

Tuberculosis is a contagious bacterial infection that often affects the kidneys, bones, and the brain. TB is one of the oldest diseases among humans. There is a high morbidity rate in some areas of the world. In the 1950s several antibiotics were made but then many different strains became apparent and many are anti resistant to antibiotics. Since Tuberculosis is airborne it makes living in close proximity areas more able to acquire it. Most people have symptoms if exposed and appear positive but are considered inactive. A weakened immune system can change an inactive case into active. Active TB starts in the lungs but if left untreated it can begin to travel through out the body. Common tests for determining tuberculosis is a chest x-ray, sputum exam, culture, and TST test. People can become positive if they have received the bcg vaccine, have aids, or are too young/ old. The treatment for latent TB work by keeping dormant tb from becoming active. Active infection treatment are all heavily toxic for the liver.

COPD hinders breathing and becomes severe over time. It is the 4th leading cause of death in the United States. There are two types of copd one being emphysema and the other being chronic bronchitis. Most cases of copd are caused by smoking or inhalation of chemicals and dust from work environment. Alpha-1 is a genetic condition which is rare but can cause copd. In the early stages there usually are no symptoms but later on become more progressive. Diagnosis is done by test results, spirometry, chest ct/ x-ray, and ABG. The damage is irreversible but there are medications and life style changes that can help slow down the disease. Inhaled steroids can help reduce inflammation while bronchodilators help open up the airway.

Sleep apnea is the absence of breathing while sleeping. There are two things that can make your obstruction worse. One is being supine and the other being in REM sleep. Men are usually higher in the risk category because men tend to store most of their fat in their neck but women usually catch up once they have gone through menopause. Patients with recent weight gain can also become a huge risk factor. Being of asian decent also puts you in the higher risk category.

Pneumonia is the inflammation of the alveoli. Bronchial and lobar are different types of pneumonia. There is also different ways a patient can acquire pneumonia such as aspiration, ventilation, hospital, and community acquired. Bacteria such as streptococcus pneumonia is the main cause. Some signs and symptoms can usually differ but some common are coughing up a green color sputum, sweating, fever, chest pain, muscle pain, d/v, and cyanosis. Initial steps for diagnosis is listening to the lungs, sputum test, blood test, chest x-ray, bronchoscopy, and ct scan. Some treatments are antibiotics but is usually treated based on the patient. Patients who are immunocompromised are more susceptible to acquiring this.

Chest tubes is inserted into the pleura space of the lungs. It is used to drain out air or fluid from the lungs. After cardiac surgery they may place one to help get rid of blood and fluid from having an operation. Pneumothorax and pleura effusion are both examples of why someone might need a chest tube. There are different types of chest tubes such as wet and dry. A wet suction is regulated by the height of the water when connected to a wall suction. With dry suction there is no water and the suction is controlled by the wall suction and there is no water evaporation unlike the wet. Some nursing interventions is to monitor the system and to know how to fix any issues to come arise. The drainage system needs to be kept below the patients chest and the tubing is effectively draining. Must note amount and color of fluid.