Chronic obstructive pulmonary disease: the gold or random therapy?

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Background and Aims: COPD the fifth cause of death in the world, is a condition where lungs are irreversibly damaged and the airways constantly narrowed. Based on the Global Initiative for Chronic Obstructive Lung Disease (GOLD), this is due to pathological changes in respiratory system mostly due to exposure to smoke. Although GOLD guideline is used to manage COPD but no comparative studies investigated the quality of life (QOL) in those who for whatever reason are not following these specific guidelines. Hence, our aim is to investigate and compare the health and QOL consequences of random therapy against GOLD therapy.

Methods: Sixty COPD patients were divided in to two groups; first group were treated by the GOLD guidelines (control), the second will not follow the guideline due to cost, compliance and adherence. Detailed drug/medical history and ST George's questionnaire was completed. The Pulmonary Function Test (PFT) was measured and all patients were followed for a period of 6 month.

Results: 26 in the GOLD and 34 patients were in the random therapy arm. The median age was 62.5 with the male to female ratio of 6:1 respectively. The PFT was improved in mild to moderate against severe COPD patients in the control group. In contrast, patients in the other arm had detritions in their PFT. The QOL in control group was improved by the average of 30% in all patients. The QOL in random therapy was varied and mostly based on compliance and adherence of patients. The major QOL parameters were shortness of breath and reduction in sputum.

Conclusions: Following the GOLD guideline in the mild to moderate control patients had the maximum impact on the PFT and QOL. In random therapy group improvements were depending on the level of compliance and adherence accompanied by smoking cessation.

Keywords: Chronic obstructive pulmonary disease (COPD); Quality of life (QOL); Global initiative for chronic obstructive lung disease (GOLD)