BREATHING EXERCISES FOR EASING RESPIRATORY PROBLEMS

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ABSTRACT

Asthma is a chronic condition caused by inflammation of the airways in the respiratory system. There are many triggers to asthma such as allergies such as pollen, animal, ragweed, dust, stress, pollution respiratory viruses such as cold or flu. Asthma may cause difficulty breathing, chest tightness, cough can occur at night during exercise with phlegm mild or severe or early morning. Acute bronchitis is usually caused by a viral infection, such as the common cold, and typically resolves on its own within a few weeks. Chronic bronchitis, on the other hand, is a long-term condition that is often caused by smoking or exposure to air pollution and can lead to more serious respiratory problems over time. People with asthma suffer from impaired quality of life compared with people without asthma. Rational asthma management leads to disease control and better quality of life. It is, therefore, considerably important to evaluate the quality of life of the patients in addition to the symptoms in order to fully assess the asthma management.

Key Words: *Respiratory problem, breathing exercise, asthma, bronchitis*

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INTRODUCTION

Bronchitis and asthma are both respiratory conditions that can cause inflammation and narrowing of the airways, making it difficult to breathe. Bronchitis is a condition that causes inflammation of the bronchial tubes, which are the air passages that lead to the lungs. This inflammation can cause coughing, wheezing, and difficulty breathing, and may be acute (short-term) or chronic (long-term).

Moffatt MF et.al (2010) said that susceptibility to asthma is influenced by genes and environment; implicated genes may indicate pathways for therapeutic intervention. Genetic risk factors may be useful in identifying subtypes of asthma and determining whether intermediate phenotypes, such as elevation of the total serum IgE level, are causally linked to the disease. the general awareness of asthma is poor, patient education programs should augment awareness and eliminate social stigma and misconceptions in society regarding asthma. Knowledge about the prevailing perception in the community would be the first step in achieving this. The higher prevalence was in the UK, New Zealand, and Australia while the prevalence of asthma in Eastern Europe, Greece, and China was considerably lower. In world health organization recognizes asthma as a major health problem. Significant factor influencing the acceptance of the disease and compliance to the therapy. There for patient education programme forms an integral component in the long-term management of asthma. Knowledge empowers patients, especially in a chronic disease like asthma.

The main goal of asthma treatment is to achieve and maintain clinical control [National Heart, Lung and Blood Institute. National Asthma Education and Prevention Program. Expert Panel Report 3, 2007], and when asthma is controlled severe exacerbations should be rare and there should be no more than occasional symptoms [Global initiative for asthma. Global Strategy for Asthma Management and Prevention. 2009]. Despite such guidelines, the Asthma Insights and Reality surveys found that the understanding and management of asthma was poor across all regions [Rabe KF et al 2004].

Acute bronchitis is usually caused by a viral infection, such as the common cold, and typically resolves on its own within a few weeks. Chronic bronchitis, on the other hand, is a long-term condition that is often caused by smoking or exposure to air pollution and can lead to more serious respiratory problems over time. If one is experiencing symptoms of bronchitis, it's important to talk to healthcare provider to determine the underlying cause and develop an appropriate treatment plan.

While the underlying causes of these conditions may differ, there are some factors that can contribute to both bronchitis and asthma:

1. Exposure to irritants: Exposure to irritants such as smoke, pollution, and chemicals can trigger inflammation in the airways and lead to bronchitis or asthma symptoms.
2. Viral infections: Many cases of acute bronchitis are caused by viral infections, such as the common cold or flu, which can also trigger asthma symptoms.
3. Allergies: Allergies to pollen, dust, pet dander, and other allergens can cause inflammation and narrowing of the airways, leading to bronchitis or asthma symptoms.
4. Genetics: Some people may be more susceptible to developing bronchitis or asthma due to genetic factors.
5. Smoking: Smoking or exposure to secondhand smoke can damage the airways and increase the risk of developing bronchitis or asthma.

When experiencing symptoms of bronchitis or asthma, it's important to talk to your healthcare provider to determine the underlying cause and develop an appropriate treatment plan. By identifying and avoiding triggers, taking prescribed medications, and following a healthy lifestyle, one can manage the symptoms and improve your overall respiratory health.

A US study found that adolescents with asthma and symptoms reported worse health-related quality of life compared with those with asthma but not reportingsymptoms and those without asthma.**[Cui W et al 2015]**

People with asthma suffer from impaired quality of life compared with people without asthma. Rational asthma management leads to disease control and better quality of life. It is, therefore, considerably important to evaluate the quality of life of the patients in addition to the symptoms in order to fully assess the asthma management.

