

# Whole lung lavage in a case of pulmonary alveolar proteinosis in respiratory icu of a tertiary care hospital

M. Pattanaik<sup>a</sup> (Prof), JK. Patra<sup>\*a</sup> (Dr)

<sup>a</sup> DEPARTMENT OF PULMONARY MEDICINE, SCBMCH, Cuttack, INDIA

## Background:

Whole lung lavage is performed primarily for the treatment of Pulmonary alveolar proteinosis. The procedure involves intubating a patient with a double lumen endotracheal tube and ventilating a single lung while performing a large volume (upto 20 L) lavage of the nonventilated lung and clearing the abnormal proteinaceous material from the alveoli<sup>1</sup>.

## Case Report:

48 years hindu female, housewife, presented with increased shortness of breath - 2 months, fever - 10days, dry cough - 10days. She was conscious , tachypneic ,  $spO_2$  - 58 % with room air. On chest examination bilateral VBS with fine inspiratory basal crackles were heard .Chest X -ray revealed symmetric, bilateral alveolar opacities. HRCT thorax showed crazy-paving pattern. Bronchoscopy revealed normal endobronchial mucosa and BAL fluid was milky white appearance. PAS staining of BAL fluid confirmed the diagnosis of PAP . Whole lung lavage was done in Respiratory ICU under general anaesthesia with double lumen endotracheal tube intubation. First right lung was lavaged with 11.5 litres of sterile warm saline and 9.8 litres of lavaged fluid was retrieved by manual chest percussion and suction. Post procedural care was done and patient was extubated after 2 days. After 2 weeks whole lung lavage was done for left lung and patient was discharged with a  $spO_2$  of 95 % with room air.

## Conclusion:

Whole lung lavage is a safe and an effective procedure in symptomatic patients with all forms of PAP. Complications from the procedure are minimal, when performed in centres with adequate resources and experience with single lung ventilation.

## References:

- 1.A. Ernst and F.J.F. Herth , Principles and Practice of Interventional Pulmonology
  - 2.Michaud G, Reddy C, ErnstA. Whole lung lavage for Pulmonary alveolar proteinosis. Chest .2009;136:1678-81
- Disclosure of funding source(s): none; Conflict of interest : none

## Correspondence:

Dr Jeetendra Kumar Patra, Associate Professor  
Department of Pulmonary Medicine, SCB Medical College and hospital  
Cuttack, Odisha (India) -753007  
Email: [jeetendrakumarpatra@gmail.com](mailto:jeetendrakumarpatra@gmail.com); Contact: +919623503906

