

# **THE RELATIONSHIP OF SHEEP PNEUMONIA WITH BACTERIAL INFECTION**

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## **Introduction:**

Pneumonia is one of the important diseases that affect sheep, in particular Newborns (pregnancies) causing illness, death and losses of meat and milk, and delayed growth, Fatal economic, However, pneumonia can also be caused by fungi, viruses, bacteria, certain medications, and autoimmune diseases. The identification of the exact cause is often ineffective [1, 2, 3]. And these inflammatory of the lung condition that mainly affects the alveoli. Bacterial pneumonia is a very specific and potentially life-threatening subset of pneumonia. Various microorganism enter the lung by suctioning of infected people live there only at certain times and under certain conditions [4,5,6], as they invade the area between the bacterial vesicles in the lungs where neutrophil and macrophage effort to deactivate the microbe [10]. Cytokine that arise since neutrophil can cause normal motivation immune classification and this lead to infection and exhaustion that are mutual among the bacteriological reasons of pneumonia [7,8,9].

Neutrophils cause consolidation, bacteria and fluids since nearby blood vessel that chunk the alveoli [11,12,13]. Klebsiella spp. is a major cause of pneumonia in Asia and it may remain accountable for patients with somatic disorders. The use of a very strong antibiotic is also linked to the diseases. The type Klebsiella belong to the Klebsiella tribe, a member of the Enterobacteria family. Klebsiella is a non-motile Gram-negative bacterium, rod-formed with a prominent poly saccharide capsule. This capsule, accountable aimed at the great presence of the organism on the Gram stain at the same time, experiences resistance in contradiction of numerous crowd defenses mechanism [14].

## **Entry of the microorganisms in lungs airway**

The airway epithelium is a major site of entry of microorganisms into the lungs; Many people have recommended pneumoniae bond and attack of epithelial cells of the lung [15,16]. E. coli is thought to be the biggest cause of numerous common

bacterial contagions, counting diarrhea, bacteria, urinary tract infections, and additional. Smell Escheric, which first distinguishes from Gram-negative bacilli living is a type of metabolism that involves both fermentation and respiration, and is a type of metabolism. stimulated or non-stimulated [16].

### **Escherichia coli respiratory tract infections**

Almost E. coli is related with respiratory infections with Escherichia coli therefore, it is a reason of pneumonia in hospitals. But, Colonic pneumonia can also occur in one form or another in patients with many chronic diseases such as urinary tract infection, resistant lung disease, diabetes and e. Coli. E. colic pneumonia usually reveals progress [16]. penis aerial bacteria within the Pseudomonadaceae is a major cause of hospitalized pneumonia. It is believed to be a mutual reason transpire completely in individuals with a weak respiratory system or a weakened system. Such as a patient suffering from heart failure and also chronic lung disease, in patients with neutropenic from the mucinous [17,19].

### **Pasteurella hemolytica**

Pasteurella hemolytica, a type A strain present in the respiratory system of sheep, which is activated when conditions exist causing blood poisoning. In lambs under 3 months of age, pneumonia in adult sheep and mastitis in ewes .- Pasteurella multocida It can cause lung abscesses, especially in large sheep. Symptoms of septicemia: loss of appetite, high temperature (above 41), and difficulty breathing due to edematous swelling of the neck. There are also nasal secretions purulent-hemorrhagic. Cough / cough, increased respiratory rate, lung fullness and distention, and bleeding spots spread in them. And in the chest cavity at the anatomical characteristic, possibly fibrous fluid and purulent oozing that tends to greenish. Eye infections also occur accompanied by tear and pus secretions and congestion of the liver, with it containing granules the size of lentils as well as the spleen. The presence of blood sacs spread under the skin of the neck and chest. A general decline followed by death

### **Antibiotic sensitivity**

The nasal swab samples were mainly classified according to their smell and color and the sensitivity test is performed after a separate test by the National Committee for Clinical Laboratory Standards, and the incubation took place for 24 hours at 37 ° C in the nutrient broth and the suspension was equivalent to 0.5 McGrawland standard and turbidity The method of spreading the disc was determined in Müller-Hintinagar Sensitivity to anti-agents For microbes [18].

The antibiotic chloramphenicol 30 mg (C30), imipenem 10 mg (IPM10), gentamycin 10 mg (CN10), ciprofloxacin 10 mg (CIP10), nalidixic acid 30 mg (NA30), ampicillin 25 mg (AM25), amoxycycline 30 mg (AM25) ). It is commonly used in the treatment of pneumonia, and the isolates have been classified as resistant, sensitive and moderate [18,24,25].

Treating bacteria less susceptible to bacteria and antimicrobial agents associated with biofilms may be difficult, thus preventing the entry of many antibiotics, and biofilms then external polysaccharide [25, 26] can prevent antibiotic penetration. It is interesting that evaluates of choosing lung then becomes sensitive to this type of bacteria, to antibiotics that are present all over the world, which inhibit their growth; It is the result of pathogens and prevents of a wide range of antibiotics and reduces the time consumption and the E. coli has a high degree of opposition to antimicrobial and bacteria that are unaffected to antimicrobial.

### **Klebsiella pneumonia respiratory tract infections**

Gram-negativ organism showed the premier incidence of pneumonia of wholly bacteria, with a peak incidence of Klebsiella pneumoniae approximately (32.5%), surveyed are aeruginosa (10%) and is observed. finding is studies (2002) conducted on Bua and Corcanado which reported that Klebsiella spp. It causes 5% of all cases of community-acquired pneumonia [19]. Amoxicillin (30 mg) (100%), and the highest resistance to cefotaxime (10 mg) (87.5%) and it was found that Klebsiella in general is unaffected to furthestmost antibiotic, which can be due to prolonged treatment with the same antibiotics, as it has often been observed that resistant types of bacterial strains appear. [20,21].

Klebsiella pneumoniae is an infection that is difficult to treat due to the organism's thick capsules, and the best treatment for it is with the use of the cephalosporins K.P.C. isolate containing 50% repissenum, which was agreed upon for us. Antimnem resistance in 75% to pneumonia. It was found that inipulum MIC is clearly affected by the vaccine. KPC-K. For an accurate identification of pneumonia, special attention should be paid to the preparation of the appropriate vaccine for broth-based allergy methods [23, 27, 28].

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