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At What Age Can You Stop Taking Preventive Medications?

Or do you need to take statins and blood pressure drugs for the rest of your life?

We know that modifying certain risk factors can help prevent heart disease. Lowering high cholesterol, blood pressure and blood sugar levels are some of the ways we can avoid a heart attack.

Bringing levels down to lower our risk usually requires taking medications, in addition to making lifestyle changes. Many of us will take these medications for years, even decades, without wondering whether they are still necessary or beneficial after we reach a certain age. Should we be taking a cholesterol-lowering statin in our 80s? Does taking blood pressure medication in our 90s reduce our risk of heart attack?

The evidence needed to answer these questions is weak, since people over age 75 are significantly underrepresented in large clinical trials. This means the decision to use or discontinue preventive medications must be based on common sense and an evaluation of pros versus cons.

"We are at higher risk of cardiovascular disease as we get older, so we should derive more benefit from treatment. However, we are also at higher risk of side effects," says Cleveland Clinic preventive cardiologist Luke J. Laffin, MD. "As patients age, their physicians must weigh the benefits of a medication against the potential risks associated with taking it."

What Age Is Considered "Old?"

One important consideration involved in making the decision to prescribe or



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If you are an active senior, continuing to take medications your doctor prescribed to prevent a heart attack can help you maintain your quality of life.

discontinue a medication is how closely a patient's chronological age and biological age align.

"There are no absolutes in medicine," says Dr. Laffin. "Age is just a number. I have 90-year-old patients who run marathons and 70-year-olds who are frail. It can be more beneficial for an active elderly person to maintain tighter control over their blood pressure and cholesterol levels than a younger person who is sedentary."

Blood Pressure Medications

We used to think blood pressure rose with age, because it was necessary to perfuse older brains with oxygen. Today, we know that's not true. The results of two large studies—the Hypertension in the Very Elderly Trial and Systolic Blood Pressure Intervention Trial—showed that older people tend to do better with lower blood pressure.

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HEART BEAT



Illustration by Marty Bee

The Foods You Eat Help Determine How Well You Age

Most of us would like to live a long life, but only if we're healthy. No one would choose to grow frail, but that's what often happens. We become less active, slow down and get easily fatigued. Over time, we need help managing ourselves and our households. Eventually, we are unable to live alone and become dependent on others. Many factors are known to contribute to frailty, but the effect of diet was not studied until recently.

Researchers evaluated nearly 72,000 women ages 60 and older participating in the Nurses' Health Study and identified which ones followed a Mediterranean diet, Dietary Approaches to Stop Hypertension (DASH) diet or Healthy Eating Index-2010 diet from 1990 until 2010. Over this 20-year period, they assessed the women every four years for frailty using the following criteria: fatigue, reduced resistance, reduced aerobic capacity, having five or more illnesses and losing 5% or more of their weight. All three diets were associated with lower risk of frailty in all criteria except five or more illnesses. As explained in the April 2020 *American Journal of Clinical Nutrition*, the characteristics of these diets that were independently associated with a lower risk of frailty included low consumption of red and processed meat, low consumption of sodium, more monounsaturated fat than saturated fat, high consumption of vegetables and moderate alcohol use.



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Got Gout? You May End Up With Heart Failure, Too

A study reported online April 16 in *Arthritis Research & Therapy* has found that people with gout have nearly twice the risk of developing heart failure as people without gout. The finding was based on results of the 5,700-person Reasons for Geographic and Racial Differences in Stroke (REGARDS) study. Researchers looked at REGARDS participants who were age 65.5 or older without coronary artery disease, heart failure or stroke. The 3.3% who developed gout were older, more likely to be black and male, have a higher body-mass index and were more likely to have diabetes, high blood pressure and kidney disease than REGARDS participants without gout. Those with gout were more likely to have coronary artery disease, be hospitalized for heart failure and die from any cause than those without gout. After making adjustments, however, only risk for heart failure was significantly higher among those with gout than those without.

