

## Emphysema in HIV Positive Patient: Diagnostic and Therapeutic Conduct

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### Abstract

The increase of cases of patients with chronic obstructive pulmonary disease in HIV positive patients is a reality since the TAAE era. In its beginning, infectious respiratory diseases were the most frequent and prevalent. Different factors were associated to this entity such as the HIV virus itself, antiretroviral treatment, tobacco habit, the use of marijuana, anemia, coinfection with HCV, BMI, nadir and current value of CD4 and viral load. The control of the patient through dyspnea assessment scales and complementary studies such as spirometry, chest CT, 6- minute walk test and carbon dioxide diffusion test have provided tools to contribute to the diagnosis, treatment and prevention of the complications inherent in COPD. Our patient presented a severe respiratory obstruction with FCV less than 70%, FEV1 less than 80%, FEV1/CFV ratio less than 70%, diffusion test less than 80% and central emphysema and parabolulillar CT. Its CD4 values and viral load within normal parameters. The logical writing reports a better occurrence of ceaseless obstructive pneumonic malady (COPD), aspiratory hypertension and lung malignancy in HIV positive patients contrasted with negative ones. it had been resolved that bacterial pneumonia and COPD are the 2 most analyzed aspiratory pathologies [1,2]. Various examinations were directed assessing lung add HIV positive patients under ART. Taking everything under consideration , an affiliation was proposed between respiratory changes with leading edge age, smoking propensity and high popular burdens. Thus, it had been indicated that ARV treatment may be a free indicator of expanded aviation route hindrance

Our goal is to convey an instance of a patient with emphysema and HIV positive, its clinical effect A multi year old white male patient determined to possess HIV positive in 1997, a kind of sexual infection, stage CDC B1. As a background marked by tobacco reliance of 4 packs/year, finding of pneumonic tuberculosis in 1988, determination of COPD in 2007 and psoriasis in 2009. In ARV treatment 20 years prior, it's immediately under treatment with lamivudine, Tenofovir and efavirenz. Great adherence to pharmacological treatment. It doesn't present co-contaminations. In treatment for COPD with salmeterol and fluticasone puff. The patient made two fruitless endeavors to prevent smoking. Counsel for compounding of dyspnea and hack.

Our patient has an expanded danger of experiencing

cardiovascular, hepatic and neoplastic co-morbidities as per their outcome by useful tests. it's basic to intensify the top of smoking, keep going with accomplish 100% adherence and methodically control your respiratory indications so on give personal satisfaction. Smoking-related diseases, such as chronic obstructive pulmonary disease (COPD), are of particular concern in the HIV-infected population. Smoking rates are high in this population, and long-term exposure to cigarette smoke in the setting of HIV infection may increase the number of complications seen. Before the era of combination antiretroviral therapy, HIV-infected persons were noted to have an accelerated form of COPD, with significant emphysematous disease seen in individuals less than 40 years old. Unlike many of the AIDS-defining opportunistic infections, HIV-associated COPD may be more common in the current era of HIV because it is frequently reported in patients without a history of AIDS-related pulmonary complications and because many aging HIV-infected individuals have had a longer exposure to smoking and HIV. In this review, we document the epidemiology of HIV-associated COPD before and after the institution of combination antiretroviral therapy, review data suggesting that COPD is accelerated in those with HIV, and discuss possible mechanisms of HIV-associated COPD, including an increased susceptibility to chronic, latent infections; an aberrant inflammatory response; altered oxidant-antioxidant balance; increased apoptosis associated with HIV; and the effects of antiretroviral therapy.

The frequency and types of lung diseases encountered in HIV-infected populations have changed many times over the course of the AIDS epidemic. With the development and use of combination antiretroviral therapy (ART), dramatic declines in morbidity and mortality from HIV/AIDS have been seen (1). These improvements do not constitute a cure, however, and over 400,000 people are living with HIV in the United States, and an estimated 33.4 million people are infected worldwide (2). With ART and the resulting increases in life expectancy, the incidence of nonopportunistic lung diseases, such as HIV-associated chronic obstructive pulmonary disease (COPD), may become more common. Respiratory symptoms are common in the HIV-infected population, particularly in HIV-infected persons who smoke, and obstructive lung disease is an increasing cause of morbidity and mortality in the HIV-infected population. Almost 4% of deaths among HIV-

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infected persons in 1998 were due to obstructive airway disease, representing a 3-fold increase from the preantiretroviral therapy era (3). Rates of hospitalization for asthma, bronchitis, and COPD have also increased since the early 1990s (4). HIV-associated COPD was identified as a critical area for future research by a National Institutes of Health workshop on pulmonary complications of HIV, and several sites in the Lung HIV group have decided to focus on the epidemiology and mechanisms of HIV-associated COPD.