Aspirin Therapy 2015

Aspirin is an over the counter medicine with great powers to reduce fever, decrease pain and inflammation, and prevent clotting. Its uses in medicine have been many but mainly it has been used to help prevent strokes and heart attacks. Unfortunately, aspirin also has the ability to cause great harm such as ulcers and bleeding. Due to recent studies, there have been some changes regarding when we use aspirin.

First, I feel it is important to define two terms: primary and secondary prevention. In primary prevention, we are trying to stop a first event, i.e. a heart attack. The purpose of the medicine is to prevent an event from occurring. In secondary prevention, you already had the event, i.e. a stroke, and the medicine helps to keep you from having another event.

There is strong evidence that aspirin has a great benefit in secondary prevention of stroke and heart attack. In fact, a daily aspirin reduces the risk of a second event by 25%. There are numerous studies showing this, so all people in these groups should take it. The question that remains is, at what dose? There is no evidence that any dose higher than 81mg is needed. All you get with higher doses are more complications. There are a few instances where we choose a dose higher than 81mg, but check with your doctor.

Primary prevention has been the point of controversy. For years, we have recommended aspirin to most people in the hopes of stopping a first heart attack. A recent study from November 2014, followed 14,464 people aged 60-85, and found no benefit to 100mg of daily aspirin over five years for primary prevention of stroke or heart attack. This is in line with other studies over the last six years that have questioned aspirin's abilities in primary prevention. The data is so strong it caused the American Heart Association to change its position and say that routine aspirin use needs to be an individualized decision for each patient.

So, who should take aspirin for prevention? You may remember that a new algorithm for determining your risk of heart attack or stroke was released two years ago. It has been used mainly to decide who takes cholesterol lowering drugs. We apply it to people 50 and older, and if your risk of an event is = 10 %, you should be on an 81mg aspirin. We also feel that people with chronic kidney

disease should take it as they most likely have heart disease.

There are still areas of uncertainty about aspirin. Studies are now being done to see if statins (cholesterol lowering drugs), mitigate the benefit of aspirin. I should also point out that a review of prior studies from 1950-2011 published in The Lancet in 2012, showed a reduction in colon, breast, esophageal, and biliary cancer with at least 20 years of a once daily aspirin.

As you can see, it is a complicated decision and like most things in medicine, likely to change. What you should understand is that just because it is an over the counter medicine, and on TV, it is not necessarily safe. You should discuss with your doctor if aspirin is right for you.

Who should take a daily 81mg Aspirin?

Secondary prevention

. Prior heart attack
. Prior stroke
. Peripheral artery disease
. Positive coronary calcium score

Primary Prevention

. Risk of event >10% by cohort risk analysis,(calculated during your annual physical)
. Chronic kidney disease