Body: Background: Acetylated opium (opium extraction, chernyaga, hanka) - a means of hand-made, which contains up to 12% of heroin, which is widespread in Russia and other Eastern European countries, where there are wild poppies. Aim: to describe cases of bullous emphysema and severe COPD in young drug addicts – acetylated opium users. Methods: A total of 35 patients with history of intravenous abuse of acetylated opium hospitalized with exacerbation of severe COPD were included in the study. The patients were from 21 to 39 years old. We analyzed clinical data, PFT data, chest radiographs, CT, alfa-1-antitripsin level. Results: in the past 6 years in pulmonology department of Tomsk Clinical Regional Hospital there were 35 young drug addicts with severe COPD and bullous emphysema. Five of these patients died of progressive respiratory insufficiency and the others are clinically disabled. Severe bronchial obstruction was observed in all the subjects, mean FEV1 was 17.2±6.1%, mean FVC – 68.6±12.4%. On the CT scans panlobular bullous nonuniform emphysema was detected. Most of patients were Hepatitis C or C and B positive. All of them have had normal or even increased level of alfa-1-antitripsin. Conclusion: In the literature the bullous emphysema in drug addicts was previously described in i.v. Ritalin users as well as in marihuana smokers. In case of acetylated opium users the lung damage may be due to high oxidation potential of the acetic anhydride used for the drug preparation.