DAMIANRASCH.COM

DAMIAN RASCH, D.O.

ENCINITAS · LA JOLLA, CALIFORNIA



Coronary Artery Disease

Plaque builds silently for decades in the arteries that feed the heart. Here is how it's found and how it's treated.

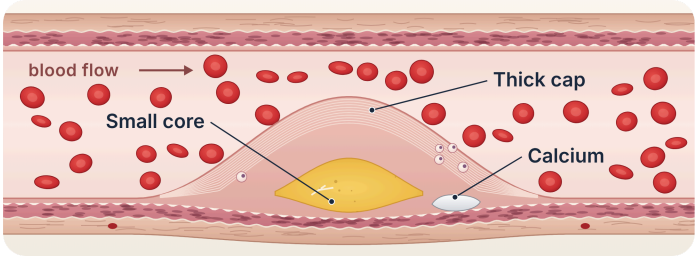
~20 million
American adults have coronary artery disease

1 in 5
deaths in the United States have it as a contributing cause

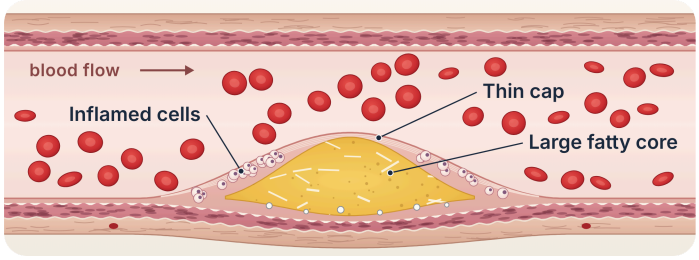
Below 55
the LDL goal in mg/dL for most people with CAD, and below 70 at lower risk

HOW PLAQUE BEHAVES

Some plaques are more dangerous than others



A stable plaque, with a thick cap, narrows the artery a lot



A vulnerable plaque can crack before it narrows much

Coronary artery disease is cholesterol-rich, inflamed plaque in the heart's arteries, growing silently for decades. A stable plaque tends to cause chest pressure with effort, called angina, once it narrows the artery by roughly 70%. The pressure eases within minutes of rest. Most heart attacks start in plaques that were less than 70% blocked, when a thin cap cracks and a clot forms on it.

HOW IT'S FOUND

The right test depends on your symptoms

Calcium score (CAC)
A quick CT scan with no contrast dye, for adults 40 to 75 without symptoms. It measures calcified plaque directly and helps decide whether you need a statin.

CT angiogram (CCTA)
A CT scan of the heart arteries, now often the first test for stable chest pain. It shows the plaque in the artery wall, including plaque a stress test would miss.

Stress test
Checks whether a blockage limits blood flow when the heart works hard. A normal result doesn't mean your arteries are free of plaque.

Heart catheterization
The gold standard, done through a thin tube. It's saved for high-risk findings or for planning a stent or bypass.

Treat the whole tree

A stent protects a few centimeters of one artery. Statins, antiplatelet drugs, blood pressure control and lifestyle change protect the entire vascular system.

TREATMENT GOALS, STENTS AND BYPASS ARE ON THE BACK

TREATING IT

Medicines first, procedures when they help

THE FOUNDATION

for everyone with CAD

LDL cholesterol	Below 55 mg/dL for most people with coronary disease, or below 70 at lower risk, under the 2026 guideline. A high-intensity statin comes first, and ezetimibe, a PCSK9 inhibitor or inclisiran can be added. Lowering LDL does more for survival than any other single treatment.
Blood pressure	Below 130/80 mmHg, with an ACE inhibitor or ARB as the usual first medicine.
Aspirin	81 mg a day, usually for life. If you also need a blood thinner like Eliquis or warfarin, aspirin is usually stopped. After a stent, a second platelet drug is added for about 6 months in stable disease or 12 months after a heart attack, sometimes less.
Diabetes	An A1c below 7%, using medicines that also protect the heart, such as SGLT2 inhibitors (empagliflozin, dapagliflozin) and GLP-1 drugs (semaglutide).
Lifestyle and rehab	A Mediterranean-style diet, 150 minutes or more of activity a week, no tobacco and a healthy weight. Cardiac rehab after a stent or heart attack lowers the risk of dying from heart disease by about a quarter, though death from any cause didn't clearly fall.
Beta-blockers	No longer recommended long term for stable disease if you haven't had a heart attack in the past year and your heart pumps normally.

STENTS AND BYPASS

What ISCHEMIA showed	In 5,179 people with stable disease whose stress test showed moderate to severe ischemia (reduced blood flow to the heart muscle), going straight to catheterization and a stent or bypass didn't lower the risk of death or heart attack over 3.3 years compared with medicines alone, though it relieved chest pain better.
When a stent helps	When angina limits your life despite medicines. During a heart attack, a stent is lifesaving.
When bypass is favored	Complex disease of the left main artery or of several arteries, several blocked arteries with diabetes, or a weak pump (an ejection fraction of 35% or less). A Heart Team of cardiologists and surgeons weighs it with you.
Recovery time	A stent usually means 1 to 3 days in the hospital and normal activities within 1 to 2 weeks. Bypass means 4 to 7 days in the hospital and 6 to 12 weeks to recover fully.

LIVING WITH IT

Checkups	Typically every six months for the first year, then once a year when things are stable. LDL, A1c, blood pressure and weight are tracked at each visit.
Lipoprotein(a)	About 20% of adults carry a high level, which raises the risk of coronary disease. If you've never been tested, a one-time blood test settles the question for life.
The long view	There's no cure, but with today's treatments the vast majority of people live long, active lives. Taking your medicines consistently does the most to decide how you do.

KNOW THE WARNING SIGNS

Call 911, and don't drive yourself, for chest pain or pressure at rest or lasting more than about 5 minutes, or with sweating, trouble breathing or fainting. Women, older adults and people with diabetes more often have shortness of breath, deep fatigue or lightheadedness instead.

READ THE FULL ARTICLE

damianrasch.com/
coronary-artery-disease

For education only, and not a substitute for advice from your own physician. Sources include the ISCHEMIA trial (NEJM 2020), the 2023 AHA/ACC chronic coronary disease guideline, the 2021 AHA/ACC chest pain guideline, the 2026 ACC/AHA dyslipidemia guideline and Stone, Libby and Boden (JAMA Cardiology 2023).

DR. DAMIAN RASCH, D.O. · BOARD-CERTIFIED INVASIVE CARDIOLOGIST · ENCINITAS AND LA JOLLA, CA

MADE IN CALIFORNIA