



## A CASE OF SEPTIC PULMONARY EMBOLI AS COMPLICATION OF PERIPHERAL VENOUS CANNULATION

**Dr. Momin Shamira Ishrath\***

\*Corresponding Author

**Dr. Miftah Junaid**

**ABSTRACT** Septic embolism can have varied presentations and clinical pictures. The major complication is due to the vascular occlusion of involved tissues or organs. Infected central venous catheters are usually associated with the development of septic emboli while peripheral venous catheters rarely lead to such complications. Here we describe a rare case of septic pulmonary emboli related to infected peripheral venous cannulation caused by an unusual etiological agent.

### KEYWORDS :

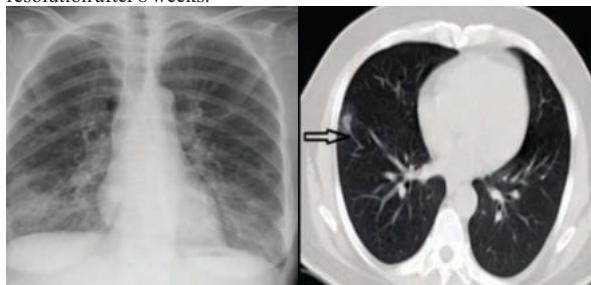
#### CASE STUDY

A 35 year old male presented to the OPD with complaints of fever, productive cough, sudden onset of Shortness of breath and cellulitis in both the upper limbs with recent hospitalization for dengue fever. On examination, patient was febrile, tachypneic and in respiratory distress. On local examination there were multiple pus filled bullae, swelling and erythema involving Right forearm that had started at the site of cannulation. Chest examination showed active accessory muscles of respiration, decreased breath sounds at Right infraaxillary, infraaxillary and mammary area.

#### INVESTIGATIONS

Chest x ray showed bilateral multiple patchy heterogeneous peripheral opacities and infiltrates. CECT chest showed feeding vessel sign confirming diagnosis as septic emboli. Patient was empirically started on ceftriaxone, vancomycin and clindamycin. Laboratory findings showed marked leucocytosis 22000/mm<sup>3</sup>. The pus culture and sputum culture showed klebsiella pneumoniae sensitive to cefoperazone - sulbactam, piperacillin - Tazobactam, meropenem and amikacin. The antibiotics were modified to cefoperazone -sulbactam. Despite giving appropriate antibiotics fever persisted. Broncho Alveolar Lavage (BAL) was done to confirm the etiology. Galactomannan, general Xpert and fungal cultures were negative. BAL culture showed klebsiella pneumoniae with same antimicrobial sensitivity profile. On day 6 of starting.

Cefoperazone - Sulbactam pt became afebrile. The skin lesions improved significantly. He was administered 2 weeks of cefoperazone - Sulbactam and discharged on oral faropenem for 4 weeks. He was followed up regularly. Chest x ray and skin lesions showed complete resolution after 8 weeks.



#### DISCUSSION

Till date only few cases of septic pulmonary emboli through peripheral intravenous catheter have been reported. This case highlights that A simple procedure of peripheral intravenous cannulation can lead to catastrophic complication of septic pulmonary emboli if not done with proper care and precautions. Also the usual pathogens in such clinical settings are gram positive bacteria but with history of recent hospitalization empirical therapy should also cover drug resistant Gram negative microorganisms

#### CONCLUSION

Through this rare case we come to a conclusion that any interventional procedure minor or major should be carried out very carefully and proper antibiotic cover should be given. This also enlightens us to

avoid unnecessary use of intravenous catheters. Intravenous catheters should only be given when oral drugs are ineffective.

#### REFERENCES

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