Atherosclerosis and its complications, such as myocardial infarction and stroke, are major causes of morbidity and mortality. Although there are numerous chemical drugs available some drugs are not effective and some have

serious side effects. Traditional Chinese medicine (TCM) has a long history for the prevention and treatment of atherosclerosis due to its less side effects and superior efficacy.

Atherosclerosis is a condition involving the narrowing of the blood vessels due to the build-up of fats, cholesterol, and other substances on the artery walls. The buildup of plaque around artery walls causes the walls to narrow and thus limits the flow of oxygen-rich blood to the body's organs. Risk factors may include high cholesterol and triglyceride levels, high blood pressure, smoking, diabetes, obesity, physical activity, and eating saturated fats.



Coronary Artery Disease (CAD)

History Science

Health

ei Laboratories

CAD occurs when the coronary arteries become damaged or diseased due to plaque formation. Plaque is cholesterol containing deposits that buildup on the artery wall and cause the arteries to become narrow, decreasing blood flow to the heart. Over time, the decreased blood flow can cause angina with symptoms of chest pain, shortness of breath, and arrhythmias. Such chest pain can be described as pressure, heaviness, numbness, or squeezing of the chest which could be mistaken for indigestion or heartburn. Although angina is usually felt in the chest, it can also cause pain in the shoulders, arms, neck, or back.^{4,5} A complete blockage can cause a heart attack.

The cause of atherosclerotic plaque formation is thought to begin with an injury or lesions to the inner layer endothelial cells of a coronary artery. This injury or damage could begin as early as childhood. Atherosclerosis is an intima-based lesion that accrues plaque slowly over decades. Injury to the inner layer of the arteries can occur from smoking, high blood pressure, high cholesterol, diabetes, infections, or a sedentary lifestyle. Once the inner layer of an artery becomes damaged, a lipid layer or fatty streak accumulates at the site of the injury followed by migration of leukocytes, smooth muscle cells, and foam cell formation which degrade the extracellular matrix leading to atherosclerosis. Normal endothelium cells produce anticoagulation factors such as heparin and nitric oxide to prevent blood clotting formation. However, the injured endothelium cells produce pro-



coagulant proteins and pro-inflammatory cytokines which can destabilize the plaque. If the plaque ruptures, platelets clump and acute vessel thrombosis occurs at the site of injury which can block the artery, leading to a heart attack.

Research results has suggested that inflammation is directly linked to the development of atherosclerotic plaque and the rupturing of the plaque because inflammation can cause chronic or repetitive endothelial injury. C-reactive protein is one of the most sensitive indicators of acute and chronic inflammation and predicts the risk of myocardial infarction, stroke, peripheral arterial disease and sudden cardiac death, even among apparently healthy individuals.⁶ The cause of inflammation may include high cholesterol, smoking, bacterial toxins from infection, sedentary lifestyle, or auto-immune. High cholesterol can trigger inflammation and release of certain hormones that cause blood vessels to tighten or "constrict" and raise blood pressure.

Renovascular Disease

Renovascular disease is a progressive condition due to atherosclerosis that causes narrowing or blockage of the renal arteries. As the plaque builds up, it reduces blood supply and damages the kidneys. Usually, there are no

warning signs; however, as the disorder progresses, patients may experience high blood pressure and symptoms related to kidney failure. This condition is often overlooked as a cause of high blood pressure.

Peripheral Artery Disease

Atherosclerotic plaque in the arteries of the other part of the body such as the legs or arms can cause peripheral artery disease. Peripheral artery disease causes sores that heal slowly and poor leg circulation which leads to numbress and pain in the calf muscles when walking (claudication) or climbing stairs. Severe blockage of blood flow can cause tissue death and lead to leg amputation.

Erectile Dysfunction

Erectile Dysfunction (ED) is also related to atherosclerosis. The artery blockage usually starts from the lower arteries interrupting blood flow necessary for an erection. Usually after 3-5 years of ED, patients will see heart related problems such as coronary artery disease. Although the cause of ED is not always linked to atherosclerosis, if patients have no obvious cause, such as trauma, screening for heart disease should be considered.