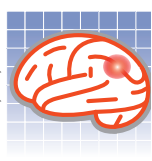


Illustration by Marty Bee

Stroke-Prevention Device Proves to Be Safer Than Expected

Real-world experience with the Watchman left atrial appendage (LAA) occlusion device reveals it is safer and is associated with substantially fewer complications than were seen in clinical trials leading to its approval by the U.S. Food & Drug Administration.

As reported at the joint scientific sessions of the American College of Cardiology and World Heart Federation in March, the device performed very well, despite the fact that the 38,158 patients who received it were older, sicker and at higher risk of stroke and bleeding than participants in the clinical trials.

The impressive success rate was a surprise, since higher rates of complications often are seen after a drug or device comes to market and is being used in a broader group of patients than had been selected for the clinical trials. The positive results reported with the Watchman are reassuring, since they were derived from a database that captures 95% of patients who received the device in the U.S.

The LAA is a small pouch in the upper left pumping chamber of the heart. The arrhythmia known as atrial fibrillation increases the likelihood that blood will pool in the LAA and clot before it is pumped into the circulation. Once it leaves the heart, the clot can block blood flow to the brain, causing a stroke. Anticoagulants can prevent blood clot formation. However, some people cannot take anticoagulants due to increased risk of internal bleeding. The Watchman was developed as an alternative. It is inserted into the heart through a catheter and expanded to close off (occlude) the LAA. ■

Could Diabetes Be Sneaking Up on You?

Here's how you can tell if you are at risk.

Diabetes is so common that many people fail to understand how serious it is. High sugar levels in the blood silently wreak havoc on blood vessels throughout the body. When large blood vessels are affected, the risk of heart attack, stroke and peripheral vascular disease increases exponentially. When the smaller vessels are affected, patients can lose their sight, kidney function or feeling in their feet.

But diabetes does not happen overnight. Rather, it develops slowly over a period of years. This interim period of prediabetes is the ideal time to take steps that will reverse the course.

So how do you know if diabetes is sneaking up on you?

"There are no symptoms," says Cleveland Clinic preventive cardiologist Dennis Bruemmer, MD, PhD. "That's why 90% of people with prediabetes are unaware they have it."

One-third of the population in the United States, including one in five teens, has prediabetes. Their risk for cardiovascular disease is nearly double that of people with no diabetes.

Tackling Prediabetes

The first clue you might have prediabetes is weight gain. As those extra pounds accumulate, the risk of diabetes grows. If you are overweight or obese, or have a family history of diabetes, you should make sure to have your glucose level tested.

If the test is positive, you have a unique window of opportunity to reverse the trend with lifestyle interventions. If you aren't tested, you could develop diabetes and be totally unaware of it.

"It's not uncommon for patients to present with a complication of diabetes, such as heart attack, before they've been diagnosed," says Dr. Bruemmer.

How Diabetes Evolves

Diabetes is a continuum that starts with insulin resistance. Insulin, a hormone made in the pancreas, moves glucose (sugar) into body cells, where it is stored for energy. For reasons that are not completely understood, the body may fail to respond to insulin. This causes blood sugar levels to climb. In an effort to force sugar into cells, the body makes more and more insulin. Finally, the overworked pancreas gives up and crashes.

The body has a tremendous capacity to overcome insulin resistance, which is why it may take five to 10 years for diabetes to be diagnosed. But during those years, even mild elevations in blood sugar cause damage to the blood vessels.

"We see patients after the damage is done. Here in Cardiology, about one-third of our heart attack patients have diabetes and one-third have prediabetes," says Dr. Bruemmer.

Symptoms of Diabetes

While increasing weight may be a quiet indication you are heading toward trouble, there are common symptoms that alert to the arrival of diabetes:

➔ **Frequent urination.** The kidneys are designed to resorb sugar from the urine. When there is too much sugar for the body to absorb, it stays in the urine. Because sugar attracts fluid, the excess sugar pulls water out of



© gchutka | Getty Images

Both weight gain and unintentional weight loss are associated with diabetes. However, there are few symptoms that indicate you are heading toward developing this dangerous, potentially devastating, disease.

the body into the bloodstream. That's why a person with diabetes urinates more often, but may feel dehydrated.

