Cardiac Drugs That Cause Heart Attack

Before discussing the headline topic of this editorial, I have to address a personal matter. We've decided that it's time to update the photograph of me that appears atop this column. If the same photo had continued to be used, this may have implied that I am somehow escaping the dreadful scourges of aging.

At age 48, those who have known me for decades say that I behave and look as if I have not aged. While I have managed to stave off many of the consequences of aging, the fact is I am subtly growing older. This terrifies me enough to spend endless hours pursuing methods of slowing and reversing the human aging process.

The dilemma facing Life Extension members today is that we know that scientific breakthroughs will inevitably lead to dramatically longer and healthier life spans. The unanswered question is whether these advances will translate into therapies soon enough to save our personal lives. As you will read in this issue, scientists that we funded have discovered a drug that may enable humans to significantly delay and even reverse some aspects of aging. What's especially encouraging is that this anti-aging drug is available right now!

I will discuss some of the steps I am taking to stay healthy later in this article, but first I have to update members on breaking information relating to the improper use of cardiac drugs.

Nitroglycerin drugs and angina

Angina is a sudden intense pain in the chest, often accompanied by feelings of suffocation. The cause is a momentary lack of adequate blood supply to the heart muscle. People with occluded coronary arteries often suffer periodic bouts of angina.

Nitroglycerin temporarily dilates blood vessels and reduces the workload on the heart. Way back in 1879, nitroglycerin was first administered to an angina patient. It worked so well that nitroglycerin and other “nitrate” drugs have been used as standard angina therapy ever since.

The most famous person to use nitroglycerin was the late President Lyndon B. Johnson. Suffering from chronic heart disease, President Johnson relied on sublingual nitroglycerin pills to alleviate his constant angina pain. President Johnson became so reliant on nitroglycerin that he would be seen using it to get through his speeches. Upon retirement in 1969, Johnson was described as being “a worn old man at sixty.” President Johnson suffered multiple cardiac episodes after retirement and died of a massive heart attack at 64 years of age.

Lyndon Johnson engaged in most of the risk factors (smoking and overeating) that are known to cause coronary artery disease. One newly identified risk factor, however, may also have contributed to Lyndon Johnson’s early demise. It turns out that while nitroglycerin (and other nitrates
drugs) provide temporary relief from angina, the regular use of these nitrate drugs may increase future heart attack risk.

This startling new finding came from a Japanese study that involved 518 patients with suspected coronary artery disease. The patients were categorized in groups based on their degree of endothelial dysfunction and use of nitrate drugs. (Endothelial dysfunction is a measurement of inner wall arterial damage.)

These 518 patients were followed for 45 months to ascertain what patients were more likely to suffer major cardiovascular events. As expected, patients with severe endothelial dysfunction suffered significantly more heart attacks, strokes, bypass surgeries, congestive heart failure, etc. The surprising finding, however, was that those who regularly used nitrate drugs were 2.42 times more likely to suffer major cardiovascular events. The doctors concluded that the effects of nitrate drugs accelerate atherogenic processes and endothelial dysfunction and that nitrate drug use causes future cardiovascular events.

**The significance of this finding**

Millions of Americans with coronary artery disease have been prescribed nitrate drugs. We now have evidence that nitrate drugs accelerate arterial wall damage (endothelial dysfunction) and thus contribute to progression of coronary artery disease — the very disorder the nitrate drugs are prescribed to alleviate.

Angina patients who rely on nitrate drugs should bring this new information to the attention of their physician. Please note that the occasional use of a nitrate drug to relieve angina symptoms was not shown to be dangerous in the most recent study. It was the regular use of a nitrate or nitroglycerin drug that increased the risk of heart attack by 2.42 times within a 45-month period.

In last month's issue of this magazine, we published an article about an FDA-approved technique that has been shown to safely reduce angina symptoms. (see "A Non-Invasive Alternative To Coronary Bypass Surgery," Life Extension, May 2003, pp 54-60)

Dietary supplements that have been shown to help protect against endothelial dysfunction include folic acid, vitamin C, vitamin E, arginine, taurine and fish oil. It should be pointed out that if left untreated, endothelial dysfunction may become so severe that it is not possible to reverse it with currently available...
therapies.
You may not have heard the term "endothelial dysfunction" used much, but it is increasingly being described in scientific journals as a significant underlying cause of most forms of cardiovascular disease including hypertension, atherosclerosis and congestive heart failure.

The Life Extension Foundation is expending enormous resources to develop a safe method to reverse endothelial dysfunction. This is absolutely crucial to protecting the vascular systems of our aging members.

Are you taking the proper anti-hypertensive medication?

The Life Extension Foundation has repeatedly warned those with high blood pressure not to depend on one-a-day dosing of anti-hypertensive drugs. The reason is many of these drugs do not provide complete 24-hour protection. When an anti-hypertensive drug wears off, the patient is vulnerable to suffering a stroke. One solution to this problem is to take a lower dose of the anti-hypertensive drug twice a day, even though the FDA claims that one-a-day dosing is adequate.

Failure to keep blood pressure at optimal low levels (below 120/85) dramatically increases mortality risk. The government states that blood pressure readings as high as 140/90 are acceptable, but published human studies clearly show that maintaining levels below 120/85 confer longevity and protection against heart attack and stroke.

The best selling anti-hypertensive drugs in the United States are not necessarily the most effective. Drug company advertising and physician "force-of-habit" prescribing often results in hypertensive individuals taking drugs that do not provide optimal blood pressure lowering effects.

Life Extension long ago recommended a class of anti-hypertension drugs known as angiotension II receptor blockers. Some of the first drugs approved in this class were Cozaar® and Hyzaar®, and Life Extension suggested them as first line therapy. The only drawback to these drugs was that they did not provide consistent one-a-day protection.

A new drug in this class is called Benicar®, and a recent study indicates that it may be the first to provide true 24-hour blood pressure reduction. Typical starting dose of Benicar is 20 mg a day. For patients requiring further reduction in blood pressure, the dose may be increased to 40 mg a day after two weeks.

Optimal control of hypertension requires blood pressure checks throughout the day. This is the only way to make sure the anti-hypertensive drug is not wearing off and endangering the arterial system. Even if you are taking Benicar, it is still critical to verify that it is really keeping your blood pressure suppressed during the entire 24-hour period.

C-reactive protein causes endothelial dysfunction

It has been clearly established that elevated blood levels of C-reactive protein significantly increase heart attack and stroke incidence. We may now know why.

A new study from the University of California Davis Medical Center shows that endothelial dysfunction occurs very early in the atherosclerosis process. What the scientists found is that C-reactive protein plays a critical role in atherogenesis by inducing endothelial dysfunction (arterial wall damage).

This new finding provides an even stronger reason to test one’s blood for C-reactive protein every year. If elevated, simple steps can be taken to suppress this destructive inflammatory factor.

Life Extension has published numerous articles about the dangers of elevated C-reactive protein. An article appearing in the May 2003 issue entitled "Predict Your Risk of Disease To Avert Future Disasters" provided many safe methods of suppressing C-reactive protein.

Few practicing physicians know how to suppress elevated C-reactive protein. Most don’t even test their patients’ blood for it. As a reader of this publication, you learn how to protect your precious health by taking advantage of cutting edge scientific research.