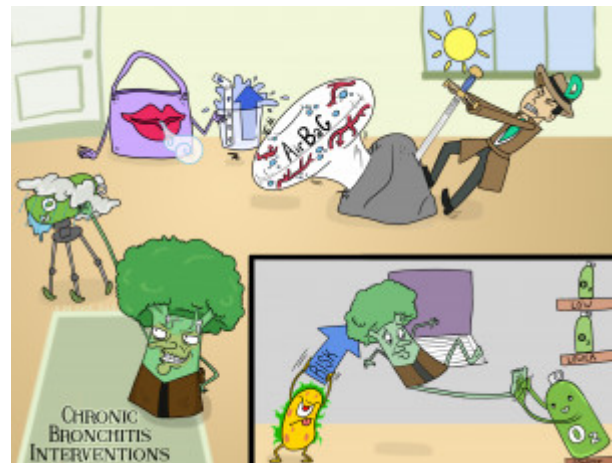


Chronic Bronchitis Interventions

Chronic bronchitis is a type of chronic obstructive pulmonary disease (COPD) in which the bronchial tubes become inflamed. Methods to decrease work of breathing in patients with chronic bronchitis include pursed lip breathing and assuming a tripod position. Oxygen therapy should be used with caution in these patients, as it may cause a decreased drive to breathe.



PLAY PICMONIC

Tripod Position

Tripod

In this position, a patient leans forward on a fixed surface, supporting themselves with their arms. The tripod position is usually seen in patients experiencing severe respiratory distress. By leaning forward, the patient is using additional muscles to lift the anterior wall of the chest, making it easier to breathe.

Humidified Oxygen

Wet O2-tank

Dry air can cause further irritation of inflamed airways in patients with chronic bronchitis. Adding moisture to the air or humidifying oxygen delivered via nasal cannula or mask can prevent further irritation and prevent the drying of mucus secretions.

Pursed Lip Breathing

Purse with Lips

Pursed lip breathing is encouraged in patients with chronic bronchitis to prevent air trapping and collapse of the bronchioles upon expiration. In this disease, alveoli cannot re-expand normally, which causes bronchiolar collapse. Pursed lip breathing prolongs the expiration of air and creates positive pressure to help keep alveoli open and functioning.

Increase Fluid Intake

Up-arrow Fluid Intake

Fluid intake should be at least three liters per day to prevent dehydration and drying of mucus secretions. Patients should be carefully monitored for signs of fluid overload, such as dyspnea and edema.

ABGs

AirBaG

Arterial blood gas results should be used to monitor the effectiveness of oxygen therapy in patients with chronic bronchitis. However, keep in mind that these patients may have a higher tolerance for carbon dioxide, which would be reflected in their lab results.

Early Detection of Exacerbation

Early-sun and Detective with Excalibur-Exacerbator

Depending on the client's risks of exacerbation and how they present symptomatically, they may be offered a range of short and long term therapy, either with beta agonists, muscarinic antagonists or inhaled glucocorticoids. Either given alone or in combination. Patients who experience a sudden increase in sputum volume, difficulty breathing, or change in sputum appearance should seek medical attention, as these can be early signs of worsening chronic bronchitis. Exacerbations can be treated using short-acting bronchodilators, and early detection improves outcomes in patients. Intravenous magnesium has been successful in cases where severe exacerbations are refractory to short-acting inhaled bronchodilators,

Considerations

Lowest O₂ Therapy

Lowest O2-tank Therapeutically-massaging

In patients with chronic bronchitis, the respiratory center in the brain develops a high tolerance to carbon dioxide in response to chronic hypoxemia. It is important to remember that administering a high flow of oxygen to these patients can take away their drive to breathe. Therefore, the lowest effective oxygen

flow rate should be used when administering oxygen therapy.

Assisted Ventilation

Assisted into Vent

Continuous positive airway pressure (CPAP) may be beneficial in patients who require additional breathing assistance. The positive pressure in CPAP works to keep the alveoli open, ultimately preventing bronchiolar collapse. Chest physiotherapy, using percussion and vibration, can be beneficial in patients who have difficulty clearing respiratory secretions on their own. In severe cases of respiratory distress, a patient may require intubation to facilitate breathing.

Increased Infection Risk

Up-arrow Bacteria Risk

Patients with COPD, especially chronic bronchitis, are more susceptible to infections. This susceptibility is due to the decreased functioning of respiratory cilia and excess respiratory secretions.