Cotton Dust Induced Pneumonia in Geriatric Patients in Kongu Nadu Region: A Case History

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ABSTRACT
Caseless introduction to cotton residue may result in different respiratory disorders like pneumonia. Acquired Respiratory Distress Syndrome (ARDS) and so on. Such occupation initiated disarranges are in the ascent right now. Here is an instance of a 70-year-old male patient who is experiencing network procured pneumonia brought about by presentation to cotton dust gained because of working at a material industry. The essential causative living being for the equivalent was observed to be Acinetobacter and E. coli. He is known to have no co-morbidities on affirmation and has boss grumblings of hack with expectation, blood-decoloured sputum, fever and shortness of breath for around about fourteen days. The patient was found in a condition of respiratory trouble amid confirmation, which was basically treated with Non-Invasive Ventilation. The patient was observed to be unreasonably hypoxic because of declining ARDS. The patient’s chest x-beam uncovered combination and the patient were at first treated with anti-toxins and given noradrenaline for hemodynamic help. Antimicrobial treatment included Colistin and Cotrimoxazole. The patient additionally hinted at different organ harm, in particular hinted at Acute Kidney Damage. The condition was recognized because of anomalous creatinine levels or pee yield. Steps were taken to control and treat the equivalent.

Key words: Cotton dust, Asthma, Pneumonia, Expectoration, Antibiotics, Acute Kidney Damage, Multi Organ Failure.

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INTRODUCTION
Pneumonia might be regularly laid out as a disease of the respiratory organ parenchyma, amid which one will anticipate union of the influenced half and a filling of the alveolar air zones with exudates, provoking cells and protein. Disease by microorganism or infections is the most regular reason; however contamination by option smaller scale life forms like rickettsia, parasites and yeasts and mycobacteria may likewise happen. In solid grown-ups, Haemophilus flu and Streptococcus pneumoniae are the most widely recognized operators. Infections, for example, flu and the respiratory syncytial infection can likewise be viewed as causative living beings. In safe bargained patients, parasitic contaminations, for example, Pneumocystis jiroveci, formerly known as Pneumocystis carinii should likewise be suspected.2 Pneumonia is comprehensively ordered into two fields of thought: a Community-gained pneumonia b, Hospital-acquired pneumonia. The term network pneumonia alludes to when the disease shows up in a non-hospitalized populace. Community-acquired Pneumonia (CAP) is a typical and conceivably genuine ailment with a high death rate in the geriatric populace. It is hence referred to as the old man’s friend, because this infection is relatively a quick and easy form of death.3 Age is an imperative parameter that should be investigated for such irresistible maladies as maturing fundamentally debilitates have protection instruments which thus can result in different irresistible sicknesses in geriatric populaces explicitly. The system is debilitated predominantly because of loss of viability of physical boundaries against the pathogen which incorporate diminishing of the skin, reduced hack reflex and changes in genitourinary life structures and physiology that disables bladder limit and purging.4 Bacterial pneumonia is moderately less regular than its viral partner yet post influenza confusion can prompt bacterial pneumonia. Pneumonia brought about by Streptococcus pneumonia remains the most widely recognized reason for all bacterial pneumonia. High-chance groups grasp more established grown-ups and other individuals with an interminable medical issue or a bargained invulnerable framework. This kind of pneumonia is prepared to do additionally complicating the state of the upper respiratory tract and may likewise cause procured respiratory trouble disorders. Pneumococcal comorbidities likewise incorporate intense kidney damage as a standout amongst the most widely recognized beneficiaries of end-organ harm.4 An examination found that Acute Kidney Injury was very regular among pneumonia patients, the investigation additionally revealed that among the 1800 members with network procured pneumonia in the multicenter Genetic and Inflammatory Markers of Sepsis (GenIMS), 33% of all patients were determined to have Acute Kidney Injury (AKI), recognized by anomalous creatinine levels or pee yield, either on the main day of confirmation or at some point amid their emergency clinic stays.6

CASE HISTORY
A 70-year-old male patient was conceded with no comorbidities in the crisis division with boss protests of the hack with expectoration breathing trouble and windedness with a background marked by fever 2 weeks back. The patient was in a condition of respiratory pain and hypotension on admission to the ER. The patient was bolstered with Non-Invasive Ventilation (NIV) and Nor Adrenaline infusion for hemodynamic help’s sweep of the chest was performed which uncovered segmental and sub-segmental solidification with centiradian knobs s/o Infective aetiology. Bronchoscopy BAL was likewise performed. Societies devel-
because of exacerbating ARDS. He likewise had intense kidney damage as un NUMBER renal parameters. Social and word related history recommends that he is a non-smoker and non-alcoholic individual. He is a resigned teacher who worked in the material business for as long as a half year. In light of the abstract and target proof, the patient is analyzed to have Community-Acquired Pneumonia with different organ disappointment and ARDS. This examination was affirmed by (IHEC/114/Pharmacy/09.2017) institutional human moral advisory group.

**DISCUSSION**

Community-acquired Pneumonia (CAP) is an incessant reason for emergency clinic confirmation and mortality in older patients around the world. One must realize that the aetiology and pathology of the infection change among populace, particularly in the geriatric one. The presence of the union in the chest radiograph is a noteworthy symptomatic parameter to recognize pneumonia. Additionally, other operators and toxins that debilitate the respiratory mechanical assembly may incite the event of the malady. Dynamic investigations have appeared about around 25 to 30% of patients with pneumococcal pneumonia will have positive blood societies. Assurance of exact aetiology of pneumonia is a troublesome undertaking because of the absence of touchy and explicit tests. In any case, in an ongoing survey of 33 investigations of network obtained pneumonia, the aetiology in older grown-ups was transcendentally Streptococcus pneumoniae (12–85%), trailed by Haemophilus influenzae (1–16%) and gram-negative bacilli other than (1–29%) H. Influenzae. Note that the expanded commonness of pneumonia among the geriatric populace does not totally prevent the nearness from claiming the equivalent in paediatric populace. In the past thirty years, the recurrence of network gained pneumonia (CAP) in the paediatric masses has out and out lessened far and wide. Generally, it is so because of the expanded usage of preventive techniques, for instance, Haemophilus influenzae type b vaccine and Pneumococcal Conjugate Vaccinations (PCVs). Despite the fact that there are different side effects the most likely is a hack, at first dry later may contain purulent or blood-decoloured sputum, dyspnoea and fever and chest torment. Biochemical assessments show the consequences of broad solidification in entire or parts of the lungs. The normal research facility discoveries are fundamentally blood investigation to discover estimations of WBC and foresee disease and furthermore the examination of the union in the chest radiograph is a noteworthy symptomatic parameter to recognize pneumonia. Additionally, outer investigations have shown the consequences of broad solidification in entire or parts of the lungs.

Legitimate safeguards must be made with respect to the perils word related residue can incite in invulnerable traded off or be appropriately told and mindfulness must be made with respect to the equivalent on the body. The representatives presented to such conditions must experience customary check-ups and play it safe to survey the impact of the equivalent on the body.

**CONFLICT OF INTEREST**

The authors declare no conflict of interest.

**ABBREVIATIONS**

CAP: Community Acquired Pneumonia; AKI: Acute Kidney Injury; ER: Emergency Room; NIV: Non-Invasive Ventilation; ARDS: Acquired Respiratory Distress Syndrome; Hibv: Haemophilus Influenzae Virus Type; B PCVs: Pneumococcal Conjugate Vaccines.

**REFERENCES**