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# Pneumonia – Diagnosis and it's Homeopathic Management

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## INTRODUCTION

The word "pneumonia" comes from the ancient Greek word "pneumon" meaning "lung". Pneumonia was defined as an infection of the lung parenchyma.

Typical symptoms may include fever, cough, shortness of breath and chest pain.

"Lobar pneumonia" is a radiological and pathological term referring to the homogeneous consolidation of one or more lobes of the lung, often with inflammation of the pleura.

Bronchopneumonia refers to more uneven alveolar consolidation with bronchial and bronchiolar inflammation, often affecting both lower lobes.

## CLASSIFICATION

Many attempts have been made to classify pneumonia based on etiology, the clinical condition in which the patient acquired the infection, and the type of lung parenchymal involvement, among other classifications. This article summarizes pneumonia based on the American Thoracic Society classification.

Community-Acquired Pneumonia (CAP)

Any pneumonia acquired outside the hospital in a community setting.

Hospital Acquired Pneumonia (HAP)

Any pneumonia acquired within 48 hours of admission to an inpatient facility such as a hospital and not incubating at the time of admission is considered HAP. This classification helps clarify the confusion surrounding the terms healthcare-associated pneumonia and hospital-acquired pneumonia. Now, all pneumonia acquired in assisted living facilities, rehabilitation facilities, and other health care facilities is included in community-acquired pneumonia, and a hospital setting is required for pneumonia to be classified as HAP.

Ventilator Associated Pneumonia (VAP)

Any pneumonia acquired 48 hours after endotracheal intubation is considered VAP.

These categories helped establish the common organisms responsible for each type of pneumonia and helped formulate treatment guidelines for effective treatment in both inpatient and outpatient settings.

Depending on the type of involvement, pneumonia has historically also been studied as:

Focal non-segmental or lobar pneumonia: involvement of one lobe of the lung.

Multifocal bronchopneumonia or lobular pneumonia

Focal or diffuse interstitial pneumonia

## HISTOPATOLOGY

Histopathology in pneumonia can be broadly studied under 2 main headings: bronchopneumonia/lobular pneumonia or lobar pneumonia.

#### Lobar pneumonia

Lobar pneumonia is a diffuse consolidation involving an entire lobe of the lung. Its development can be divided into 4 stages as follows:

Congestion: This stage is characterized by severely heavy and swampy lung tissue, diffuse congestion, vascular congestion, and accumulation of alveolar fluid rich in infectious organisms. At this stage, there are few red blood cells (RBCs) and neutrophils.

Red hepatization: Marked infiltration of red blood cells, neutrophils and fibrin into the alveolar fluid is observed. Grossly, the lungs appear red and firm like the liver, hence the name hepatization.

Gray hepatization: Red blood cells break down and are associated with fibrinopurulent exudates that cause a red to gray color change.

Differentiation: Characterized by removal of exudates by resident macrophages with or without residual scar formation.

Bronchopneumonia

Bronchopneumonia is characterized by purulent inflammation located in the areas around the bronchi, which may or may not be located in a single lobe of the lung.

## **RISK FACTORS**

The risk of developing pneumonia is particularly high in infants and the elderly (over 65). A weakened immune system, for example due to diabetes, kidney problems or cancer, also means that the risk is higher and greater. Lung diseases such as asthma and COPD, heart disease, smoking, and certain viral infections such as influenza (flu) can make people more susceptible to pneumonia.

The risk of aspiration pneumonia is particularly high in people who are bedridden or have confusion or difficulty swallowing, for example due to dementia or stroke.

Certain medications are also associated with pneumonia, such as medications that reduce stomach acid. But it is still not clear whether they actually increase the risk of pneumonia.

## SIGNS AND SYMPTOMS

Typical symptoms of pneumonia are:

- High fever and chills
- Physical weakness and a strong feeling that you are not well
- Cough with mucus (sputum)
- Shortness of breath and rapid breathing
- Race pulse

Not all symptoms always appear at the same time. In particular, children and the elderly may not show some symptoms, or other, less typical symptoms, such as diarrhea, stomach pain, or drowsiness and confusion, may be more prominent.

#### MANAGEMENT

The approach to the evaluation and diagnosis of pneumonia depends on the clinical condition, laboratory parameters and radiological examination.