➔ **Blurry vision.** In the early stages of diabetes, high sugar levels change the water content in the lens, causing blurry vision. This will improve with diabetes medication. More worrisome is damage to vessels in the retina, which can cause irreversible blindness.

➔ **Losing weight without trying.** When blood sugar exceeds a certain threshold, the body is no longer able to convert sugar to energy, and cells starve. The person feels hungry and keeps eating in an effort to generate energy, but to no avail.

Diabetes Likes Bad Company

Diabetes not only destroys blood vessels, it also keeps company with other cardiovascular risk factors:

- 85% of patients with diabetes are overweight.
- Three-fourths have high blood pressure.
- Two-thirds have elevated LDL cholesterol.
- One-fourth smoke.

"This culminates in the perfect storm," says Dr. Bruemmer. "That's why you have to treat all these risk factors in addition to lowering blood sugar levels to reduce the risk of heart attack or other cardiovascular event." ■

When to Consider Genetic Counseling for Heart Disease

Identifying the genetic cause of heart disease can help ensure you get the right treatment while protecting your family.

Most of us understand the role of risk factors in the development of coronary artery disease leading to heart attack. But heart diseases with underlying genetic causes are less well known. They include bicuspid aortic valve disease, hypertrophic cardiomyopathy, familial dilated cardiomyopathy, Brugada syndrome, long-QT syndrome, familial hypercholesterolemia and connective tissue diseases such as Marfan syndrome.

If you have one of these heart problems, or two or more members of your family have been diagnosed with the same or similar condition or suffered sudden cardiac death, you might benefit from meeting with a genetic counselor.

“Our goal is to identify people at increased risk of a catastrophic event, so that we can try to prevent it,” says Christina Rigelsky, MS, CGC, a licensed genetic counselor in Cleveland Clinic’s Center for Personalized Genetic Healthcare.

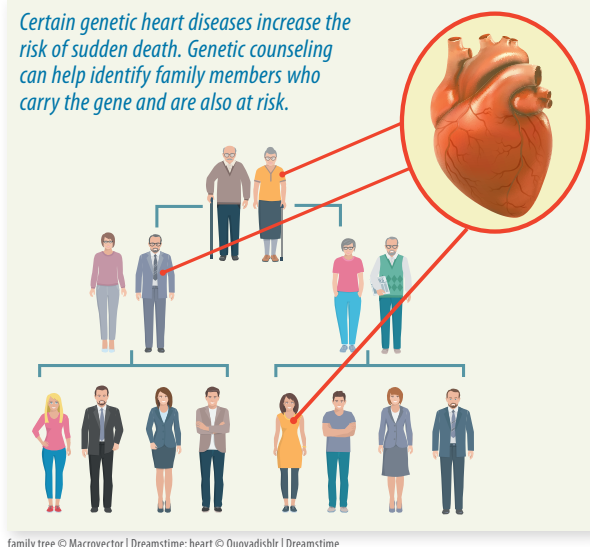
What Genetic Counseling Involves

Genetic counseling is not an automatic referral for genetic testing. A genetic counselor gathers information aimed at helping identify whether a patient has family members who are at risk and, if so, recommend how they should be evaluated.

Genetic testing may be included in a meeting with a genetic counselor, but it depends on the condition and the patient’s interest in being tested.

“We do a lot of education. We have

Certain genetic heart diseases increase the risk of sudden death. Genetic counseling can help identify family members who carry the gene and are also at risk.



family tree © Macrovector | Dreamstime; heart © Quovadisblir | Dreamstime

the luxury of spending time with patients talking about the condition they have and how it has affected them,” says Rigelsky.

Better understanding about their disease opens the door to a discussion about the need for other family members to be screened.

