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Heart to Heart

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COPD

What is COPD?

COPD is Chronic Obstructive Pulmonary Disease, a lung disease that severely limits normal airflow in and out of the lungs, making the patient short of breath. The airflow obstruction is progressive and associated with an abnormal response of the lungs to noxious particles and gases in the environment, either actively or passively inhaled (like cigarette smokes, etc).

How prevalent is COPD?

In the USA alone, 12.1 million adults 25 and older had COPD diagnosed in 2001. Twenty four million smokers have impaired lung functions. More 120,000 die of COPD and complications each year. COPD is the 4th leading cause of death, and projected to be the 3rd by year 2020. This disease cost the government \$32.1 billion in 2002 alone. Since women have started smoking and surpassed men, COPD victimizes more females than males.

What are the symptoms of COPD?

Deep, wet, crackling cough, with sputum production, even before airflow limitation ensues. Dyspnea (shortness of breath) on exertion is progressive. These are most noticeably common among smokers. The severity of COPD is gauged by stages, from Stage 0 where there is chronic cough and sputum production but the lung function is still normal, to Stage IV, where there is severe airflow limitation and severe shortness of breath, where quality of life is poor and exacerbations become life-threatening.

What causes COPD?

The single most essential risk factor is cigarette smoking. Cigar, pipe, tobacco chewing and other type of tobacco smoking in many countries are likewise risk factors for COPD. The other risks and causes of COPD are: long term exposure to occupational dusts and chemical vapors; indoor pollution from biomass fuels utilized for heating or cooking in poorly ventilated factories or homes; outdoor air pollution.

How about passive smoking?

Most definitely, passive smoking (inhaling smokes from a smoker nearby or in a room filled with cigarette smoke) also contributes to the risk and development of COPD. Passive smoking also causes children to develop reduced lung function and respiratory ailments as they grow, making them more prone to COPD as adults.

What are the tests for COPD?

Tests to diagnose COPD, besides the classical history of smoking and the clinical symptoms, include: Spirometry (test of patient's breathing capability), Bronchodilator Reversibility Test, Chest X-ray, Arterial Blood Gasses, and Alpha-1 anti-trypsin Deficiency Screening.

How can one prevent COPD?

The first and foremost is abstinence from cigarette (tobacco) smoking. "Quit before you start!" is the best prophylactic strategy. Not starting the habit at all is the best way to prevent this debilitating disease that makes patients gasp for breath and cripple them with suffocation, every minute, day in and day out, making life miserable. Some even "drown" in their own sputum, because even their ability to spit it out is severely impaired. Those who smoke should quit because it is never too late. Quitting helps minimize progression and worsening. For those who work in factories exposed to chemical vapors or dust, the use of the approved industrial mask is recommended. Homes must be well ventilated and smokers should step out of the house to smoke, instead of forcing their spouse and children to passive smokes, which is more dangerous than active smoking.

Obviously, the other essential lifestyle practices are equally important, like low-cholesterol, low-fat, low-carbohydrate, low-salt, high fiber and grain diet (basically fish, vegetables, nuts, fruits), and daily physical exercises. All these make the body and its immune system fit and strong to fight, not only lungs disease but metabolic diseases (diabetes, etc), cardiovascular illness (high blood pressure, stroke, heart attack), and cancer in general.

What is the treatment for COPD?

COPD is not curable. Once the lungs are "burned" by tobacco smoke or other pollutants, the lung tissues are irreversibly damaged. Part of the management includes patient education, drugs to lessen the symptoms, bronchodilators to help ease the shortness of breath a little, steroids to reduce some inflammation, antibiotics for secondary infection, Flu vaccines have been used to reduce (by 50%) illness and death rate of COPD patients, who have high mortality rate from influenza, mucolytic agents to help thin out thick mucus for easier elimination. Antitussives for cough, rehabilitation and oxygen therapy.

How about surgery?

Surgery is limited because destroyed lung tissues are useless. If there are lung “bubbles or balloons” (Emphysematous Bullae), these could be resected to provide the lungs more room and allow the remaining lungs to expand. For Stage IV patients, who are relatively young and otherwise healthy, lung transplantation may be an option, on a selected case basis. But the cost and the risk are high. And results are not guaranteed.

The Million Dollar question is: Why even smoke and allow all these miseries to happen to your body and cut your life short?