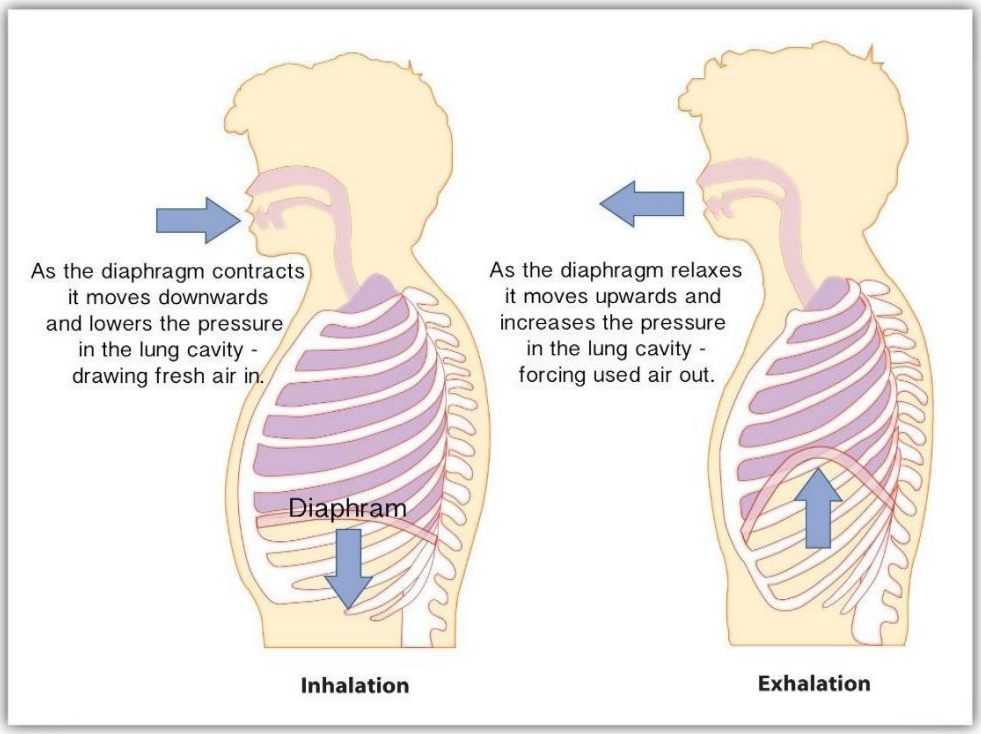
Acute bronchitis usually resolves on its own within a few weeks without treatment. However, there are some steps we can take to help manage symptoms and speed up recovery:

1. Get plenty of rest: Resting can help your body fight off the infection and reduce fatigue.
2. Stay hydrated: Drinking plenty of fluids can help thin out mucus and make it easier to cough up.
3. Use a humidifier: A humidifier can help moisten the air and ease coughing and congestion.
4. Avoid irritants: Try to avoid exposure to irritants such as smoke, pollution, and chemicals, which can make your symptoms worse.
5. Take over-the-counter medications: Over-the-counter medications such as acetaminophen or ibuprofen can help relieve fever and pain, while cough suppressants or expectorants can help relieve cough and congestion.

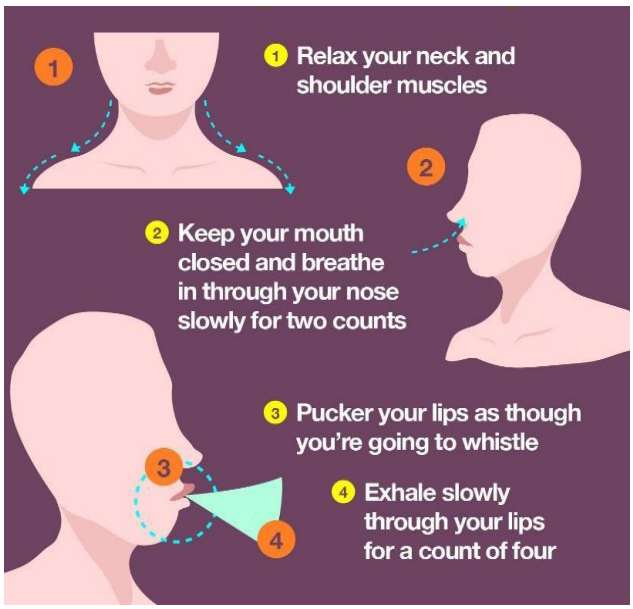
If one have chronic bronchitis, healthcare provider may recommend a treatment plan that includes medications to manage your symptoms, such as bronchodilators or inhaled steroids.

There are several breathing exercises that may be helpful for people with asthma.

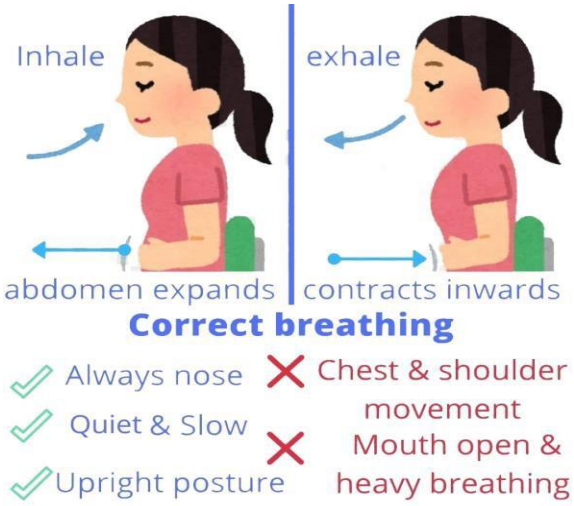
1. Diaphragmatic breathing: This involves breathing deeply from the diaphragm, rather than shallowly from the chest. To do this exercise, sit or lie down comfortably, place one hand on your chest and the other on your abdomen, and inhale deeply through your nose, feeling your abdomen rise as you breathe in. Exhale slowly through your mouth, feeling your abdomen fall as you breathe out. Repeat for several minutes.