“We also spend time talking about how the information they have learned about their own medical problem might be able to protect their family,” she says. “Patients and family members may think that if they don’t have symptoms, they are not at risk. However, some consequences of these genetic diseases do not cause symptoms—the first symptom, so to speak, is sudden death. The only way to know if you are at risk may be to have genetic testing or an imaging test.”

How the Process Works

The genetic testing and screening process varies with different genetic conditions. We’ll illustrate how the process works using aortic disease, a condition that causes the section of

aorta in the chest to enlarge, causing an aneurysm, or tear.

The discovery that aortic disease has a genetic cause allows a patient’s cardiologist to make an informed decision about treatment. “Surgical intervention may be needed earlier, because these patients are at increased risk that the layers of tissue in their aorta will separate, or dissect,” Rigelsky explains.

If the patient carries the gene responsible for causing aortic disease, other family members might also have the mutation. This increases their risk for an aortic aneurysm, which could rupture and cause sudden cardiac death. Those at risk can have their aorta screened with noninvasive echocardiography.

“We recommend the test be ordered by a cardiologist to ensure the size of the aorta is represented accurately. If it is not, a CT scan or other advanced imaging test may be needed,” says Rigelsky.

Cascade Screening

Screening is done by generation, starting with first-degree relatives (parents, siblings and children). Even when no genetic cause is found, someone else in the family is found to have aortic disease 20% of the time.

If one family member has aortic disease, and that person also carries the gene, extended family members (aunts and uncles, nieces and nephews, grandparents, grandchildren and half-siblings) should undergo genetic testing to learn if they need to be imaged. When a family member is negative, the investigation ends.

“Their children don’t need genetic testing. They don’t have the gene mutation, so they can’t pass it on,” Rigelsky explains.

Even when no genetic cause is found, family members are advised to begin screening at least 10 years prior to the earliest known diagnosis of aortic disease in the family. It doesn’t stop there, since the risk of aortic disease increases with age.

“They should return for screening every five to 10 years,” says Rigelsky. ■

Symptoms of Heart Attack and Stroke Are a Medical Emergency!

Don't delay care because you fear getting COVID-19 at the hospital.

An unexpected consequence of the COVID-19 pandemic has been the dramatic drop in the number of acute heart attack and stroke patients seen in emergency departments worldwide. Depending on their location, hospitals report 30% to 60% fewer patients with heart attack symptoms and nearly the same drop in patients admitted with symptoms of stroke.

What caused this? It's unlikely that cardiovascular disease has taken a holiday. Heart attacks and strokes don't stop during a pandemic. In fact, the stresses associated with COVID-19 should cause cardiovascular event rates to soar.

It's more likely that people who are experiencing symptoms consistent with a heart attack or stroke are avoiding emergency departments and hospitals for fear they might get the coronavirus.

"Instructions to stay home do not apply to patients with heart attack or stroke symptoms," says Samir Kapadia, MD, Chairman of Cardiovascular Medicine at Cleveland Clinic. "Delaying care puts your life at risk. Hospitals have safety measures to protect you from infection."

Every Minute Counts

Hospitals are seeing a disturbing trend in patients who don't take timely action, and instead wait days after their symptoms of stroke or heart attack began to seek care. The dangers of this approach can be seen in the larger number of people found dead in their homes by emergency medical responders.

Timely care saves lives and reduces the risk of complications.

"Immediate care can limit damage to your heart, which increases the likelihood you will survive a heart



© fizkes | Getty Images

If you are with someone who experiences symptoms consistent with a heart attack or stroke, do not wait to see whether they improve. Call 911 immediately. The decision may save their life.

attack and preserve your quality of life," says Dr. Kapadia.

There is some indication that people who are experiencing stroke symptoms that resolve simply wait to see what will happen. Stroke specialists say this is unwise.

"We have good treatments for people who have just had a stroke, but they are time-limited. Your outcome is likely to be worse if you delay seeking medical attention," adds M. Shazam Hussain, MD, Director of Cleveland Clinic's Cerebrovascular Center.

