

Special Article - COPD

Evaluation of Elderly Patient in Indian Context with Chronic Obstructive Pulmonary Disease

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Editorial

Elderly patients have a common complaint of respiratory discomfort and they are prone for respiratory complications with characteristic features of Dyspnoea, peripheral muscle dysfunction and increase in health care utilization [1]. Chronic Obstructive Pulmonary Disease (COPD) is a predominant disease in elderly patients. There is utmost need for caregivers in managing patients with COPD. As managing patients in elderly age group is highly complicated. However, mortality and burden of diseases were clubbed together in elderly. Treating the old patient and explaining the treatment protocol to them is always challenging, geriatric rehabilitation is entirely different from the pulmonary rehabilitation guidelines commonly followed in patients with COPD [2].

Other health burdens like heart failure, pulmonary embolism, and anxiety; medication effects; and other conditions, including deconditioning and malnutrition; may exacerbate COPD. There is a need for the development of evidence based guidelines in the management for elderly patients with COPD [3]. Elderly population in India, when involved in pulmonary rehabilitation, addresses the adverse effects of interventions and they plan for the need of end-of-life care planning. Older patients will have cognitive deficit which is a bothersome symptoms tend to interrupt the management protocol and this will complicate the successful implementation of treatments protocol in elderly patients with COPD [4].

A case of COPD reported in a 91 year old female hospitalized with severe dyspnea and skeletal muscle dysfunction is presented. This case has encountered the challenges in delivering the standard treatment protocol that is unique for all the COPD patients. However, there are limitations in applying guidelines to geriatric patients. She has very severe dyspnea in borg's scale and she has been brought to pulmonology department by her son. Her chief complaints were depression, type 2 diabetes mellitus, and hypertension [5]. When collecting a detailed past history assessment it has been evident that she has been exposed to passive smoking for 50 years. She is a diagnosed case of COPD since 2003, from the past 15 years she was under broncho-dilators and has not involved in any pulmonary rehabilitation programme [6].

Before 15 years, when spirometric recording showed an FEV1 of 47% of predicted value. She has the inability to walk for 6minutes without taking rest. Her husband has dementia and subsequently died. She has adapted with assisted living facility in all her ADL activities. This in addition has declining health status. However she has been walking with walker support.

She has difficulty in talking continuously to questions asked when collecting the past history status. Her lung shows bilateral expiratory wheezes, she has regular rhythm with a normal S1 and S2, no murmurs on her cardio-vascular examination, on depression scale she has 7/15 and 20/30 on the Mini-Mental State Examination. Her hemoglobin was 10.4 g/dL, hematocrit 30.1%, MCV 77.8, and WBC 19,300. Chest radiography showed large lung fields, but no infiltrates or effusions. The pH was 7.09, pCO₂ 55.1 mm Hg, pO₂ 47.8 mm Hg, O₂ saturation 70.3%. Initially, she was admitted to the ICU and placed on CPAP. She continued her usual medications for the co morbid conditions. Her respiratory status was undesirable and she was shifted back to the assisted care facility after 6 days in the hospital.

Management for COPD in the Elderly needs a considerable attention, as she is 90 years old no formal pulmonary rehabilitation guideline has been advisable. Over the last few years, several guidelines for the diagnosis and management of COPD have been introduced that emphasize the need for a multidisciplinary approach to the problem. But none of the study has highlighted the importance for creation of new deliverable protocol for elderly population. Further follow up of this case has been planned in delivering treatment protocol that minimizes the burden placed on her respiratory system by the formal pulmonary rehabilitation programme [7].

References

1. Sundararajan L, Balami J, Packham S. Effectiveness of Outpatient Pulmonary Rehabilitation in Elderly Patients With Chronic Obstructive Pulmonary Disease *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2010; 30: 121-125.
2. Couser JI Jr, Guthmann R, Hamadeh MA, Kane CS. Pulmonary rehabilitation improves exercise capacity in older elderly patients with COPD. *Chest*. 1995; 107: 730-734.
3. Abirami Subramaniam et al, Outcomes of pulmonary rehabilitation for COPD in the elderly: A comparative study , *European Respiratory Journal*. 2015; 46.
4. McCarthy B, Casey D, Devane D, Murphy K, Murphy E. Lacasse Y Pulmonary rehabilitation for chronic obstructive pulmonary disease. *Cochrane Database Syst Rev*. 2015.
5. Gloeckl R, Schneeberger T, Jarosch I, Kenn K. Pulmonary Rehabilitation and Exercise Training in Chronic Obstructive Pulmonary Disease. *Dtsch Arztebl Int*. 2018; 115.
6. Lenferink A, Brusse-Keizer M, van der Valk PD, Frith PA, Zwerink M, Monnikhof EM, et al. Self-management interventions including action plans for exacerbations versus usual care in patients with chronic obstructive pulmonary disease. *Cochrane Database Systematic Rev*. 2017.
7. Puhan MA, Santos I, Cates CJ, Troosters T. Pulmonary rehabilitation following exacerbations of chronic obstructive pulmonary disease. *Cochrane Database Systematic Reviews*. 8 December. 2016.