What are Coronary Artery Disease and Peripheral Artery Disease?

Coronary Artery Disease (CAD) and Peripheral Artery Disease (PAD) (or Peripheral vascular disease (PVD)) describe the progressive narrowing of the arteries which supply blood to our Heart (CAD) and your legs (PAD). Both diseases are progressive, chronic, and potentially fatal.

Why does it matter if my arteries are narrowed?

<table>
<thead>
<tr>
<th>CAD can lead to:</th>
<th>PAD can cause:</th>
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<tbody>
<tr>
<td>♥ Heart Failure</td>
<td>♥ Weakness</td>
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<td>♥ Heart Attack</td>
<td>♥ Difficulty walking</td>
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<tr>
<td>♥ Stroke</td>
<td>♥ Leg and/or arm pain</td>
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<td>♥ Breathing problem</td>
<td>♥ May lead to loss of the limb</td>
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<tr>
<td>♥ Kidney problems</td>
<td>♥ DEATH</td>
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What can be done to treat/prevent CAD and PAD?

1. Defining the problem: Diagnostic testing will be ordered by your Cardiologist to understand the extent of your disease. These include stress testing, echocardiography, Doppler studies of the legs or catheterization of the heart or leg arteries. If the diagnosis of heart disease or peripheral vascular disease is made treatment is necessary.

2. Creating your individual plan: one or all of the following approaches may be recommended.
   a. Medical Management to slow the disease and control symptoms. If you have either CAD or PAD a lifetime of medicines such as aspirin, beta blockers and statins has been shown to lower the risk of heart attack and death.
   b. Balloon Angioplasty with or without Stenting can reopen vessels relieving symptoms and preventing more damage.
   c. Surgery is sometimes necessary to prevent loss of life and limb. In the case of heart disease this is called coronary bypass surgery. In the case of PAD femoral-popliteal or femoral-femoral bypass surgery.

What you can do if you have CAD or PAD?

1. Control your Risk Factors.
   a. Quit Smoking. This can be very difficult but is crucial to halt the progression of disease. There are various strategies including medication that can break you of the addiction that we can talk to you about. Most importantly you need to make the decision that you want to stop or none of the strategies will work.

   b. Weight Management – usually requires a combination of dietary changes and exercise.

   c. Reducing High Blood Pressure- Blood pressure is controlled by a reduction of salt intake and medications. Many times 2 to 3 medicines are required to control blood pressure. Medicines that control blood pressure include beta blockers (Toprol, metoprolol, Bystolic), ACE-inhibitors (lisinopril), ARB's (Diovan, Cozaar, Avapro), diuretics (HCTZ, Lasix) and calcium blockers (Amlodipine, diltiazem). Ideal blood pressure is a systolic blood pressure of less than 140 and diastolic pressure of less than 90

   d. Lowering High Cholesterol
Ideally the LDL or bad cholesterol in patients with heart disease should be 70 or less. Diet control and the statins (Crestor, Lipitor, Pravastatin, Simvastatin, Vytorin, Livalo) both reduce LDL and lower the chance of future heart attacks.

HDL (the good cholesterol should be 45 or higher. Exercise and to a lesser extent medications like Niaspan and fenofibrate may increase your HDL.

Controlling Blood Sugar
Ideally your Fasting Blood Sugar should be less than 110 and HgbA1c < 6.5%. If your numbers are higher you may have diabetes requiring oral medicines or insulin. Your internist or diabetes specialist will advise you how to best control your sugars if you have diabetes.

Exercise - is essential to cardiovascular health. Exercise helps you lose weight and also strengthens heart function and lowers the risk of future heart attack. You should exercise at least 30 minutes 3 times a week.

2. Take all of your medications all the time.
   a. Each medicine your doctor prescribes does a specific job.
   b. Combinations of medications are often needed to help control symptoms and slow the disease.
   c. If you are not able to take your medicines for any reason (Cost, side effects) please discuss these issues with your doctor BEFORM stopping or changing your dose.

And finally......

It is important to follow these recommendations forever since CAD and PAD are chronic conditions that can be controlled, but not cured, even by a series of stents or surgery. This means you should continue these measures even if you are experiencing no discomfort. Regular follow ups with your cardiologist are part of the plan to make sure your heart and legs stay healthy.