



Pneumonia

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ABSTRACT :-

Pneumonia is now a leading cause of mortality world wide. Pneumonia is a complex inflammatory condition of lungs. It is caused by various infectious agents like bacteria, virus etc. Pneumonia is very common and continues to exact a high burden on health. It causes 55% of LRI Deaths in all ages. Pneumonia causes a lower particular virus novel pathogens. Pneumonia is commonly classified according to patients location at the time of infection, leading to the categories of community acquired and acquired pneumonia. Pneumonia is a complex condition of lungs that is caused by the growth of bacterial infection. 1, 2

KEYWORDS:- Pneumonia, Viral Diseases.

INTRODUCTION:-

Pneumonia is a common acute respiratory infection that can affect the distal airways and Alveoli. It is a major health problem which is associated with high morbidity with short term as well as long term mortality in all age groups. Pneumonia is divided into 1. Community acquired pneumonia 2. Hospital acquired pneumonia. It is most commonly Infectious cause of death. It is usually characterized by consolidation. In pneumonia alveoli are filled with a mixture of inflammatory Exudate, bacteria and WBC. It is generally described as inflammatory process in the lungs tissue that may predispose a patient at a risk for microbial infection. It is generally caused by microorganisms which enter the lower respiratory system and cause infection. In the case of pneumonia the air sacs may fill with fluid or pus. 3, 4

RISK FACTORS :-

There are the various risk factors of pneumonia some of the common risk factors are :-

1. Age 60 or older.
2. History of smoking.
3. Upper respiratory tract infections.
4. Tracheal intubation.
5. Malnutrition.
6. Dehydration.
7. Being hospitalized in unhygienic hospitals.
8. Weakened immune system.
9. Chronic illness.
10. Recent viral respiratory infections.
11. Chronic exposure to certain chemical.
12. Recent surgery trauma.
13. Drug abuse.
14. Hospitalisation in and intensive care unit.
15. Infants and very young children's . 5, 6

SYMPTOMS:-

There are various symptoms of pneumonia and some of the main symptoms are given as follow :-

1. High fever.
2. Cough sometimes with green or yellow bloody mucous.
3. Tiredness.
4. Rapid breathing.
5. Shortness of breath.

6. Sweating or chills .
7. Chest or abdominal pain.
8. Loss of appetite.
9. Blueish skin, lips or nails.
10. Confusion.
11. Rapid heart rate.
12. Dry cough.
13. Muscle pain .
14. Lack of energy.
15. Restless or Fussiness.
16. Pale skin.
17. Grunting sound with breathing.
18. Sudden change in mental health. [7](#), [8](#), [9](#)

TYPES :-

Some of the main types of pneumonia are given as under ;

1. CAP (COMMUNITY ACQUIRED PNEUMONIA) :- In this type of pneumonia the patient get the pneumonia symptoms outside of a health care facility. The main cause of CAP are bacteria, virus, fungi and protozoa.
2. HAP (HOSPITAL ACQUIRED PNEUMONIA) :- In this type of pneumonia patient get the pneumonia while in a hospital or health care facility for another illness or procedure. It is more serious than CAP because it is caused by antibiotic resistant bacteria, like methicillin-resistant. [10](#),[11](#) [12](#)
3. HEALTH CARE ASSOCIATED PNEUMONIA :- The patient get the health care associated pneumonia while in a long term care facility such as nursing home or out patient, extended stay in clinics or stay in hospital by which a patient gets pneumonia. It is usually caused by antibiotic resistant bacteria.
4. Ventilator associated pneumonia :- It is generally acquired by the patient who need to be own a respirator or breathing machine to help in breathe into the hospital used in ICU . It is same type of bacterial pneumonia as CAP. [13](#), [14](#), [15](#)

DIAGNOSIS AND TESTS :-

Diagnosis :-

To diagnosis pneumonia a health care provider will ask about your health history and conduct a physical exam. They will listen to your lungs with a stethoscope and may perform other additional tests. [16](#), [17](#)

TESTS :-

There are various tests which are performed to cure pneumonia and some of common tests are given as under ;

1. Imaging.
2. Blood test.
3. Chest X ray or CT scan.
4. SPUTUM Test.
5. Pulse Oximetry.
6. Pleural fluid culture test.
7. Arterial blood gas test.
8. Bronchoscopy. [18](#), [19](#)

TREATMENT :-

There are various treatment of pneumonia and some of common treatment of pneumonia are given as under ;

1. Control your fever with aspirin or anti inflammatory drugs.
2. Drink plenty of fluids to help loosen secretion and bring up phlegm.
3. Do not take cough medicine without first talking to your doctor.
4. Drink warm beverages, take steamy baths and use a humidifier to help open your airways and helps you to easy breathe.
5. Stay away from smoke to let your lungs heal.
6. Use of antibiotic, antiviral and fungal medication, cough suppressant and pain reliefer etc.
7. Breathing treatment and exercises using a humidifier.

8. Oxygen therapy.
9. Using IV fluids.
10. Conservative treatments. [20](#), [21](#)

PREVENTION :-

There are the various prevention of pneumonia and some of the common strategies that help to protect patients from the pneumonia infection are ;

1. Vaccination :- Vaccine such as RSV, COVID 19 and some flu vaccines that can help to prevent many common types of pneumonia caused by various causative agents including bacteria and virus.
2. Practicing good hygiene :- Regular hand washing and avoiding close contact with the people who are affected with pneumonia.
3. Strengthen the immune system :- Eating balance diet, exercising regularly, and getting enough sleep that can strength the immune system.
4. Avoiding crowded places :- Crowding is essential risk factor for various infectious disease which can make it easier to spread infection like pneumonia. [22](#), [23](#), [24](#)
5. Avoiding aspirations :- For individuals at the risk of aspirations such as those with swallowing difficulties, it is important to be Cautious about food and drink intake to prevent food or liquid from entering the lungs.
6. Addressing environmental factors :- Avoiding certain environmental factors such as indoor air pollution and lungs irritants like smoking can reduce pneumonia risk.
7. Treatment the chronic conditions :- Management of chronic disease specially in older patients including diabetes, asthma and heart conditions can reduce the risk of pneumonia. [25](#) , [26](#), [27](#)

CONCLUSION :-

Pneumonia is a critical health problem which requires effective treatment and diagnosis. It is a respiratory infection by which lungs are affected by bacteria, fungi or viruses. [28](#) Early diagnosis and treatment like antibiotics, antiviral, supportive care are important for recovery. Vaccination, good hygiene, avoiding smoking are the preventive majors that can reduce the risk of pneumonia. Awareness is important to manage and prevent complications from the pneumonia. [29](#), [30](#)

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