

COUGH

A **cough** is a sudden and often repetitively occurring reflex which helps to clear the large breathing passages from secretions, irritants, foreign particles and microbes. The cough reflex consists of three phases: an inhalation, a forced exhalation against a closed glottis, and a violent release of air from the lungs following opening of the glottis, usually accompanied by a distinctive sound. Coughing can happen voluntarily as well as involuntarily.

INTERVENTIONS

Non-pharmacological

- Provide restful environment and reduce external factors like dust or smoke
Cough can drain your energy, providing rest periods will recover the energy loss
Dust and smoke are triggering factors, minimizing these will promote healing
- Ensure adequate fluid intake
To liquefy secretions and prevent dehydration
- Encourage mobilization of secretion through ambulation, coughing, and deep breathing.
This will promote proper ventilation of the airway
- Observe for signs of air way obstruction.
Treatment will be provided right away.
- Instruct the patient to complete the full course of prescribed antibiotics and explain the effect of meals on drug absorption.
Client education is will enable him/her to adhere with treatment plan.
- Caution the patient on using over-the-counter cough suppressants, antihistamines, and decongestants.
This may cause drying and retention of secretions.
- Suggest avoiding dry environments and using a humidifier at bedside.
Humidifier will moisturize the airway.
- Encourage smoking cessation if the patient is a smoker.
Smoking is proven effective to complicate the condition.
- Instruct the patient in the following:
Optimal positioning (sitting position)
Use of pillow or hand splints in coughing
Use of abdominal muscles for more forceful cough
Use of incentive spirometer
Importance of ambulation and frequent position changes
Directed coughing techniques will help mobilize secretions from smaller airways to larger airways because the cough is done at varying times. The sitting position and splinting the abdomen promote more effective coughing by increasing abdominal pressure and upward diaphragmatic movement.

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Pharmacological

Anesthetics: Lozenges, gargles, or sprays containing benzocaine, lidocaine, benzyl alcohol, or phenol numb cough receptors. Examples of products with anesthetics include Sucrets and Spec-T.

Expectorants: Products containing guaifenesin (eg, Safe Tussin) facilitate removal of secretions by enhancing the breakdown of mucus and increasing sputum volume.

Antihistamines: These agents dry secretions to reduce sputum production and expand the bronchial air passages, but they can produce sedation. Examples of products containing antihistamines include Benadryl Allergy/Cold and Coricidin Cough & Cold.

Sympathomimetic decongestants: These products can reduce nasopharyngeal edema and postnasal drip, but they contain ingredients that can cause excessive central nervous system stimulation and insomnia, nervousness, and tremor. Examples of products containing decongestants include Tylenol Cold, Advil Cold & Sinus, and Sudafed Severe Cold Formula.

Central suppressants: Products containing dex-tromethorphan suppress cough via the central nervous system. Side effects in nonprescription dosages are usually minimal; but constipation and sedation can occur in elderly persons. Examples include Safe Tussin, Robitussin DM, and Alka Seltzer Plus Flu.

CONVERSATION

Patient: Good afternoon.

Doctor: Good afternoon. What have you come for today?

Patient: I am here to see you because I have a dry cough and chest pain.

Doctor: For how long have you had this cough?

Patient: For a month, and I can't stand it anymore.

Doctor: How old are you?

Patient: I am 23 years old.

Doctor: 23 years old. Tell me, besides this cough, do you have any other kind of health problems?

Patient: No doctor. I only have this cough and my chest hurts.

Doctor: Is your cough productive of phlegm?

Patient: No, my cough is very dry.

Doctor: Have you had a fever or chills?

Patient: Yes, I have had fever up to 38° C. It comes and goes frequently.

Doctor: Does someone at work or in your family have the same cough?

Patient: No one suffers from this cough in my family, but at work a woman does.

Doctor: Are you very close to her? Do you work in the same office?

Patient: No, we don't work in the same office.

Doctor: Are you allergic to anything?

Patient: Yes, I am allergic to strong odors such as perfumes and flowers. I am also allergic to dust.

Doctor: Have you taken any medicine for this allergy?

Patient: No doctor.

Doctor: Do you smoke?

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Patient: Yes, I have been smoking for the last 5 years.

Doctor: How many packs per day do you smoke?

Patient: I smoke 2 packs per day.

Doctor: Have you lost your appetite?

Patient: Yes. I am so stressed at work that I am not hungry anymore. Besides that my chest hurts so much when I swallow that I really don't want to eat.

Doctor: Have you been seen by another doctor?

Patient: No.

Doctor: When was your last physical exam?

Patient: A couple of years ago.

Doctor: Have you had any X-rays taken lately?

Patient: No doctor.

Doctor: I wish to give you a thorough medical examination, paying special attention to your lungs. Have you ever been tested for tuberculosis?

Patient: Yes, two years ago, but it was negative.

Doctor: I am going to listen to your lungs. Breathe deeply through your mouth. I hear some lung diminutions and wheezing. Tell me, do you get out of breath when you go up the stairs or when you walk fast?

Patient: Frequently, I suffocate myself.

Doctor: What do you in these cases?

Patient: I try to stop walking and relax a little bit. I also try to breath as deep as I can.

Doctor: I will schedule a chest X-ray at the hospital for you. While you are there we will have the lab get sputum for evaluation. Also you are going to take the tuberculosis test again. Depending on the test results, I will meet with you again to talk about our treatment plan. I will prescribe some antibiotics for you. Are you allergic to any antibiotic?

Patient: No, doctor.

Doctor: I advise you and everyone who smokes to stop smoking. The air we breathe is already contaminated by car and industry pollution. You also have to take into account that lately, females suffer more from lung and larynx cancer than males because they tend to smoke more. There are several methods to quit smoking, but the cheapest I know is to stop buying cigarettes. Do not ask for one, stay away from them.

Patient: Doctor, how does smoking damage the lungs?

Doctor: The lung tissue starts to deteriorate with the inhalation of toxic substances, and the interchange of gases decreases. Therefore, the more the person smokes the less he/she can breathe.

Patient: Thank you very much, doctor.

Doctor: My pleasure. I will see you as soon as I have the result of your medical tests.