

8.19 Thoracic imaging in COPD: diagnostic usefulness and adherence to GOLD guidelines in a severe COPD cohort

¹Anne-Marie Sweeney, ¹Orla O'Carroll, ¹Physician Emer Kelly
¹St. Vincent's University Hospital, Dublin, Ireland

Background: While chest CT is not classically part of the COPD diagnostic workup, cross sectional imaging provides insight into structural and pathophysiologic abnormalities, leading to greater understanding of disease severity and prognosis, and allowing exploration of strategies such as lung volume reduction surgery or endobronchial valve placement. **Methods:** GOLD recommends that CT is considered in patients with persistent exacerbations, symptoms out of proportion to airflow limitation, FEV1 <45% with hyperinflation and gas trapping and those who meet lung cancer screening criteria.¹ 54 patients with spirometry-confirmed COPD attended the severe COPD clinic over 12 months, in GOLD severity groups 1 (n=10), 2 (n=16), 3 (n=23) and 4 (n=5). 62% were in GOLD Category E. 45 patients met criteria for CT; 37 had imaging available, although 14 scans were >2 years old. Significant findings included emphysema (28), pulmonary nodules (17), coronary artery disease (16), infection (13), bronchiectasis (7), osteoporotic fractures (5), mediastinal lymphadenopathy (4), pleural plaques (3), cancer (1) and fibrosis (1). **Results:** Chest CT is useful for detection of pulmonary disease and also for co-morbidities impacting all-cause mortality in this population. CT should be considered in those with a significant smoking history, ongoing symptoms despite optimal management or those with high risk characteristics. **Conflicts of Interest:** The authors declare that they have no conflicts of interest.