Wellness Recommendation

Traditional Chinese Medicine (TCM) views atherosclerotic plaque as a type of Blood Stasis in combination with a Qi and Blood deficiency. The wellness recommendation includes CV, B-2, and Qi Booster. CV removes Blood Stasis, enhances Heart Qi, and nurtures the Blood. It helps to reduce blood vessel restriction, remove atherosclerotic plaque, repair artery damage, and enhance blood flow to the heart. Red Sage (Danshen, Radix Salviae Mil Tiorrhizae) an herbal ingredient in CV, has been shown to have the ability to inhibit oxidative stress to prevent low-density lipoprotein from oxidation and disrupt adhesion molecules.¹ This, in turn, reduces atherosclerotic areas as well as decreases levels of pro-inflammatory cytokines to decrease the susceptibility of plaque formation.¹ Astragalus Root (Huangqi, Radix Astragali) another herbal ingredient in CV, has protective effects on cardiovascular disease by reducing atherosclerotic lesion size and increasing plaque stability.² It also reduces inflammation and decreases as well by regulating the genes responsible for lipid metabolism, by which ameliorating the lipid disorder.²

Qi Booster and B-2 help clear the waste from the plaque breakdown. B-2 clears phlegm damp and resolves spleen leakage. It helps improve the efficiency of the collecting terminals of the lymphatic vessels and enhance lymph recycling from the tissues. Qi Booster enhances the Qi of the spleen and middle Jiao. It helps improve blood supply to the upper body. Tangerine Peel, an herbal ingredient in B-2, is an important traditional Chinese medicine for the treatment of spleen deficiency-related diseases by stimulating the lymph system and eliminating excess.³

If patients have complications of chronic myocarditis, bradycardia, or pericarditis, Myogen is also recommended to enhance Heart Yang and reduce heart inflammation. PaceKeeping is recommended if patients have complication of arrhythmia.

For atherosclerosis, patients can have symptom improvement within 1-3 days of the protocol and 4-6 weeks are required for significant improvement.

<u>For CAD</u>, patients can have symptom improvement almost immediately if they are in an acute situation. 4-6 weeks are required for significant improvement. CV can also instantly open the coronary artery and provide enough oxygen supply to the heart to prevent severe heart damage for patient on the verge of a heart attack. After the 4-6 weeks, patient may use CV at a lower dose as a preventative.

<u>For renovascular disease</u>, LC Balancer and Xcel are also recommended to improve kidney function and effectively filter out the metabolic wastes. Patients can experience improvement within 2 weeks of beginning of the protocol.

<u>For peripheral artery disease</u>, patients can have symptom improvement within 1-2 weeks of beginning the protocol and 4-6 weeks are required for significant improvement.

<u>For erectile dysfunction caused by atherosclerosis</u>, M-Strong is also recommended. M-Strong nurtures Kidney Yang and helps to promote blood flow to the male sex organs as well as resolve poor blood flow issues due to various causes in patients with ED. Patients can experience an increase in energy in 3 days; an increase in sex drive and a better sex life with normal erectile function and ejaculation in 2-3 weeks; youthful energy, feel more invigorated, and illustrate less passiveness in 6 weeks.

Selected Case Study:

<u>Case 1: Successful Treatment of Blocked Heart Arteries, Heart Arrhythmia, and Prostate Hypertrophy</u> Jacklin Arastouzadeh, B.A UCLA, LA.c, Dipl. Ac, N.B.A.O., Qualified Medical Evaluator, Former UCLA Research Acupuncturist, CA 90211

A male patient, age 62, came for treatment as he had had been diagnosed with two blocked heart arteries. The MD had recommended using medication until surgery would become necessary. The patient also suffered from an arrhythmia (irregular heart beat) and a hypertrophy of his prostate.

A six-month program against the hypertrophy of the prostate was prescribed. It was composed of one session of acupuncture per week and herbal formulas from Wei Labs including LC Balancer, Prostate Formula and Qi Booster.

The results have been amazing. The size of the prostate completely normalized (only from using acupuncture and herbs). No surgery was necessary. The results have sustained until today.

A four-month program against the heart arrhythmia and the two blocked heart arteries was applied which included Wei Labs herbal formulas CV, PaceKeeping, Myogen, B-2 and Qi Booster and one session of acupuncture for one hour per week.

The results have been astounding. After only four months the heart arrhythmia had been completely eliminated and the two blocked arteries had become completely reopened. The results have been proven based on a subsequent angiogram. A medical professor at UCLA testified that the patient's heart was working better than his.

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