Focus on smoking cessation

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Introduction

Nicotine is a highly addictive substance that is found naturally in tobacco. Smoking tobacco can lead to nicotine dependence and serious health problems. Cessation can significantly reduce the risk of suffering from smoking-related diseases. Effective treatments and helpful resources are available to help smokers stop smoking.

Smoking causes the following:
- Many types of cancer, e.g. lung cancer
- Lung disorders
- Chronic obstructive pulmonary disease or emphysema
- Gum disease
- Vision problems, e.g. cataracts
- Heart disease
- Strokes
- Pregnancy problems
- Sudden infant death syndrome
- Premature skin wrinkling.

Cigarette smoking increases the risk of:
- Developing peptic ulcer disease
- Bone loss and hip fracture in women
- Sexual problems, e.g. impotence
- Developing type 2 diabetes
- Infertility
- Spontaneous abortion
- Ectopic pregnancy
- Premature menopause
- Postoperative complications.

Nicotine dependence

Nicotine is a drug in cigarettes that is just as addictive as heroin or cocaine, and it causes a strong feeling (craving) to smoke. When smoke is inhaled, nicotine is carried deep into the lungs. From there, it is quickly absorbed into the bloodstream, and carried throughout the body, affecting many organs, including the heart, blood vessels and the brain.

Stopping smoking is difficult, and may require multiple attempts. Users often relapse because of stress, weight gain and withdrawal symptoms.

Examples of nicotine withdrawal symptoms include:
- Anxiety
- Chest tightness
- Coughing
- Constipation and wind or bloating
- Craving cigarettes
- Difficulty concentrating
- Dizziness
- Dry mouth
- Dysphoric or a depressed mood
- Headaches
- Increased appetite or weight gain
- Insomnia
- Irritability, impatience, frustration or anger
- Nasal drip
- Restlessness or boredom
- Slower heart rate
- Sore throat.

These symptoms may lead the smoker to start smoking again to boost nicotine blood levels back to a level where there are no symptoms.

Benefits of smoking cessation

Smoking cessation has major and immediate health benefits for men and women of all ages. The earlier a person quits, the greater the benefits. Smoking cessation is also important for non-smokers, since exposure to second-hand cigarette smoke is responsible for a number of serious health conditions.

The immediate rewards of quitting include:
- The sense of smell returns to normal.
- Food tastes better.
- The patient’s breath smells fresher.
- Stained teeth get whiter.
- The patient has increased energy.
- Everyday activities, such as climbing stairs or light housework, no longer leave the patient out of breath.
- The yellow discoloration of the patient’s fingers and fingernails disappears.
- Hair and clothes no longer smell bad.

Smoking cessation is associated with the following health benefits:
- An improvement in circulation.
- Smoking cessation lowers the risk of lung, and other types, of cancer.
- Blood pressure starts to return to normal.
- Pulse and blood oxygen level returns to normal.
- The risk of acquiring coronary heart disease, having a stroke, or acquiring peripheral vascular disease, is reduced.
- Respiratory symptoms, such as coughing, wheezing and shortness of breath, are reduced.
- Smoking cessation reduces the risk of developing emphysema.
- Smoking cessation by women during their reproductive
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years reduces the risk of infertility.

- Women who stop smoking during pregnancy also reduce their risk of having a baby with a low birthweight.

Smoking cessation management

Tobacco addiction is both mental and physical. For most people, the best way to quit will be same combination of medicine, a method to change personal habits and emotional support.

The following recommendations can help a patient to quit smoking:

S = Set a quit date.
T = Tell family, friends, and the people around you that you plan to quit.
A = Anticipate or plan ahead for the tough times to be faced while quitting.
R = Remove cigarettes and other tobacco products from the home, car and work.
T = Talk to the doctor about getting help to quit.

Other tips to quit smoking include:
- Keep busy, e.g. go for walks, read a book, or listen to music.
- Keep your hands and mouth busy, e.g. chew gum, eat a healthy snack, or squeeze a stress ball.
- Rethink social breaks, i.e. minimise time spent with smokers.
- Avoid triggers, e.g. coffee and alcohol.
- Reward yourself for not smoking.

Pharmacotherapy for smoking cessation aims to relieve the symptoms of nicotine withdrawal and /or reduce the rewarding or reinforcing aspect of smoking, thereby making it easier for a smoker to stop the habitual use of cigarettes.

Table I lists some cessation medications.

Conclusion

Smoking is recognised as a chronic addictive disease that often requires repeated interventions by the patient to quit smoking. Over-the-counter treatments may help the patient to stop smoking. Smoking cessation represents the single most important step that smokers can take to enhance the length and quality of their lives.

Bibliography


Table I: Cessation medications

Cessation medications that have been found to be effective in treating tobacco dependence include the following:

Nicotine replacement products

Nicotine replacement therapy (NRT) only deals with the physical dependence of smoking, and may help reduce cravings and withdrawal symptoms. A range of NRT products are available. They vary with regards to ease and frequency of use, the speed of nicotine release, and the amount of behavioural replacement provided. There are no conclusive studies to show that one formulation is any more effective than another at achieving cessation. All products will increase the chances of success if used correctly.

Nicotine replacement products include over-the-counter medications, e.g. nicotine gum and spray.

Prescription non-nicotine medications

Prescription drugs are also available to help smokers quit. Some can be used together with NRT, and others must be started before the planned quit day.

Bupropion, e.g. Zyban® is an antidepressant that is used as an aid to smoking cessation. It reduces nicotine withdrawal symptoms.

Varenicline, e.g. Champix®, aids smoking cessation by interfering with the nicotine receptors in the brain. It lessens the pleasurable effects that a person gets from smoking, and it reduces nicotine withdrawal symptoms.

The combination of medication and counselling is more effective for smoking cessation than either one alone. Other methods of quitting include hypnosis and acupuncture, but there is no strong evidence that they can improve the chances of quitting.

7. Written by the doctors and editors at UpToDate. Patient information: Quitting smoking (The Basics). In: UpToDate, Basow, DS (Ed), UpToDate, Waltham, MA, 2012. c2012.