



A CASE OF HOSPITAL ACQUIRED PNEUMONIA

¹Suman Saha, ²Amartya De

¹ Ex. Physician, ²HOD, Assistant Professor, Dept. of Pharmacology, BCDA College of Pharmacy & Technology, West-Bengal, India.

¹Critical Care Medicine,

¹ SSKM Hospital, Kolkata, West Bengal, India

Abstract : Pneumonia is a serious complicated disease with specially old age group. Mode of the treatment with the patient was steroid and antibiotic therapy. In this case study several antibiotics treatment started to the patient but did not get any better response but polymyxin- B had shown better response to the patient. This paper mainly presents a case of severe hospital acquired pneumonia.

IndexTerms - Pneumonia, Hospital acquired infection, Polymyxin -B.

I. INTRODUCTION

Pneumonia is a lung infection that can range from mild to severe. It is a serious infection in which the air sacs fill with pus and other liquid. Lobar pneumonia affects one or more sections (lobes) of the lungs. Bronchial pneumonia affects patches throughout both lungs. It is an inflammatory condition of the lung primarily affecting small air sacs known as alveoli [1][2]. The severity of the condition is variable [3] It is not commonly caused by infection with viruses or bacteria, and less commonly by other micro organisms[4][5]. Risk factors for pneumonia include cystic fibrosis ,COPD, asthma, diabetes, heart failure, a history of Smoking (such as following a stroke) and a weak immune system.

II. Case presentation

A 65 years old woman having COPD / Hypothyroidism was admitted with C/O severe shortness of breath, and admitted to a hospital . There was very mild pneumonia in both lungs. Her covid test report was negative. Patient started improving within 2 days with the injection Piperacillin and tazobactam. But suddenly after 2 days of admission patient started deteriorating again. The HRCT of thorax and chest x-ray was done. The investigation revealed a big Hospital acquired pneumonia in right Lung (almost 90% infected). The modified treatment has been started with injection Meropenem , Teicoplanin , nebulisations with Levosalbutamol+Ipratopium, Formoterol + Budesonide and Tobramycin. But patient did not improved. Then, antibiotic changed to injection Polymyxin-B, which responded very good result. Patient became completely stable within 7 days.

III DISCUSSION

An old women with severe shortness of breathing was admitted to the hospital . Her different investigating parameters like pH was 7.445.

PCO₂ 35.8 mm/ Hg, PO₂ 162mm/Hg.

BEef 1 mmol /L

HCO₃ 24.6mmol/L

TCO₂ 26 mmol/L

SO₂ 100%

Na 115 mmol/L

K 4.6 mmol/L

ica 0.35mmol/L

Hct 36% Pcv

Hb 12.2 gm/dl

CPB ; No

Blood sugar level PP: 145mg/dl .



Fig 1: COVID Test Report



Fig 2. Picture of CT scan of lungs.



Fig 3: X-Ray reports of lungs for several dates after admission to recovery



Fig4. Different parameters

2days after admission in the hospital, severe complication has been noted in right lung. After treatment with antibiotic therapy no changes has been observed but Polymyxin- B has shown big changes and patient recovered.

IV. Conclusion

Patient having mild pneumonia admitted to the hospital have developed hospital acquired pneumonia after 2 days of admission. After administration of several antibiotic therapy polymyxin-B shown good results and improved patient's condition.

V. Declarations

Ethical approval and consent to participate: Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

VI. Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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