If You Might Have COVID-19

If you or someone in your household has been diagnosed with COVID-19 or is experiencing symptoms such as a high fever or persistent dry cough, you still need to seek emergency care for a potential heart attack or stroke. Simply tell the 911 operator when you call.

"COVID-19 is important, but a heart attack or stroke can be deadly. These emergencies should be viewed as a priority," says Dr. Kapadia. 🏠

These Symptoms Should Be Taken Seriously

Some symptoms of heart attack and stroke are obvious, but others are subtle. This often makes it easy to wonder whether someone is having a cardiovascular event or a less-serious problem, such as heartburn or a migraine.

Don't wait to find out. Call 911. If the symptoms turn out to be nothing problematic after all, the paramedics will likely let you know. But if you or someone you love is having a heart attack or stroke, minutes count. If you wait, you might be too late.

Most Common Symptoms of Heart Attack

- Chest pain, tightness or pressure, possibly with shortness of breath or weakness
- Left arm or shoulder pain
- Jaw pain

There are other symptoms of heart attack that are less common. Follow your gut. If you sense something is wrong, you may be right.

Warning Signs of Stroke

- B** = Balance difficulty
- E** = Eyes or vision disturbance
- F** = Face droopiness
- A** = Arm (or leg) weakness
- S** = Speaking difficulty
- T** = Time to call 911

Severe intense headache (think: the worst headache of your life) or losing consciousness can also indicate an emergency.

Iron Deficiency in Heart Failure Is a Common, Fixable Problem

Intravenous iron is best for correcting it.

If you have heart failure, you know it often takes a lot of work—and a strong patient-physician partnership—to maintain a good quality of life. Staying well usually requires making dietary adjustments, such as adopting a low-sodium diet and restricting fluid intake. Multiple medications are usually required, as well.

Yet many heart-failure patients are plagued by unrelenting fatigue and weakness. In many cases, an underlying cause can be too little iron in the blood, a condition known as anemia. It affects about half of patients with heart failure with reduced ejection fraction (HFrEF).

“Iron deficiency interferes with quality of life by limiting the ability to function. It also increases the likelihood of dying from heart failure,” says Maria Mountis, DO, a Cleveland Clinic heart failure specialist.

That’s why she recommends patients with heart failure have their iron levels routinely tested.

“The result of iron replacement is a rapid, dramatic improvement in 6-minute walk test and quality of life. “Iron deficiency is the most rewarding comorbidity we treat,” she says.

Causes of Iron Deficiency

Iron plays a central role in the creation of red blood cells, which carry oxygen throughout the body. When the blood has too few red cells, the body receives too little oxygen. Low blood oxygen levels are responsible for the fatigue that characterizes anemia.

We obtain iron through the foods we eat. Excess iron is stored in cells found in our liver, bone marrow and spleen.

We can become deficient in iron if we don’t eat enough iron-rich foods. Deficiency can also be caused by inflammation; blood loss, for example, through a bleeding ulcer or menstruation; certain medications, vitamins and supplements; or when our digestive system does not absorb or transport iron properly.

Sometimes, iron deficiency occurs when a protein called hepcidin prevents iron from being absorbed, even when there is a sufficient amount of iron in the body.



Iron-Rich Foods

Insufficient dietary iron causes about half of all cases of anemia worldwide. If you have heart failure, be sure your diet contains some of these iron-rich foods:

- Red meat, pork and organ meats such as liver
- Poultry, especially dark meat and liver
- Fish and shellfish, especially sardines and anchovies
- Broccoli, kale, turnip greens and collard greens
- Lima beans, peas, pinto beans and black-eyed peas
- Iron-enriched pasta, grains, rice and cereal

Know Your Iron Level

Iron levels are determined by blood tests and reported as micrograms per deciliter (mcg/dL).

A normal iron level is 76 to 198 mcg/dL in men, 26 to 170 mcg/dL in women.

Levels lower than normal are considered deficient.