- Clinical assessment: This includes taking a careful patient history and performing a thorough physical examination to assess the clinical signs and symptoms listed above.
- Laboratory evaluation: Includes laboratory values such as complete blood count with differentials, inflammatory biomarkers such as ESR and C-reactive protein, blood cultures, sputum analysis or Gram stain and/or urine antigen testing or polymerase chain reaction to detect the nucleic acids of a specific bacterium.

Arterial blood gas can reveal hypoxia and respiratory acidosis.

• Radiologic evaluation: Includes a chest x-ray as the initial imaging test, and the finding of pulmonary infiltrates on plain film is considered the gold standard for diagnosis if laboratory and clinical features are supportive.

Chest X-ray may reveal consolidation or parapneumonic effusion.

Chest CT is performed in complex cases where the cause is unknown.

## DIFFERENTIAL DIAGNOSIS

The differential diagnosis of pneumonia includes asthma, chronic obstructive pulmonary disease (COPD), pulmonary edema, malignancies, noninfectious lung consolidation processes, pleurisy, pulmonary embolism, foreign body aspiration, bronchiectasis, bronchiolitis, and others. little. If differentiation becomes difficult, parameters such as C-reactive protein, erythrocyte sedimentation rate, procalcitonin levels, leukocyte count, and temperature can be used to establish the diagnosis.

#### MANAGEMENT WITH HOMEOPATHY

ACONITUM NAPELLUS – first stage caused by cold in COLD, DRY AIR. Chills more or less marked at commencement of attack immediately followed by intense fever with dry burning, hot skin rapid and hard pulse with violent thirst, anxiety, restlessness, dyspnoea and perhaps fear of death, constant pressure on left chest, labored breathing. wheezing cough worse from every inspiration, at night, drinking; clutching his throat.

He prefers to cough while lying on his back. Shortness of breath during sleep. Violent congestion of blood in the chest. Pneumonia. Chest tightness on slightest movement. Lungs are hot.

ANTIMONIUM TARTARICUM - the best remedy for pneumonia of the right lung associated with jaundiced cough in elderly patients, especially in the winter months with weak chest and weak expectoration.

Difficult breathing, relieved by coughing. respiratory problems of newborns. & significant respiratory distress . children with Rattle chest.

BRYONIA ALBA -Cough; DRY, HARD, VERY PAINFUL, at night from stomach, must sit eat and drink more difficult. He wants to take a deep breath, but he can't or he coughs. Coughing up; rusty blood streaked or solid. Pneumonia. SHARP STITCHES IN Chest or right scapula, worse deep breathing and cough. Pleurisy. Coming into a warm room causes a cough. Holds the chest or presses the sternum when coughing.

CHELIDONIUM – Right-sided pneumonia with backache, desire for warm drinks, painful cough. hemoptysis. Right-sided intercostal neurolagia, worse from movement.

Bilious pneumonia. Respiratory symptoms with liver symptoms. Shortness of breath and tight chest. Shortness of breath worse urination. they usually have right-sided complaints. aggravation from motions.& improves after lunch.

LACHESIS MUTUS- in the late stage of pneumonia, when it takes on a typhoid form, especially with an abscess in the lungs. HEPATITISATION MOSTLY IN THE LEFT LUNG. Great difficulty breathing

SULPHUR - after jacon has played its part in onset, sulfur often interrupts the disease. Great rattling of mucus in the chest. Frequent, weak, fainting and hot flushes. He wants to have the windows and doors open.

In the later stages of pneumonia, when there is no tendency to subside, bryonia is often required.

RUBRICS FROM MURPHY REPERTORY

PNEUMONIA, infection, (104)

PNEUMONIA, infants, (13)

PAIN, pneumonia, after (7)

PNEUMONIA, congestive stage (7)

PNEUMONIA, consolidation stage

PNEUMONIA, left, lung (8)

PNEUMONIA, left, lung lower lobe (3)

PNEUMONIA, resolution stage (15)

PNEUMONIA, infection, consolidation stage (8)

PNEUMONIA, right, lung (15)

PNEUMONIA, right, lung lower lobe (3)

PNEUMONIA, right, lung upper lobe (2)

FAST, pulse pneumonia, in (4)

QUICK, pulse pneumonia, in (5)

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