COPD Surgery and Escalation

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Can surgery make your COPD symptoms worse?

There is no surgery without the risk of various complications. If you have heart diseases and COPD, the chances of developing complications or making the pre-existing conditions worse are even higher, because anesthetic procedures and surgeries affect the entire body, especially your cardiac and respiratory system.

Smoking, advanced age and a sedentary life are additional factors that increase the likelihood of complications from surgery, and all of them are often seen in COPD patients as well.

It is known that those diagnosed with COPD have higher chances of developing heart attacks, heart failure, bronchopneumonia and respiratory failure following major surgical interventions as indicated in a study featured in 2007 in the “International Journal of Chronic Obstructive Pulmonary Diseases. “

This study further evaluated specific risk factors for pulmonary complications. COPD is one of them because the inflammation of the bronchi occurs with airway instruments used during anesthesia and surgery; there is also a risk of bacterial growth along the respiratory tract. In addition, surgery depresses the immune system while increasing the muscular work of breathing and all these factors further aggravate COPD.

In cases in which COPD is associated with pulmonary high blood pressure, the prognosis is even worse. Also more pulmonary complications –such as pneumonia- are likely to happen when the surgery involves lung resection in male patients with severe COPD and bacterial overgrowth affecting the respiratory tract.

Signs and symptoms of COPD aggravation

FEV1 (or forced expiratory volume in 1 second) as measured by spirometry shows how fast you can breathe air out of your lungs. According to this result, a doctor can measure the severity of COPD. Thus a drop in FEV1 during or after surgery is an expression of COPD aggravation.

COPD is defined as mild if FEV1 is 80% or more than normal. During this stage, the only symptom may be a chronic cough.

Moderate COPD occurs when FEV1 is between 50 to 79% of normal. At this point, chronic cough may be associated with mucus and shortness of breath with occasional flare-ups.

A severe COPD is characterized by an FEV1 between 30 and 49% of the normal; Cough and shortness of breath are more severe, and there is more mucus in the bronchi. Also, fatigue, reduced ability to exercise and recurrent flare-ups are seen in these cases.

Very severe COPD is associated with an FEV1 below 30% of the normal. In addition to a chronic cough with lots of mucus and severe shortness of breath, a patient may experience weight loss, cyanosis (bluish color of the lips,

fingers and toes, due to low oxygen levels in the tissue), edema (fluid accumulation) and life-threatening flare-ups.

Surgeons and anesthesiologists are aware of the possibility of COPD aggravation during and after surgery and use the safest techniques and tools to minimize these risks (i.e., choosing carefully the type of anesthesia, minimally invasive procedures, avoiding infections, etc).

The patient’s job is to stay as healthy as possible for his condition – to not smoke, lose weight if necessary and follow the treatment recommended by the doctor. If symptoms get worse following the surgery, the treatment should be adjusted accordingly as soon as possible.