



PNEUMONIA

What is Pneumonia? - Pneumonia is an inflammatory response to bacterial infection in lung tissue characterized by the production of pus and secretions into conducting airways and tissues.

What Causes Pneumonia? - Bacteria enter the lungs primarily by the inhalation or aspiration. Respiratory virus infections can also adversely influence the lung linings allowing bacterial growth. This impairment of host defenses by the virus may allow resident bacteria to invade the respiratory tract. Any condition that decreases an animal's resistance or immune system can preclude a bout of pneumonia.

Bacterial invasion of the lung incites an inflammatory reaction. High protein fluid leaks into the lung tissues and air spaces. White blood cells infiltrate the airways and tissues, resulting in tissue consolidation, loss of blood circulation, tissue death, and collapse of the lung tissue as a consequence of bronchial occlusion. Death is associated with severe hypoxemia (low arterial oxygen concentration) and/or invasion of the bloodstream by bacteria. In dogs the bacteria *Bordetella bronchiseptica* and *Streptococcus zooepidemicus* are primary pathogens. In cats *Bordetella bronchiseptica* and *Pasteurella* species are reported most frequently.

What Are the Symptoms of Pneumonia?

The signs associated with pneumonia can include coughing, fever, trouble breathing, abnormal breathing sounds, nasal discharge, loss of appetite, lethargy, weight loss, exercise intolerance, and dehydration.

How is It Diagnosed? - The history of the illness and the physical examination can give strong presumptive evidence of the presence of pneumonia. Depending on the situation, chest x-rays and blood tests may be indicated. Occasionally specific tests may be needed including tracheal washing and culture, bronchoscopy, bronchoalveolar lavage, fine-needle lung biopsy, fecal examinations, and blood tests.

How is it Treated? - Treatment in the hospital is recommended if the patient is showing multisystemic signs such as lost appetite, high fever, weight loss, or lethargy.

ACTIVITY: Should be restricted during treatment at home or in the hospital except as part of physiotherapy after aerosol treatments.

DIET: Ensure normal intake with a diet high in protein and energy density; intravenous or stomach tube nutritional support can be indicated in severely ill patients. Rarely surgery can be indicated to remove a severely involved lobe of lung.

MEDICATIONS: Oral and parenteral antimicrobials (antibiotics) are the principal therapy. Sometimes the antibiotic success will require culture results to determine the best choice. Dehydration hinders mucus clearance and secretion mobilization, so maintenance of normal hydration is an important therapeutic objective. Nebulization with bland aerosols results in more rapid resolution of canine pneumonia if used in conjunction with physiotherapy and antibacterials. Physiotherapy (mild forced exercise, chest wall coupage, tracheal manipulation to stimulate mild cough, postural drainage) should be used immediately after aerosol treatments to enhance secretion clearance.

Occasionally cough suppressants may be used with caution and only for short intervals to control an intractable cough. Expectorants are recommended by some clinicians.

What is the Prognosis? - A good prognosis can usually be made with aggressive antibacterial and supportive therapy. Prognosis is more guarded in young animals, those with immunodeficiency, and those that are debilitated or have severe underlying disease.

Call Us If...

- You have trouble giving your pet its medicine.
- Your pet continues to cough in spite of its medicine.
- Its general health seems to diminish.
- It loses its appetite.
- It is still coughing after 10-14 days.

Thank You for This Opportunity to Serve You!