Signs and Symptoms of Dyslipidemia (High Cholesterol)

Dyslipidemia, which is high cholesterol in your blood does not have obvious signs or symptoms. Early on, you feel normal, however, after a while, plaque build up (made of cholesterol and fats) can slow down or stop blood flow to different areas of your body, including your heart or brain.

All About Cholesterol

- Cholesterol is a naturally occurring fatty, waxy substance in the blood. You need some cholesterol to be healthy, but too much can be a problem.
- Too much cholesterol can build up in your arteries causing fatty deposits (plaque) and put you at higher risk for a heart attack, stroke, and other circulation problems such as peripheral arterial disease.
- Where does cholesterol come from?
  - Liver – The liver makes cholesterol which is used as the building blocks for your cells.
  - Diet – Cholesterol is also found in what you eat. Often this is from animal products like meat, eggs, cheese, and milk.
  - Some people were born with a disorder which makes it hard to remove cholesterol from the blood.

Understanding Cholesterol Test Results

Cholesterol is measured by a simple blood test. It is often called a cholesterol panel or lipid panel.

Results:

- Total Cholesterol (TC) is the total amount of cholesterol in the blood.
- Low-density lipoprotein (LDL) is called the “bad” cholesterol. Too much of this can cause plaque build up in the arteries which can rupture and lead to a heart attack or stroke.
- High-density lipoprotein (HDL) is “good” cholesterol because it moves extra cholesterol from the bloodstream to your liver. Then the liver gets rid of it from the body.
- Triglycerides (TG) are a type of fat in the blood.

Understanding Your Cholesterol Levels:

<table>
<thead>
<tr>
<th>Dangerous: High / Very High</th>
<th>At Risk: Borderline High</th>
<th>Heart-healthy: Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC: ≥240 mg/dL</td>
<td>TC: 200-239 mg/dL</td>
<td>TC: &lt;200 mg/dL</td>
</tr>
<tr>
<td>LDL: ≥160 (high)</td>
<td>LDL: 100-159 mg/dL</td>
<td>LDL: &lt;100 mg/dL</td>
</tr>
<tr>
<td>LDL: ≥190 (very high)</td>
<td>LDL: 40-59 mg/dL (male)</td>
<td>LDL: &lt;70 mg/dL (Recommended for those with CAD)</td>
</tr>
<tr>
<td>HDL: &lt;40 mg/dl (male)</td>
<td>HDL: 50-59 mg/dL (female)</td>
<td>HDL: ≥60 mg/dL</td>
</tr>
<tr>
<td>TG: 200-499 mg/dL (high)</td>
<td>TG: 150-199 mg/dL</td>
<td>TG: &lt;150 mg/dL</td>
</tr>
<tr>
<td>TG: ≥500 mg/dL (very high)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Learn more: pcna.net/cholesterol
The Role of the Patient as a Crucial Member of their Healthcare Team

Your participation in your care is very important. Your health care team is just that, a team, with you as the team leader. You will work together to decide what treatment is best for you.

Available Treatment Options

Working on improving your cholesterol numbers is key in reducing your risk of heart disease, heart attacks, and strokes. This often includes both lifestyle changes and medicines. It is key that you are an active participant in your plan.

Medicines:
- **Statins**: help block your liver from making cholesterol.
- **Cholesterol absorption inhibitors**: prevent cholesterol from being absorbed by your digestive system
- **Bempedoic acid**: helps block your liver from making cholesterol.
- **Bile-acid-binding resins**: The liver uses some cholesterol to make bile acids for digestion. Bile-acid-binding resins cause the liver to create more bile acids, which lowers the amount of cholesterol in your blood.
- **PCSK9 inhibitors**: help your liver absorb more cholesterol so there is less in your blood.
- **Fibrates**: lower triglycerides and production of cholesterol in the liver.
- **Omega-3 fatty acids**: lower triglycerides.

Lifestyle:
- Eat heart-healthy foods
- Get moving most days of the week
- Aim for a healthy weight
- Drink limited alcohol
- Stop smoking or vaping

Learn more about a heart healthy lifestyle: pcna.net/eating

What to Ask Your Care Team on Your Next Visit

- What are my cholesterol numbers?
- What is the goal for my cholesterol numbers?
- What information should I share with my family?
- When will we repeat my lab work?
- Any additional testing you recommend? If yes, can you share why?
  - Lp(a)
  - ApoB
  - Coronary Artery Calcium Score

Available Treatment Options

- **Statins**: help block your liver from making cholesterol.
- **Cholesterol absorption inhibitors**: prevent cholesterol from being absorbed by your digestive system
- **Bempedoic acid**: helps block your liver from making cholesterol.
- **Bile-acid-binding resins**: The liver uses some cholesterol to make bile acids for digestion. Bile-acid-binding resins cause the liver to create more bile acids, which lowers the amount of cholesterol in your blood.
- **PCSK9 inhibitors**: help your liver absorb more cholesterol so there is less in your blood.
- **Fibrates**: lower triglycerides and production of cholesterol in the liver.
- **Omega-3 fatty acids**: lower triglycerides.