A 30 age male patient, working as a welder and a driver, applied to our hospital with dyspnea that began 4 months ago. Despite of various antibiotics and bronchodilators therapy for asthma and pneumonia, his complaints worsened. There were bilateral diffuse infiltrations on his postero-anterior chest graphy and PO2:53 mmHg, SaO2:%88 was found at arterial blood gas measurements. There were interstitial septal thickening, bilateral interstitial and alveolar densities, increased densities combined with each others in the style of ground glass areas on thorax tomography. The view of bronchoalveoler lavage (BAL) fluid was milky. The staining of the fluid with PAS (periodic acid-Schiff) was pozitif and proteinaceous materials containing d-PAS resistant globules were seen. Asido resistant bacillus and the other pathogens were not cultured negative in sputum, in post bronchoscopic sputum and BAL material. Wedge resection was made by video-assisted thoracoscopic surgery. Histopathology report of biopsy material revealed "Pulmonary alveolar proteinosis (PAP)". Although massive lung lavage was planned for the patient, it was not applied to him because of clinical and radiological improvements, having shunt fraction <%10 and increased of partial oxygen pressure to 64 mmHg After three months, radiological lesions had completely regressed.

As a conclusion, the acute and chronic effects of welding fumes to lungs may cause PAP and the physicians should consider PAP as a rare disease in the differential diagnosis of patients with dyspnea symptoms and having bilateral diffuse infiltrations on chest graphy.