flares in autoimmune disease, cause transient elevations. Chronic elevations of this inflammatory marker are more worrisome and can come from things like unhealthy lifestyle (smoking, lack of exercise, high saturated fat diet). An example, would be eating fried foods verses fresh fruits and vegetables. In addition to the high antioxidants that quench the inflammation, there is a negative shift in essential fatty acids that come along with fried food consumption. This shift acts as a catalyst to inflammation and promotes the process. So certainly there are lifestyle factors that influence CRP levels. As this JUPITER study points out, statin drugs do a relatively good job at lowering CRP levels. However, statin drugs do have their down side, and there are a multitude of natural oral substances that do an excellent job at lowering CRP levels as well. Regardless if you use natural or statin drugs to lower CRP levels, it is clear they need to be lowered. (It is important to note that traditional over the counter anti-inflammatory medications should not be used for this problem, as it may make things worse).