Iron Replacement

Oral iron supplements, which can be purchased over the counter, are the most common form of iron replacement. But iron supplements can cause constipation.

They also may not work as well as expected.

“Iron supplements should always be taken with vitamin C or orange juice to improve

absorption. However, they are generally not absorbed well and do not increase replenished iron stores enough to improve the symptoms of iron deficiency,” says Dr. Mountis.

On the other hand, intravenous (IV) iron infusions relieve symptoms almost immediately.

Cleveland Clinic’s experience with IV iron reflects that of randomized, placebo-controlled trials.

“IV iron is safe, corrects iron deficiency and raises hemoglobin [red blood cells] in anemic patients,” says Dr. Mountis. “IV iron improves 6-minute walk distance and the amount of oxygen consumed during exercise [peak Vo2]. Very importantly, it relieves fatigue, weakness and other symptoms caused by iron deficiency. That’s why we treat iron deficiency with IV iron in most cases,” she says.

Whether IV iron has an even more profound impact on patients is under investigation. A study on the effect of IV iron on the combination of death, heart failure hospitalization and 6-minute walk test is underway, with results due in 2022. ■

Preventive Meds ... cont from page 1

“The vast majority of older patients should aim to keep their systolic blood pressure under 140 mmHg. More robust individuals should aim for even tighter control,” says Dr. Laffin.

Blood pressure control is less of a concern in patients with dementia or other life-limiting illness. “We tend to let blood pressure remain a little higher when patients have comorbidities indicating their life would not be prolonged by lower blood pressure levels,” he says.

Cholesterol-Lowering Statins

If you have been taking statins without experiencing side effects, you can continue taking them indefinitely. “Their benefit comes from taking them for many years,” says Dr. Laffin.

Once you have had a heart attack, taking a statin helps prevent a second one: People who have had a stroke or heart attack will benefit from statin therapy at any age.



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Maintaining tight control over blood pressure, blood sugar and cholesterol levels is a prescription for a longer life and better quality of life, cardiologists say.

One area of controversy is starting statin therapy after age 75. “After age 75, statins should be started judiciously,” says Dr. Laffin. “Your risk of cardiovascular disease will rise, but you may not live long enough to derive any benefit from these medications.”

Blood Sugar Medications

Diabetes is such a potent risk factor for heart disease that medications to normalize blood sugar levels should be taken for life.

“As we get older, we can be a little less strict with blood sugar control, but most people should aim for a hemoglobin A1c level of 7 or less,” says Dr. Laffin.

Less Is Better

As we get older, the number of ailments we have tends to grow and with it, the number of medications we take. Before we know it, we’re taking scores of medications for many reasons. This is known as polypharmacy, and it increases the risk of side effects. Sometimes, taking multiple medications makes people sicker.

Dr. Laffin recommends sitting down with your doctor once a year to review every medication you take, with an eye toward seeing if any should be stopped or changed. Doctors call this “deprescribing.”

“Risk-benefit profiles change over time. Determining what’s best for an individual at any age is where the art of medicine and shared decision making come into play,” he says. ■

Are You Ever Too Old to Undergo Stenting or Bypass Surgery?

Despite taking preventive measures, more than 720,000 adults in the United States have a first heart attack every year, and 320,000 have a second or third. That’s why revascularization procedures to prevent a heart attack or save the life of someone who is having a heart attack are very common. Every year, 480,000 percutaneous coronary interventions (PCI, or angioplasty and stenting) and 371,000 coronary artery bypass grafting procedures (CABG, or “bypass surgery”) are performed. A large percentage of patients who undergo these procedures are in their 80s and 90s.

“You are never too old for CABG or PCI, if you can



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Because the incidence of heart disease increases with age, the majority of patients who undergo elective CABG are elderly. Although it’s a major surgical procedure, most patients do just fine.

tolerate it,” says Lars Svensson, MD, PhD, a heart surgeon who chairs Cleveland Clinic’s Heart & Vascular Institute.

