

Chronic Obstructive Pulmonary Disease in the Elderly

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Rec date: Oct 10, 2016; Acc date: Oct 12, 2016; Pub date: Oct 14, 2016

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Citation: El-Moselhy EA, Hay AHIA (2016) Chronic Obstructive Pulmonary Disease in the Elderly. J Gerontol Geriatr Res 5: e140. doi:10.4172/2167-7182.1000e140

Editorial

Elderly is robustly accompanied with raise prevalence of chronic obstructive pulmonary disease (COPD). Prevalence of COPD in subjects aged 65 years and more is estimated at 14.2% (11.0%-18.0%) in contrast with 9.9% (8.2% to 11.8%) in those aged 40 years or more [1].

Ordinary aging of the respiratory system is linked with reduced static-elastic recoil of the lung, in respiratory muscle effectiveness, and in compliance of the chest wall and respiratory system, result to boost work of breathing in contrast with younger people and reduced respiratory reserve in cases of acute disease, such as heart failure, infection, or airway obstruction. Regardless of these changes, the respiratory system still remains eligible to preserving appropriate gas exchange at rest and in state of effort during the whole lifespan, with only a minor reduce in Pa(O₂) and no considerable change in Pa(CO₂) [2].

Increasing proof suggests that COPD is a multi-faceted illness comprising more than airflow obstruction. Airflow obstruction has important impacts on function of the heart and gas exchange with many systemic outcomes. Moreover, as COPD is a consequence of inflammation and/or changes in repair mechanisms, the dispersal of inflammatory mediators into the circulation might lead to significant systemic revelations of the illness, as skeletal muscle waste and cachexia. Systemic inflammation may set or get worsen the co-morbid illnesses, as ischemic heart disease, heart failure, anaemia, diabetes mellitus, depression, osteoporosis, and lung cancer [3].

Though prevalence of COPD is elevated in the elderly, the illness is predominantly under-diagnosed and under-treated. Diagnosis of COPD is basically depends on physiological airflow restriction using spirometry. Arguments subsist as to the zone of predicted ordinary rates in the elderly, in whom its clinical presentation might be sophisticated by another co-morbidities [4]. The major COPD management fundaments are to evaluate and observe disease severity, minimize risk factors, prevent and manage symptoms, promote health, and raise capability to exercise [5]. Medicament for COPD is mostly introduced using inhalers. The obtainable types of COPD medicament delivery devices are metered-dose inhalers (MDIs), dry powder inhalers (DPIs), and ultrasonic nebulizers [6].

Elderly patients state a particular defiance with respect to selection of the inhaler device. In elderly patients with adequate cognitive function, manual cleverness, and hand power, the most effective factors in inhaler selection are cost reimbursement, device obtainable and suitability, and patient predilection. Multiple-dose DPIs present the smooth way of rapid medicament administration, the smooth way

of dealing, and integration dose counters [7]. Meanwhile, oral β -agonists are not much efficient than aerosol medicament, however if the elderly is disabled to use any sort of aerosol medicament, then oral β -agents are a choice [6]. Methylxanthines are third-line medicament. The grade of bronchodilation accomplished is tiny and adverse reactions like anorexia, tremors, and insomnia are frequent, even with doses in therapeutic levels. Further, theophylline clearance reduces with progress age and co-morbidities, and medications can change theophylline metabolism [8,9]. Oral corticosteroids had been supposed convenient if the patient is symptomatic despite sufficient aerosol medicament. However, the effects of corticosteroids on lung function are tiny to moderate [10]. Furthermore, the use of corticosteroids for longtime is accompanied with numerous adverse reactions such as osteoporosis, cataracts, diabetes mellitus, Cushing effect, mood disturbances, etc. Therefore, the advantage of oral corticosteroids should be apparent to justify the risk of occurring dangerous adverse reactions [6].

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