112年會員代表選舉 112年4月23日14:00-15:00 主講人:基隆長庚醫院內科部李立夫部長

題目: COPD disease progression: pathogenesis and oxygen therapy

內容:

COPD is a chronic inflammatory disease characterized by airways structural remodeling and irreversible airflow limitation (FEV1/FVC <70%). Most patients with COPD experience exacerbation of respiratory symptoms, complicated by multiple comorbidities, and frequent hospitalization, resulting in enormous healthcare utilization. The pathogenesis of COPD may be caused by patient susceptibility, genetic and epigenetic regulation, cigarette smoking and air pollutant exposure, and lung repair deficiency mechanisms. Notably, abnormal small airways are frequently found in COPD patients with smoking history, while never-smokers mainly exhibit a phenotype dominated by emphysematous destruction of alveolar wall. The long-term use of oxygen increases survival in COPD patients with severe chronic resting hypoxemia. In patients with stable COPD and moderate resting or exertional hypoxemia, long-term use of oxygen does not ameliorate mortality or provide sustained benefit in health status, lung function, and 6MWT. NIPPV may improve hospitalization-free survival in selected patients after recent acute exacerbation, particularly in those with profound daytime persistent hypercapnia (PaCO2 > 53) mmHg). Because it is still a leading cause of death in Taiwan and no effective treatment can cure this disease, identification of specific phenotypes, inflammatory biomarkers, and metabolites driven by air pollutants on COPD patients is vital for developing novel and effective treatments.