2. Pursed-lip breathing: This involves inhaling through your nose and exhaling slowly through pursed lips, as if you were blowing out a candle. To do this exercise, sit comfortably and inhale through your nose for a count of two. Purse your lips and exhale slowly through your mouth for a count of four. Repeat for several minutes.



3. Buteyko breathing: This involves breathing slowly and shallowly through your nose, and holding your breath for a few seconds after each exhale. To do this exercise, sit comfortably and breathe in slowly through your nose for a count of two. Exhale slowly through your nose, and hold your breath for a count of two. Repeat for several minutes.

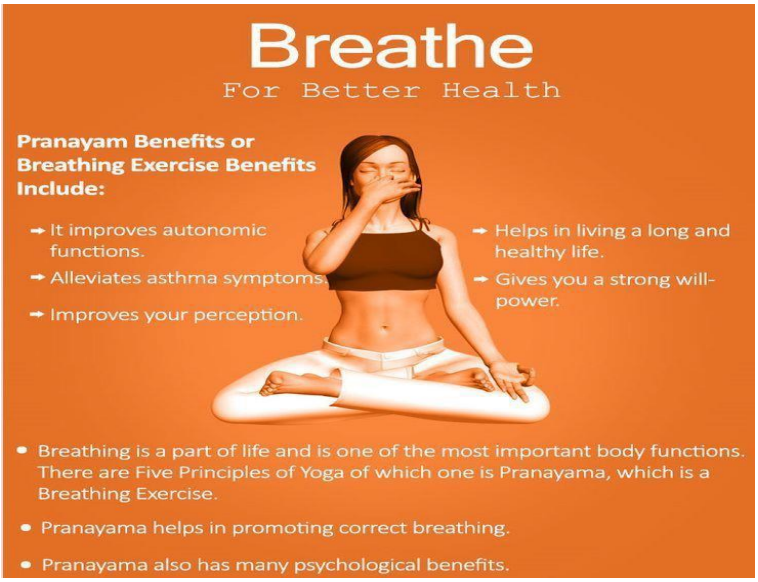


4. Alternate nostril breathing: This involves breathing in through one nostril and out through the other. To do this exercise, sit comfortably and place your right thumb on your right nostril and your right ring finger on your left nostril. Inhale through your left nostril, and then close it with your ring finger. Exhale through your right nostril, and then inhale through your right nostril. Close it with your thumb, and exhale through your left nostril. Repeat for several minutes.

5. Pranayam

Pranayama is a form of yoga that involves controlling your breath. Here's one pranayama exercise you can try:

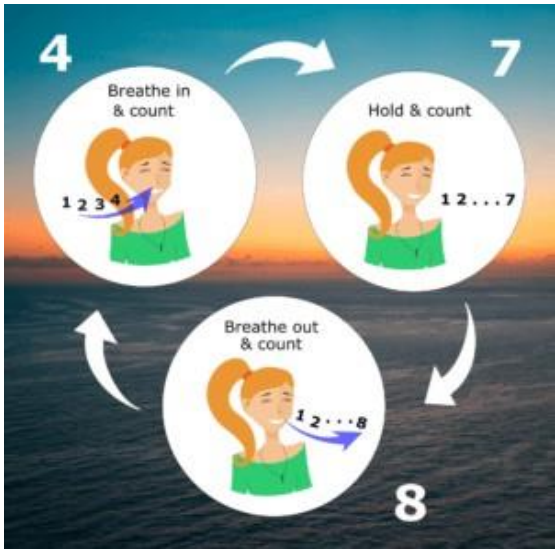
1. Sit comfortably with your back straight and your eyes closed.
2. Place your right thumb over your right nostril and inhale deeply through your left nostril.
3. Hold your breath for a few seconds.
4. Release your right thumb and place your right ring finger over your left nostril.
5. Exhale slowly through your right nostril.
6. Inhale through your right nostril, hold your breath, and exhale through your left nostril.
7. Repeat for several minutes, alternating between inhaling through your left nostril and exhaling through your right nostril, and inhaling through your right nostril and exhaling through your left nostril.



This exercise can help calm your mind and improve your breathing.

6. The Papworth Method

Slowly inhale through the nose. Exhale through pursed lips as if you are blowing out a candle. Remember, the exhalation should be twice as long as the inhalation. Repeat this cycle 3-5 times.



It is important to note that while breathing exercises may be helpful for some people with asthma, they should not replace prescribed medications or other medical treatments. Always talk to doctor before starting any new breathing exercises or making changes to your asthma treatment plan.

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