YOUNG COPD IN THE CONTEXT OF COMPLEX DIFFERENTIAL DIAGNOSIS

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Abstract

The main factors that lead to chronic obstructive pulmonary disease (COPD) are tobacco smoking and inhalation of toxic particles and gases from indoor and outdoor air pollution, as well as pulmonary developmental disorders and aging.

COPD is more common in older people, but it has been proven that COPD can also occur at a young age. This group of young COPD patients has been called "early-onset COPD" or "young COPD." According to GOLD, this group was defined as subjects aged 50 years and younger with at least 10 pack-years of cumulative smoking with airflow limitation and structural changes in the lungs.

The diagnosis of COPD should be considered in any patient with chronic dyspnea, chronic cough, sputum production, and a history of recurrent lower respiratory tract infections, with confirmation of the diagnosis by pulmonary function testing, which includes spirometry, plethysmography, and lung diffusion capacity. According to GOLD, the diagnosis of COPD involves differential diagnosis with diseases such as congestive heart failure, bronchiectasis, tuberculosis, bronchiolitis obliterans, diffuse panbronchiolitis, and asthma; however, the presence of these diseases does not exclude the diagnosis of COPD. When diagnosing COPD at a young age, a detailed differential diagnosis should be first conducted with asthma, bronchiolitis obliterans, bronchiolitis obliterans syndrome as a manifestation of graft versus host disease (GVHD), and a group of genetic diseases that include cystic fibrosis and primary ciliary dyskinesia with Kartagener syndrome.

Considering the complexity of early-onset COPD diagnosis, this publication presents the clinical cases of such a condition and bronchiolitis obliterans as a manifestation of GVHD, cystic fibrosis and primary ciliary dyskinesia with Kartagener syndrome, which by clinical course and spirometry flow-volume curve resemble COPD.

Key words: young COPD, bronchiolitis obliterans, bronchiolitis obliterans syndrome, GVHD, cystic fibrosis, primary ciliary dyskinesia, Kartagener syndrome, pulmonary function testing.

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