



Chronic obstructive pulmonary disease Nursing guidance

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I. What is chronic obstructive pulmonary disease (COPD)

Chronic obstructive pulmonary disease (pulmonary obstruction for short) is caused by long-term inflammation of the respiratory tract, leading to symptoms such as cough, phlegm, and wheezing. In severe cases, it may affect heart function or cause lung cancer. These symptoms usually result in persistent and often progressive airflow obstruction.

II. Risk factors

- i. Smoking or second-hand smoke
- ii. Family history
- iii. Environmental hazardous substances, such as dust, chemicals, harmful fumes, toxic itys play the solvent.
- iv. Lung health, if asthma, a history of bronchial or lung over-sensitive person repeated infections.
- v. Air pollution
- vi. Gene: Alpha-1 antitrypsin deficiency
- vii. Age: When you are over 25, your lung function gradually worsens over time.

III. Symptoms

Asthma, wheezing, chest tightness, chronic cough, excessive phlegm, fatigue, etc.

IV. Self-care

The most effective way to prevent lung obstruction is not to smoke. The sooner you quit smoking, the better. If detected and treated early, the symptoms of cough, phlegm, and asthma and the progression of the disease can be slowed.

i. Medication :

Continued treatment with inhaled medications is important to improve symptoms and slow disease progression. After discharge from the hospital, take medications as directed by your doctor. If you have any symptoms, note them down and let your doctor know when you come back. Your doctor will adjust your medication based on your situation. Do not adjust your medications on your own. If you use an inhaler, you must follow your doctor's instructions. Use on time and rinse mouth after use.

ii. Diet:

- (i) The main focus on maintaining ideal body weight and water balance, avoid

overeating to the principle of smaller meals, reduce the burden on the digestive tract and abdominal bloating sense, thereby reducing shortness of breath.

(ii) Avoid irritating foods such as coffee, tea, cold food, etc.

(iii) Avoid eating foods easy to produce gas, Speak not when as leeks, beans, carrots, cauliflower, onions, corn, cabbage, soft drinks, sweet potatoes, milk and eating, easy to increase the chance of abdominal bloating.

(iv) Avoid eating too much starch, high sugar foods, such as cakes, pastries, bread, jam, sugary drinks, etc., will affect the gas exchange, leading to carbon dioxide retention.

(v) Appropriate intake amount of protein, such as meat, eggs, milk and other food; increase the amount of intake of monounsaturated fats, such as vegetable oils (tea seed oil, olive oil, canola oil, sesame oil, peanut oil) and nuts (walnuts, pine nuts, almonds, cashews, peanuts).

(vi) The right amount of water intake helps sputum excluded.

iii. Exercise :

(i) Breathing exercise :

a. Pursed mouth breath, when the nose inhales, the inner heart silently reads [inhale- inhale], and then breathes out again after closing the breath; when exhaling, pursed the lips as if to blow out the candle, slowly exhale the air, and the inner heart silently reads [spit-spit-spit- spit], focusing on keeping the exhale time twice as long as the inhale time.



b. Abdominal breathing :

(a) Exhale phase : exhale slowly at the beginning, drive the gas out of the abdominal cavity by contracting the abdomen until the gas is exhausted, the process is about 5 seconds.

(b) Breathing phase : Stop breathing after exhaling for about 2-3 seconds.

(c) Inhalation phase : first relax the ribs, let the gas slowly fill the chest cavity to maximize the expansion of the chest cavity, and then continue to inhale, relax the abdomen, and make the belly gradually bulge.

(ii) Upper, lower limb movement : activities should adopt a progressive,

continuous, the hands can move upwards during inhalation, and simultaneously withdrawing inner meditation [inhale- inhale] when aspiration, hands down exhale [spit-spit-spit-spit], or walking, cycling, climbing stairs moving, the frequency of 3-5 days a week, every 30 minutes.

iv. Homecare:

- (i) CDC recommends that people with lung obstruction receive regular COVID-19 vaccine, flu vaccine, and recommended pneumococcal vaccine to avoid the risk of serious infection.
- (ii) Have suitable amounts of rest and sleep. Consume food rich in vitamin C and avoid overexposure to cold, heat, humidity and stress to maintain immunity.
- (iii) Maintain cleanliness of the oral cavity. Quit smoking and drinking and wear a mask to avoid inhalation of secondhand smoke.
- (iv) Prevent constipation to avoid using excessive force during excretion, leading to shortness of breath.
- (v) Avoid inhaling cold air or excessively hot air to avoid shortness of breath caused by bronchoconstriction. You can use scarves and masks appropriately.
- (vi) Moderately replenish water to facilitate sputum excretion, except for heart and kidney disease.
- (vii) Observe phlegm for signs of infection, such as if the amount increases or if the color changes. Please see a doctor as soon as possible if medication cannot ease discomfort, such as fever, yellow phlegm, breathing difficulty, purplish coloration of finger tips, and if you have trouble breathing that prevents you from talking, walking, or sleeping and medicine doesn't relieve it, get medical help as soon as possible.
- (viii) Please follow the doctor's instruction when there is need for oxygen therapy after being discharged from the hospital. Please check with the nursing station and respiratory therapist if such need arises.

V. Cooperate with the doctor's outpatient hours and return to the hospital regularly for follow-up.

After discharge, please follow the doctor's instructions and return to the clinic on time for follow-up. If you have any questions, please ask them at any time. The nursing staff is very helpful. front page Taipei/Tamsui MacKay/ Children's Hospital (02)25713760, Hsinchu Mackay/Children's Hospital (03)5745098, Taitung Mackay Hospital(089)310150 ext. 311. Available for consultation Monday to Friday from 9:00 AM to 12:00 PM & 2:00 PM to 5:00 PM.

May God Bless You