

Smoking and lung cancer

Background

Lung cancer is the most common type of cancer diagnosed worldwide. In Australia, it is the leading cause of cancer-related death in men and the second-most common cause in women. The survival rates for lung cancer remain poor, with only 15% of patients alive at five years after diagnosis of lung cancer.

Tobacco smoking

Cigarette smoking is the largest single cause of lung cancer, and is responsible for up to 90% of lung cancers in men and 65% in women. Over 60 known cancer-causing chemicals (carcinogens) are found in cigarette smoke. The risk of lung cancer further increases with the number of cigarettes smoked and the duration of smoking, as well as with exposure to second-hand smoke. Smoking is also associated with a vast range of other cancers, including cancers of the mouth, throat, stomach, kidneys, and colon.

Smoking and surgery

Patients who continue to smoke often have poorer outcomes following surgery. There is strong evidence that smokers who undergo surgery have:

- a higher risk of lung and heart complications
- higher risk of infections after surgery
- poorer wound healing
- increased likelihood to be admitted to the intensive care unit
- increased risk of dying in hospital
- greater likelihood for longer hospital stay

The chemicals in cigarettes will place a greater strain on your body during and after surgery. Your heart rate and blood pressure will increase, therefore increasing the stress on your body during recovery. Increased mucus production and damage to the tissue lining that keep your lungs clear can narrow your airways and make it difficult to breathe.

The chemicals will make your blood more thick and sticky, and greatly increase the risk of blood clots, while impairing normal immune functions and potentially interacting with certain drugs required for surgery.

It is recommended that patients quit smoking at least four weeks prior to their surgery. This will allow important body functions, including blood oxygen levels, breathing, and immune response, to begin to recover and improve. Even if someone is a life-long smoker, quitting smoking for a short period of time before surgery will still have lots of benefits. After surgery, it is important that you do not start smoking again, as smoking will make recovery harder.

Quitting smoking

Like any addiction, smoking is difficult to quit. Replacement with nicotinic gum, patches, or electronic cigarettes are not recommended, as the nicotine can still interfere with recovery. However, there are many other resources available to help you quit.

You should have a discussion with your surgeon and anesthetist about the impact of smoking on surgery, and formulate a smoking cessation plan with your family doctor. Family, friends and coworkers can also help you through this period.

For more information, please visit the following websites:

<http://www.nlm.nih.gov/medlineplus/quittingsmoking.html>

<http://www.cancer.gov/cancertopics/tobacco/smoking>

<http://www.cdc.gov/tobacco/campaign/tips/diseases/cancer.html>

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