COPD and High Blood Pressure

by BRENDA VANTA

COPD and High Blood Pressure: Is There a Connection?

Have you been diagnosed with chronic obstructive pulmonary disease (COPD) and hypertension? You are not alone. Most individuals who have COPD suffer from heart diseases, including high blood pressure. A 2012 study reveals that in more than half of the cases (almost 56 percent) of COPD, there is an associated high blood pressure.

The Link Between COPD and High Blood Pressure

The lungs and heart are not just located closely in your thorax, but they also function together. Therefore, if a disease affects the lungs, the heart and blood vessels will also suffer. The heart and all cells in the body require oxygen to function optimally, and the lungs have restricted ability to bring all these necessary oxygen, or to eliminate the carbon dioxide.

COPD also increases the levels of inflammation in the body, including swelling of the blood vessels which will have to work harder. The result: an increased blood pressure levels, as well as more chances to develop heart diseases (including heart attacks), kidney problems and stroke.

The Dangers of Smoking

Let’s not forget that most COPD cases (as many as 80 percent) are linked with a very unhealthy habit: smoking. Smoking impairs the lung function, but also raises the blood pressure, increases the risk of heart diseases and by up to four times and the risk of lung cancer by 25 times. Other conditions that develop more frequently in smokers include cancer of the bladder, cervix, colon and rectum, esophagus, larynx, liver, pancreas, stomach and blood. Infertility, diabetes, eye diseases, various autoimmune diseases, and overall an increased risk of premature death are also linked with smoking.

The good news is that it's never too late to quit smoking. You can cut back the risk of developing these conditions significantly and ameliorate lung dysfunction and blood pressure values. Blood pressure gradually improves soon after you quit smoking. The symptoms of COPD also improve over the next months and years. The risk of stroke is the same as of a non-smoker two to five years after quitting, and the risk of various cancers also decreases by nearly a half after several years.

How Is High Blood Pressure Managed?

Whether high blood pressure occurs with or without COPD, the same classes of drugs are considered for treatment. Water pills (or diuretics) improve the blood pressure by helping your kidney eliminate batter the excessive water and salt in the body. Beta blockers keep your heart rate slower and beat with less force, and thus it will be less pressure on the blood vessels.

Angiotensin converting enzyme inhibitors (ACEI) decrease the blood pressure by improving the relaxation of the blood vessels. Calcium channel blockers (CCBs) reduce the blood pressure and relax the blood vessels by influencing the amounts of calcium that enters the cells of the heart and vessels, and calcium.

Usually a combination of two or more of these drugs is used for the management of high blood pressure. Other lifestyle changes such as DASH diet (created specifically for high blood pressure) and regular exercise are also very important.