The decision on which revascularization procedure to recommend is based on several factors:

- Anatomy of the individual’s coronary vessels
- Severity and location of the blockages
- Patient’s overall physical condition and habits, such as smoking
- Presence of other comorbidities, such as kidney failure, lung disease or dementia
- History of previous CABG or stenting
- Presence of factors that increase the risk of stroke.

Many older patients fear CABG, since it’s a major surgical procedure. Cleveland Clinic surgeons use a formula provided by the Society of Thoracic Surgeons to calculate the risks of CABG for an individual.

“If the formula indicates CABG is a reasonable choice, and the patient will tolerate the operation, the risk of death with this surgery at Cleveland Clinic is less than 1%,” says Dr. Svensson.



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I am 60 and do not have heart disease. Will taking aspirin help prevent a heart attack?

Few would argue against aspirin use to prevent a recurrent event (secondary prevention) in someone with known cardiovascular disease. However, aspirin for primary prevention of a first heart attack, stroke or death remains controversial.

After a study showed a substantial reduction in first heart attacks among male physicians over age 45 taking low-dose aspirin, the idea of aspirin for primary prevention in men took hold. Over the past decade, other studies reported less benefit from aspirin. The incremental benefit of aspirin seen in recent studies was perhaps lower due to the positive effects of exercise, healthier diets, smoking cessation, use of medications for high blood pressure and statin therapy. Also, as with any treatment, its benefits must be balanced against its risks. Grouped analysis of these trials plus three large clinical trials from 2018 demonstrated the lower rate of heart attack and stroke with aspirin was not associated with fewer deaths, but was accompanied by a worrisome risk of bleeding. This was in addition to a known age-related increase in risk of gastrointestinal bleeding.

Current guidelines recommend aspirin for primary prevention only in certain groups ages 40 to 70 at higher cardiovascular risk, provided they have no risk factors for bleeding. It is not recommended in those older than age 70, since benefits typically do not outweigh the risks as you age.

If your estimated 10-year risk of having a cardiovascular event is greater than 20%, or you have diabetes and multiple risk factors, you fall into a high-risk group. Imaging studies such as CT coronary calcification scores, ankle-brachial index or ultrasound to detect subclinical coronary disease or other form of vascular disease may further help identify higher risk. Ask your doctor if this testing makes sense to determine your risk.

If you are otherwise healthy and not considered at high risk, it is better to focus on lifestyle changes, such as not smoking and controlling your cholesterol and blood pressure, to reduce your risk of heart attack.

I have diabetes and a history of heart attack. I take high-dose statins to lower my cholesterol, but my triglyceride levels are still elevated. Should I be concerned?

Elevated triglycerides (TG) are associated with cardiovascular risk, but whether they are merely a marker for risk or cause cardiovascular disease is controversial.

A 2019 observational study of statin-treated patients with diabetes or cardiovascular disease compared those with TGs above and below 150 milligrams per deciliter (mg/dL). Over 3.5 years, those with TG levels higher than 150 mg/dL had 31.9% more heart attacks and 13.7% more strokes. Even after adjusting for risk factors and HDL cholesterol, those with high TGs had a 26% higher risk of cardiovascular events. This suggests elevated TGs in statin-treated patients remain a real danger.

To treat elevated TGs, start with exercise, weight loss, quit smoking and reduce alcohol use. Treat conditions associated with high TGs, such as thyroid disease, and maintain tight blood sugar control.

Recently, icosapent ethyl, a form of purified fish oil, was found to lower cardiovascular events by 25% in statin-treated patients with elevated TGs. The American Diabetes Association now recommends icosapent ethyl be considered in statin-treated diabetics with controlled LDL-C, TG levels of 135 to 499 mg/dL and atherosclerotic cardiovascular disease or other cardiac risk factors. The American Heart Association calls 4 grams of prescription fish oil per day an effective and safe option for reducing TGs, after underlying causes and lifestyle interventions have been addressed. ■

IN COMING ISSUES

How much do you know about PCI?

When and how to measure blood pressure properly.

Why low-fat diets don't work.

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