

# Pneumonic Pasteurellosis in a Sheep Flock and Its Management

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## Abstract

An adult sheep was presented to the clinic with complaint of inappetence, respiratory distress and weakness. Examination of the sheep revealed pyrexia, tachycardia, tachypnea, pale mucous membrane, harsh and crackles while auscultation of lungs. Postmortem examination of the sheep revealed consolidations of the lung lobes, frothy exudates along the trachea, bronchi and smears from the lungs revealed presence of *Pasteurella* organisms. All the sheep in the flock showing the similar signs were treated with broad-spectrum antibiotic, non-steroidal anti-inflammatory drug along with supportive therapy.

**Keywords:** *Pasteurella*, pneumonia, sulpha drugs, sheep

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## INTRODUCTION

Pneumonic Pasteurellosis is one of the most important economically infectious diseases of ruminants with a wide prevalence throughout the country. The disease is characterized by an acute febrile course with severe fibrinous or fibrinopurulent bronchopneumonia, fibrinous pleurisy, and septicaemia [1]. *M. haemolytica*, *P. trehalosi*, and *P. multocida* are common commensal organisms of the tonsils and nasopharynx of healthy sheep and goats. They are non-motile, gram-negative rods that cause cranioventral bronchopneumonia affecting sheep and goats of all ages worldwide [2]. The present communication places on record a pneumonic pasteurellosis in a sheep flock and its management.

## MATERIALS AND METHODS

A four-year old sheep was presented to teaching veterinary clinical complex, C.V. Sc., Proddatur with history of inappetence, unable to stand properly. Deteriorating condition of the sheep was noticed from the last three days. Previously four sheep were died showing the similar signs in their flock contain thirty sheep.

Clinical examination findings were pyrexia, tachycardia, and tachypnea. The sheep was having abdominal breathing with harsh and crackles lung sound upon auscultation. The prognosis of this case was guarded, and the

sheep died on the day of presentation and postmortem examination was carried out. Postmortem findings for this sheep were consolidations of the left and right cranial lateral lung lobes. In addition, we noticed froth along the trachea, bronchi, and cut surface of the lung. Also, the presence of straw-colored pericardial fluid was observed. Smears collected from the postmortem and stained blood smears revealed presence of bipolar organisms.

## TREATMENT AND DISCUSSION

The treatment plan for other sheep showing the similar signs in the flock was sulphadimidine sodium (33.3%, purchased from Novartis) (100 mg/kg) injection intravenously on the first three days, same as bolus (Sulphadimidine; purchased from Pabidine bolus, Intas Pharma) for next five days. Flunixin Meglumine purchased from Unizif-Intas Pharma (2 mg/kg) intramuscularly for 3 days and supportive therapy with Intalyte purchased from INTALYTE-Intas pharma (150 ml, I.V. for 2 days), Anistamin purchased from Anistamin Intas Pharma inj. (2 ml, I.M., BID, for 2 days) and calcium supplement purchased from Intacal-IM Intas pharma @ 1 ml/animal thrice a week for two weeks was prescribed. In the present study, case was diagnosed as pneumonic pasteurellosis based on the clinical presentations, postmortem and

laboratory findings. The clinical signs observed were inappetence, weakness, pyrexia, abnormal lung sounds collaborate the previous reports [3]. The present case can be said to be an acute form of the disease as it has been reported that the disease in goats can manifest in acute, sub-acute, or chronic form [4]. The postmortem findings of consolidation of the lung lobes, frothy exudates in the trachea, bronchi, and lung surfaces coupled with straw-colored pericardial fluids depict the postmortem case definition of pneumonic pasteurellosis [5]. The bacteria have been reported to be a normal flora of the nasopharynx in healthy sheep and goats [2]. Stress factors such as transportation, concurrent infections, overcrowding, poor housing, and sudden environmental changes increase sheep susceptibility to pneumonic pasteurellosis [6].

## CONCLUSION

In conclusion, pneumonic pasteurellosis is one of the important and devastating diseases in sheep. Proper early diagnosis and treatment is required to prevent economic loss due to pasteurellosis.

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